

YE-4G18



**YG-1 CO., LTD.**

**HEAD OFFICE**

211, Sewolcheon-ro, Bupyeong-gu, Incheon, Korea

**Phone: +82-32-526-0909**

**Http://www.yg1.kr**

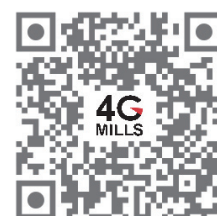
**E-mail:yg1@yg1.kr**

**Note** The new address above has currently been updated since Korean new postal standard was valid from 2014.  
Be noticed that the physical Headquarter location is NOT changed.



Tool specifications are subject to change without prior notice.

SCAN QR CODE  
TO SEE 4G MILLS AT WORK



YG1YE4G180420003

# **4G MILLS**

## **Y-COATED SOLID CARBIDE END MILLS**

for Pre-Hardened Steels up to HRc55  
for High Speed Cutting  
for Excellent Surface Finish  
for Dry & Wet Cutting  
for Mold & Die

**NEW  
SIZES**

- 2 FLUTE CORNER RADIUS
- 4 FLUTE SHARP EDGE & CORNER RADIUS
- 4 FLUTE CORNER PROTECTION

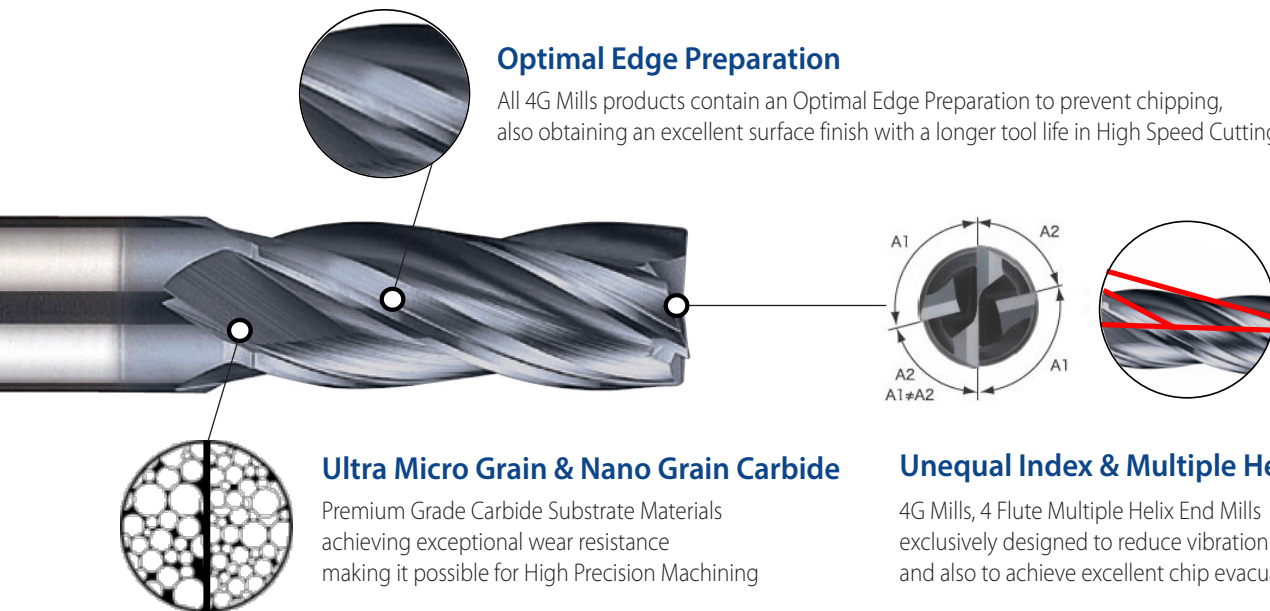


## High Speed Cutting for Pre-Hardened Steels up to HRc55 - 4G MILLS

Suitable for wide range of work material, specifically for increasing tool life when machining pre-hardened materials, low hardness materials and cast iron, etc.  
High speed cutting, dry and wet cut recommended together.

### Optimal Edge Preparation

All 4G Mills products contain an Optimal Edge Preparation to prevent chipping, also obtaining an excellent surface finish with a longer tool life in High Speed Cutting



### Ultra Micro Grain & Nano Grain Carbide

Premium Grade Carbide Substrate Materials achieving exceptional wear resistance making it possible for High Precision Machining

### Unequal Index & Multiple Helix

4G Mills, 4 Flute Multiple Helix End Mills exclusively designed to reduce vibration and also to achieve excellent chip evacuation

### High Technology Y-Coating

AlCr Based, YG-1's High Technology  
In-house coating for maximum tool life and high performance  
Excellent quality coating developed by YG-1

### Holds a Large Variety of Product Range for Multiple Use

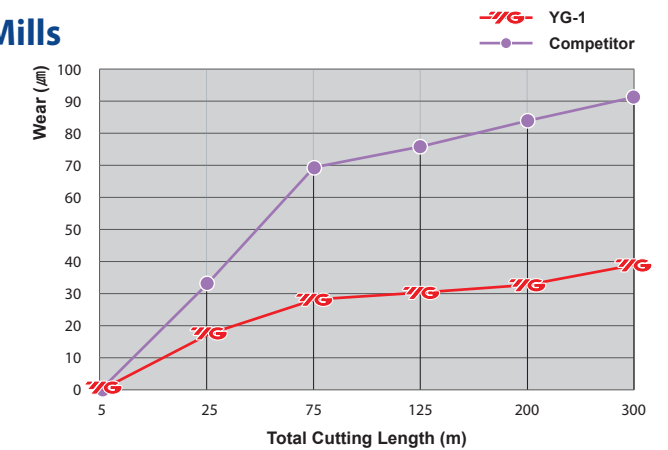
Large Variety of Products  
For Several Different Applications with Different Size and Lengths  
► Size : Ø0.03mm~Ø25.0mm



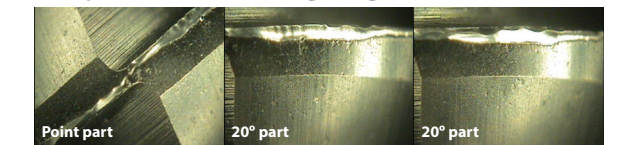
## CASE STUDY

### ► Y-Coated Solid Carbide 2 Flute, Ball End Mills

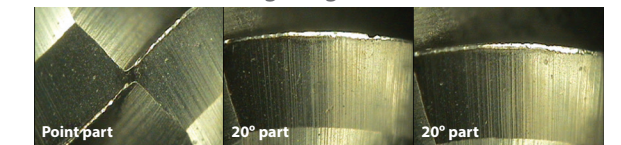
| Cutting Conditions |                                       |
|--------------------|---------------------------------------|
| Tool               | SEMD98060E                            |
| Size(mm)           | Ø6 x 6 x 12 x 90                      |
| Work Material      | KP4M<br>(HRc35 / DIN 1.2738 Improved) |
| Cutting Speed      | 130.061 m/min.                        |
| RPM                | 6900 rev./min.                        |
| Feed               | 830 mm/min.                           |
| Feed per tooth     | 0.060 mm/tooth                        |
| Milling Method     | Profiling                             |
| Milling Depth      | Axial : 0.2 mm<br>Radial : 1.2 mm     |
| Coolant            | Oil Mist                              |
| Overhang           | 26 mm                                 |



Competitor (Total Cutting Length : 300m)

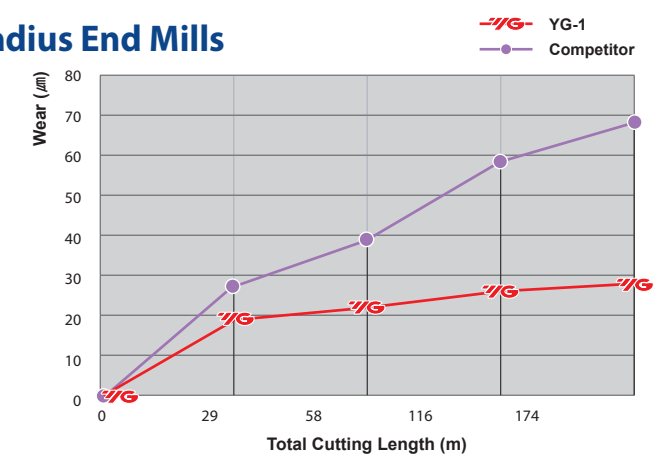


4G MILLS (Total Cutting Length : 300m)

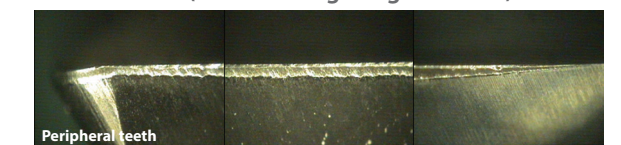


### ► Y-Coated Solid Carbide 4 Flute, Corner Radius End Mills

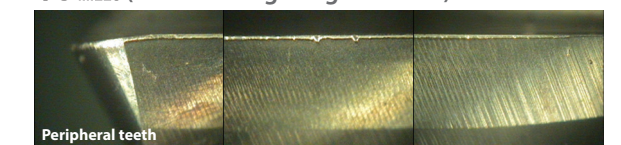
| Cutting Conditions |                                       |
|--------------------|---------------------------------------|
| Tool               | SEME0110005E                          |
| Size(mm)           | Ø10(R0.5) x 10 x 25 x 100             |
| Work Material      | KP4M<br>(HRc35 / DIN 1.2738 Improved) |
| Cutting Speed      | 51.522 m/min.                         |
| RPM                | 1640 rev./min.                        |
| Feed               | 180 mm/min.                           |
| Feed per tooth     | 0.027 mm/tooth                        |
| Milling Method     | Down & Side Cutting                   |
| Milling Depth      | Axial : 25 mm<br>Radial : 0.5 mm      |
| Coolant            | Oil Mist                              |
| Overhang           | 41 mm                                 |



COMPETITOR (Total Cutting Length : 174m)

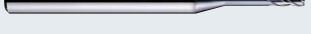


4G MILLS (Total Cutting Length : 174m)



SELECTION GUIDE

4G MILLS  
Y-COATED SOLID CARBIDE END MILLS

| ITEM   | MODEL                                                                               | DESCRIPTION                                | SIZE  |       | PAGE |
|--------|-------------------------------------------------------------------------------------|--------------------------------------------|-------|-------|------|
|        |                                                                                     |                                            | Min.  | Max.  |      |
| SEMD98 |    | 2 FLUTE BALL NOSE                          | R0.05 | R12.5 | 6    |
| SEM846 |    | 2 FLUTE LONG NECK BALL NOSE                | R0.05 | R6.0  | 11   |
| SEM846 |    | 2 FLUTE LONG NECK BALL NOSE<br>(6mm shank) | R0.25 | R1.0  | 19   |
| SEMD99 |    | 2 FLUTE CORNER RADIUS                      | D0.2  | D20.0 | 22   |
| SEME61 |    | 2 FLUTE LONG NECK CORNER RADIUS            | D0.2  | D20.0 | 29   |
| SEME01 |    | 4 FLUTE CORNER RADIUS                      | D1.0  | D20.0 | 44   |
| SEME64 |    | 4 FLUTE LONG NECK CORNER RADIUS            | D1.0  | D20.0 | 50   |
| SEME35 |    | 2 FLUTE                                    | D0.03 | D25.0 | 62   |
| SEME70 |  | 2 FLUTE LONG LENGTH                        | D1.0  | D25.0 | 67   |
| SEM845 |  | 2 FLUTE LONG NECK                          | D0.1  | D12.0 | 72   |
| SEME36 |  | 4 FLUTE                                    | D0.8  | D25.0 | 79   |
| SEME71 |  | 4 FLUTE                                    | D1.0  | D20.0 | 81   |
| SEME72 |  | 4 FLUTE LONG LENGTH                        | D1.0  | D25.0 | 85   |
| SEME73 |  | 4 FLUTE LONG NECK                          | D1.0  | D12.0 | 90   |
| SEME75 |  | 6 FLUTE 45° HELIX                          | D6.0  | D20.0 | 94   |

X-SPEED ROUGHER

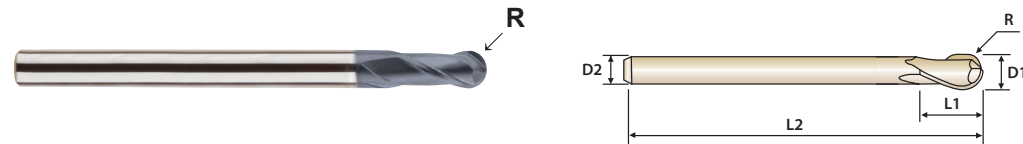
|                                |                                                                                     |                                                                |      |       |    |
|--------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------|------|-------|----|
| G9D75<br>G9D67                 |  | 4&5 FLUTE MULTIPLE HELIX SHORT LENGTH<br>CORNER RADIUS         | D6.0 | D20.0 | 95 |
| G9D76<br>G9D68                 |  | 4&5 FLUTE MULTIPLE HELIX LONG LENGTH<br>CORNER RADIUS          | D6.0 | D20.0 | 95 |
| G9D77<br>G9D69                 |  | 4&5 FLUTE MULTIPLE HELIX LONG REACH<br>CORNER RADIUS           | D6.0 | D20.0 | 96 |
| GAE53                          |  | HSS-PM, 4&5 FLUTE MULTIPLE HELIX SHORT LENGTH<br>CORNER RADIUS | D6.0 | D20.0 | 97 |
| RECOMMENDED CUTTING CONDITIONS |                                                                                     |                                                                |      |       | 98 |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          | S        |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |          |                        |

|   |   |   |   |  |  |   |   |   |  |  |  |  |
|---|---|---|---|--|--|---|---|---|--|--|--|--|
| ◎ | ◎ | ◎ | ○ |  |  | ○ | ◎ | ○ |  |  |  |  |
| ◎ | ◎ | ◎ | ○ |  |  | ○ | ◎ | ○ |  |  |  |  |
| ◎ | ◎ | ◎ | ○ |  |  | ○ | ◎ | ○ |  |  |  |  |
| ◎ | ◎ | ○ |   |  |  | ◎ | ◎ | ○ |  |  |  |  |

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



R≤3 R&gt;3

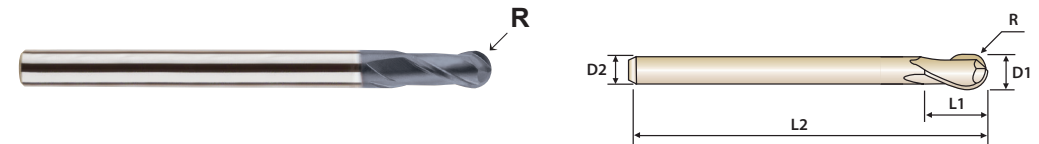
Unit : mm

| EDP No.       | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|---------------|---------------------|---------------|----------------|---------------|----------------|------------|-----------|
|               | R                   |               | D2             | L1            | L2             |            |           |
| SEMD98001SE   | R0.05               | 0.1           | 4              | 0.1           | 40             |            | Short     |
| SEMD98001E    | R0.05               |               | 4              | 0.2           | 40             | ●          | Regular   |
| SEMD980013SE  | R0.05               |               | 3              | 0.2           | 40             |            | 3mm Shank |
| SEMD980015SE  | R0.075              | 0.15          | 4              | 0.15          | 40             |            | Short     |
| SEMD980015E   | R0.075              |               | 4              | 0.3           | 40             |            | Regular   |
| SEMD9800153SE | R0.075              |               | 3              | 0.3           | 40             |            | 3mm Shank |
| SEMD98002SE   | R0.1                | 0.2           | 4              | 0.2           | 40             |            | Short     |
| SEMD98002E    | R0.1                |               | 4              | 0.4           | 40             | ●          | Regular   |
| SEMD980023SE  | R0.1                |               | 3              | 0.4           | 40             |            | 3mm Shank |
| SEMD98003SE   | R0.15               | 0.3           | 4              | 0.3           | 40             |            | Short     |
| SEMD98003E    | R0.15               |               | 4              | 0.6           | 40             | ●          | Regular   |
| SEMD980033SE  | R0.15               |               | 3              | 0.6           | 40             |            | 3mm Shank |
| SEMD98004SE   | R0.2                | 0.4           | 4              | 0.4           | 40             |            | Short     |
| SEMD98004E    | R0.2                |               | 4              | 0.8           | 40             | ●          | Regular   |
| SEMD980043SE  | R0.2                |               | 3              | 0.8           | 40             |            | 3mm Shank |
| SEMD98005SE   | R0.25               | 0.5           | 4              | 0.5           | 40             |            | Short     |
| SEMD98005E    | R0.25               |               | 4              | 1.0           | 40             | ●          | Regular   |
| SEMD980053SE  | R0.25               |               | 3              | 1.0           | 40             |            | 3mm Shank |
| SEMD98006SE   | R0.3                | 0.6           | 4              | 0.6           | 40             |            | Short     |
| SEMD98006E    | R0.3                |               | 4              | 1.2           | 40             | ●          | Regular   |
| SEMD980063SE  | R0.3                |               | 3              | 1.2           | 40             |            | 3mm Shank |
| SEMD98007SE   | R0.35               | 0.7           | 4              | 0.7           | 40             |            | Short     |
| SEMD98007E    | R0.35               |               | 4              | 1.4           | 40             | ●          | Regular   |
| SEMD980073SE  | R0.35               |               | 3              | 1.4           | 40             |            | 3mm Shank |
| SEMD98008SE   | R0.4                | 0.8           | 4              | 0.8           | 40             |            | Short     |
| SEMD98008E    | R0.4                |               | 4              | 1.6           | 40             | ●          | Regular   |
| SEMD980083SE  | R0.4                |               | 3              | 1.6           | 40             |            | 3mm Shank |
| SEMD98009SE   | R0.45               | 0.9           | 4              | 0.9           | 40             |            | Short     |
| SEMD98009E    | R0.45               |               | 4              | 1.8           | 40             | ●          | Regular   |
| SEMD980093SE  | R0.45               |               | 3              | 1.8           | 40             |            | 3mm Shank |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



R≤3 R&gt;3

Unit : mm

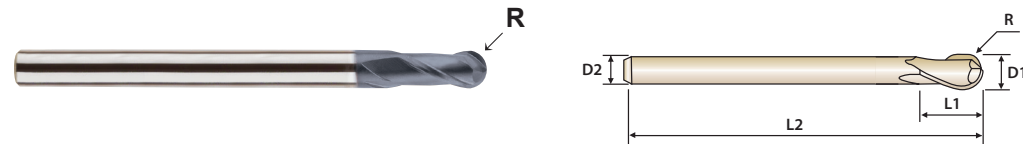
| EDP No.       | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|---------------|---------------------|---------------|----------------|---------------|----------------|------------|------------|
|               | R                   |               | D2             | L1            | L2             |            |            |
| SEMD98010040E | R0.5                | 1.0           | 6              | 1.5           | 40             |            | Short      |
| SEMD980103SE  | R0.5                |               | 3              | 2.5           | 50             |            | 3mm Shank  |
| SEMD980104SE  | R0.5                |               | 4              | 2.5           | 50             | ●          | Regular    |
| SEMD98010E    | R0.5                |               | 6              | 2.5           | 50             | ●          | Regular    |
| SEMD98010070E | R0.5                |               | 6              | 2.5           | 70             | ●          | Long Shank |
| SEMD98010100E | R0.5                | 1.2           | 6              | 2.5           | 100            |            | Long Shank |
| SEMD98012040E | R0.6                |               | 6              | 2             | 40             |            | Short      |
| SEMD980123SE  | R0.6                |               | 3              | 3             | 50             |            | 3mm Shank  |
| SEMD980124SE  | R0.6                |               | 4              | 3             | 50             |            | Regular    |
| SEMD98012E    | R0.6                |               | 6              | 3             | 50             | ●          | Regular    |
| SEMD98012070E | R0.6                |               | 6              | 3             | 70             |            | Long Shank |
| SEMD98012100E | R0.6                |               | 6              | 3             | 100            |            | Long Shank |
| SEMD98015040E | R0.75               | 1.5           | 6              | 2.5           | 40             |            | Short      |
| SEMD980153SE  | R0.75               |               | 3              | 4             | 50             |            | 3mm Shank  |
| SEMD980154SE  | R0.75               |               | 4              | 4             | 50             | ●          | Regular    |
| SEMD98015E    | R0.75               |               | 6              | 4             | 50             | ●          | Regular    |
| SEMD98015070E | R0.75               |               | 6              | 4             | 70             | ●          | Long Shank |
| SEMD98015100E | R0.75               | 2.0           | 6              | 4             | 100            |            | Long Shank |
| SEMD98020040E | R1.0                |               | 6              | 3             | 40             | ●          | Short      |
| SEMD980203SE  | R1.0                |               | 3              | 5             | 50             |            | 3mm Shank  |
| SEMD980204SE  | R1.0                |               | 4              | 5             | 50             | ●          | Regular    |
| SEMD98020E    | R1.0                |               | 6              | 5             | 50             | ●          | Regular    |
| SEMD98020080E | R1.0                |               | 6              | 5             | 80             | ●          | Long Shank |
| SEMD98020100E | R1.0                | 2.5           | 6              | 5             | 100            |            | Long Shank |
| SEMD98025040E | R1.25               |               | 6              | 4             | 40             |            | Short      |
| SEMD980253SE  | R1.25               |               | 3              | 6             | 60             |            | 3mm Shank  |
| SEMD980254SE  | R1.25               |               | 4              | 6             | 60             |            | Regular    |
| SEMD98025E    | R1.25               |               | 6              | 6             | 60             | ●          | Regular    |
| SEMD98025080E | R1.25               |               | 6              | 6             | 80             | ●          | Long Shank |
| SEMD98025100E | R1.25               |               | 6              | 6             | 100            |            | Long Shank |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |



- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



R≤3 R&gt;3

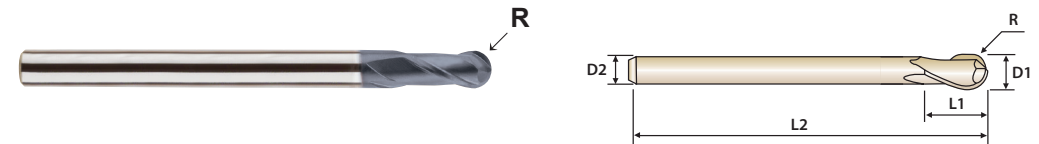
Unit : mm

| EDP No.         | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|-----------------|---------------------|---------------|----------------|---------------|----------------|------------|------------|
|                 | R                   | D1            | D2             | L1            | L2             |            |            |
| SEMD98030040E   | R1.5                | 3.0           | 6              | 4.5           | 40             | ●          | Short      |
| SEMD9803035E    | R1.5                |               | 3              | 6             | 60             |            | 3mm Shank  |
| SEMD9803045E    | R1.5                |               | 4              | 6             | 60             | ●          | Regular    |
| SEMD98030E      | R1.5                |               | 6              | 6             | 60             | ●          | Regular    |
| SEMD98030080E   | R1.5                |               | 6              | 6             | 80             | ●          | Long Shank |
| SEMD98030100E   | R1.5                |               | 6              | 6             | 100            | ●          | Long Shank |
| SEMD98035E      | R1.75               | 3.5           | 6              | 8             | 70             |            | -          |
| SEMD98040050E   | R2.0                | 4.0           | 6              | 6             | 50             | ●          | Short      |
| SEMD9804045E    | R2.0                |               | 4              | 8             | 70             | ●          | Regular    |
| SEMD98040E      | R2.0                |               | 6              | 8             | 70             | ●          | Regular    |
| SEMD9804010045E | R2.0                |               | 4              | 8             | 100            | ●          | Long Shank |
| SEMD9804012045E | R2.0                |               | 4              | 8             | 120            |            | Long Shank |
| SEMD98040100E   | R2.0                |               | 6              | 8             | 100            | ●          | Long Shank |
| SEMD98040120E   | R2.0                |               | 6              | 8             | 120            | ●          | Long Shank |
| SEMD98045E      | R2.25               | 4.5           | 6              | 9             | 80             | ●          | -          |
| SEMD98050060E   | R2.5                | 5.0           | 6              | 7.5           | 60             | ●          | Short      |
| SEMD98050E      | R2.5                |               | 6              | 10            | 80             | ●          | Regular    |
| SEMD9805055E    | R2.5                | 5.5           | 5              | 10            | 80             |            | 5mmShank   |
| SEMD98055E      | R2.75               |               | 6              | 11            | 90             |            | -          |
| SEMD98060050E   | R3.0                | 6.0           | 6              | 9             | 50             | ●          | Short      |
| SEMD98060060E   | R3.0                |               | 6              | 9             | 60             |            | Short      |
| SEMD98060080E   | R3.0                |               | 6              | 9             | 80             | ●          | Short      |
| SEMD98060E      | R3.0                |               | 6              | 12            | 90             | ●          | Regular    |
| SEMD98060110E   | R3.0                |               | 6              | 12            | 110            |            | Long Shank |
| SEMD98060130E   | R3.0                |               | 6              | 12            | 130            | ●          | Long Shank |
| SEMD98060150E   | R3.0                |               | 6              | 12            | 150            |            | Long Shank |
| SEMD98065E      | R3.25               | 6.5           | 8              | 13            | 90             |            | -          |
| SEMD98070E      | R3.5                | 7.0           | 8              | 14            | 90             | ●          | -          |
| SEMD98080050E   | R4.0                | 8.0           | 8              | 12            | 50             | ●          | Short      |
| SEMD98080060E   | R4.0                |               | 8              | 12            | 60             |            | Short      |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



R≤3 R&gt;3

Unit : mm

| EDP No.       | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|---------------|---------------------|---------------|----------------|---------------|----------------|------------|------------|
|               | R                   | D1            | D2             | L1            | L2             |            |            |
| SEMD98080080E | R4.0                | 8.0           | 8              | 12            | 80             |            | Short      |
| SEMD98080090E | R4.0                |               | 8              | 12            | 90             | ●          | Short      |
| SEMD98080E    | R4.0                |               | 8              | 14            | 100            | ●          | Regular    |
| SEMD98080130E | R4.0                |               | 8              | 14            | 130            |            | Long Shank |
| SEMD98080150E | R4.0                |               | 8              | 14            | 150            | ●          | Long Shank |
| SEMD98085E    | R4.25               | 8.5           | 10             | 16            | 100            |            | -          |
| SEMD98090E    | R4.5                | 9.0           | 10             | 18            | 100            |            | -          |
| SEMD98100050E | R5.0                | 10.0          | 10             | 15            | 50             |            | Short      |
| SEMD98100060E | R5.0                |               | 10             | 15            | 60             | ●          | Short      |
| SEMD98100080E | R5.0                |               | 10             | 15            | 80             |            | Short      |
| SEMD98100090E | R5.0                |               | 10             | 15            | 90             | ●          | Short      |
| SEMD98100E    | R5.0                |               | 10             | 18            | 100            | ●          | Regular    |
| SEMD98100130E | R5.0                |               | 10             | 18            | 130            | ●          | Long Shank |
| SEMD98100150E | R5.0                |               | 10             | 18            | 150            | ●          | Long Shank |
| SEMD98100180E | R5.0                |               | 10             | 18            | 180            | ●          | Long Shank |
| SEMD98100200E | R5.0                |               | 10             | 18            | 200            |            | Long Shank |
| SEMD98110E    | R5.5                | 11.0          | 12             | 20            | 100            |            | -          |
| SEMD98120060E | R6.0                | 12.0          | 12             | 18            | 60             |            | Short      |
| SEMD98120080E | R6.0                |               | 12             | 18            | 80             | ●          | Short      |
| SEMD98120090E | R6.0                |               | 12             | 18            | 90             |            | Short      |
| SEMD98120100E | R6.0                |               | 12             | 18            | 100            | ●          | Short      |
| SEMD98120E    | R6.0                |               | 12             | 22            | 110            | ●          | Regular    |
| SEMD98120130E | R6.0                |               | 12             | 22            | 130            |            | Long Shank |
| SEMD98120150E | R6.0                |               | 12             | 22            | 150            | ●          | Long Shank |
| SEMD98120180E | R6.0                |               | 12             | 22            | 180            |            | Long Shank |
| SEMD98120220E | R6.0                |               | 12             | 22            | 200            | ●          | Long Shank |
| SEMD98130E    | R6.5                | 13.0          | 12             | 24            | 100            | ●          | -          |
| SEMD98140E    | R7.0                | 14.0          | 12             | 26            | 100            |            | Regular    |
| SEMD98140145E | R7.0                |               | 14             | 26            | 100            | ●          | -          |
| SEMD98140165E | R7.0                |               | 16             | 26            | 100            |            | -          |

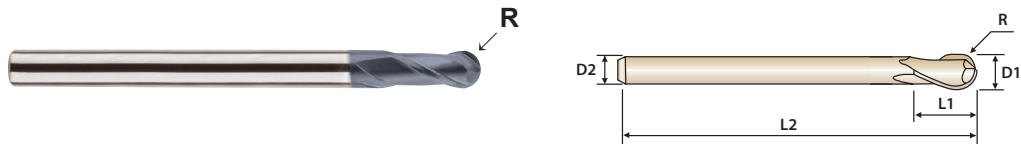
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE BALL NOSE  
(SHORT, REGULAR, LONG SHANK)

SEMD98 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



| EDP No.       | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|---------------|---------------------|---------------|----------------|---------------|----------------|------------|------------|
|               | R                   | D1            | D2             | L1            | L2             |            |            |
| SEMD98150E    | R7.5                | 15.0          | 16             | 28            | 140            |            | -          |
| SEMD98160100E | R8.0                | 16.0          | 16             | 24            | 100            | ●          | Short      |
| SEMD98160130E | R8.0                |               | 16             | 24            | 130            |            | Short      |
| SEMD98160E    | R8.0                |               | 16             | 30            | 150            | ●          | Regular    |
| SEMD98160180E | R8.0                |               | 16             | 30            | 180            |            | Long Shank |
| SEMD98160200E | R8.0                |               | 16             | 30            | 200            |            | Long Shank |
| SEMD98180E    | R9.0                | 18.0          | 16             | 34            | 150            |            | Regular    |
| SEMD9818018SE | R9.0                |               | 18             | 34            | 150            |            | -          |
| SEMD98200100E | R10.0               | 20.0          | 20             | 30            | 100            | ●          | Short      |
| SEMD98200130E | R10.0               |               | 20             | 30            | 130            |            | Short      |
| SEMD98200E    | R10.0               |               | 20             | 38            | 150            | ●          | Regular    |
| SEMD98200200E | R10.0               | 25.0          | 20             | 38            | 200            |            | Long Shank |
| SEMD98250120E | R12.5               |               | 25             | 50            | 120            |            | Short      |
| SEMD98250E    | R12.5               |               | 25             | 50            | 180            |            | Regular    |

| Size     | Radius Tolerance (mm) | Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|----------|-----------------------|--------------------------|----------------------|
| up to R3 | ±0.005                | 0~-0.012                 | h6                   |
| over R3  | ±0.010                | 0~-0.015                 |                      |

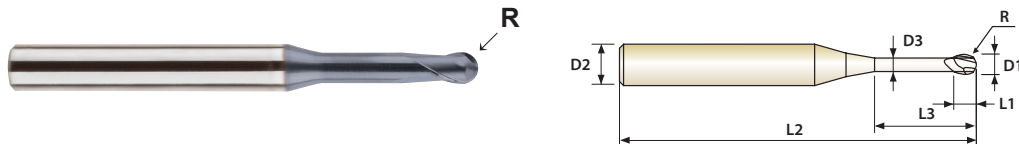
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



| EDP No.       | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|---------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|               | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM846001002E | R0.05               | 0.1           | 4              | 0.1           | 0.2                | 40             | 0.085         |            |
| SEM846001003E | R0.05               |               | 4              | 0.1           | 0.3                | 40             | 0.085         |            |
| SEM846001005E | R0.05               |               | 4              | 0.1           | 0.5                | 40             | 0.085         |            |
| SEM84600101E  | R0.05               |               | 4              | 0.1           | 1                  | 40             | 0.085         |            |
| SEM846002005E | R0.1                |               | 4              | 0.2           | 0.5                | 40             | 0.17          | ●          |
| SEM84600201E  | R0.1                | 0.2           | 4              | 0.2           | 1                  | 40             | 0.17          | ●          |
| SEM846002015E | R0.1                |               | 4              | 0.2           | 1.5                | 40             | 0.17          |            |
| SEM84600202E  | R0.1                |               | 4              | 0.2           | 2                  | 40             | 0.17          |            |
| SEM84600203E  | R0.1                | 0.3           | 4              | 0.2           | 3                  | 40             | 0.17          |            |
| SEM84600301E  | R0.15               |               | 4              | 0.3           | 1                  | 40             | 0.27          | ●          |
| SEM846003015E | R0.15               |               | 4              | 0.3           | 1.5                | 40             | 0.27          |            |
| SEM84600302E  | R0.15               |               | 4              | 0.3           | 2                  | 40             | 0.27          | ●          |
| SEM846003025E | R0.15               |               | 4              | 0.3           | 2.5                | 40             | 0.27          |            |
| SEM84600303E  | R0.15               |               | 4              | 0.3           | 3                  | 40             | 0.27          | ●          |
| SEM84600304E  | R0.15               |               | 4              | 0.3           | 4                  | 40             | 0.27          |            |
| SEM84600305E  | R0.15               |               | 4              | 0.3           | 5                  | 40             | 0.27          |            |
| SEM84600401E  | R0.2                |               | 4              | 0.4           | 1                  | 40             | 0.37          | ●          |
| SEM846004015E | R0.2                |               | 4              | 0.4           | 1.5                | 40             | 0.37          |            |
| SEM84600402E  | R0.2                | 0.4           | 4              | 0.4           | 2                  | 40             | 0.37          | ●          |
| SEM846004025E | R0.2                |               | 4              | 0.4           | 2.5                | 40             | 0.37          |            |
| SEM84600403E  | R0.2                |               | 4              | 0.4           | 3                  | 40             | 0.37          | ●          |
| SEM84600404E  | R0.2                |               | 4              | 0.4           | 4                  | 40             | 0.37          | ●          |
| SEM84600405E  | R0.2                |               | 4              | 0.4           | 5                  | 40             | 0.37          |            |
| SEM84600406E  | R0.2                |               | 4              | 0.4           | 6                  | 40             | 0.37          |            |
| SEM84600408E  | R0.2                |               | 4              | 0.4           | 8                  | 40             | 0.37          |            |
| SEM84600410E  | R0.2                |               | 4              | 0.4           | 10                 | 40             | 0.37          |            |
| SEM84600501E  | R0.25               | 0.5           | 4              | 0.5           | 1                  | 45             | 0.45          | ●          |
| SEM846005015E | R0.25               |               | 4              | 0.5           | 1.5                | 45             | 0.45          |            |
| SEM84600502E  | R0.25               |               | 4              | 0.5           | 2                  | 45             | 0.45          | ●          |

◎ : Excellent ○ : Good

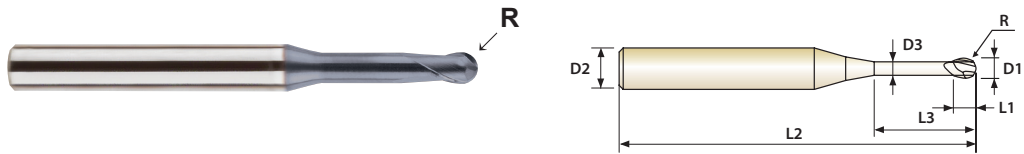
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |
|               |              |                    |                 |          |                      |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



| EDP No.       | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|---------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|               | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM846005025E | R0.25               | 0.5           | 4              | 0.5           | 2.5                | 45             | 0.45          |            |
| SEM84600503E  | R0.25               |               | 4              | 0.5           | 3                  | 45             | 0.45          | ●          |
| SEM84600504E  | R0.25               |               | 4              | 0.5           | 4                  | 45             | 0.45          | ●          |
| SEM84600505E  | R0.25               |               | 4              | 0.5           | 5                  | 45             | 0.45          | ●          |
| SEM84600506E  | R0.25               |               | 4              | 0.5           | 6                  | 45             | 0.45          | ●          |
| SEM84600508E  | R0.25               |               | 4              | 0.5           | 8                  | 45             | 0.45          | ●          |
| SEM84600510E  | R0.25               |               | 4              | 0.5           | 10                 | 45             | 0.45          | ●          |
| SEM84600512E  | R0.25               |               | 4              | 0.5           | 12                 | 45             | 0.45          |            |
| SEM84600514E  | R0.25               |               | 4              | 0.5           | 14                 | 45             | 0.45          |            |
| SEM84600516E  | R0.25               |               | 4              | 0.5           | 16                 | 45             | 0.45          |            |
| SEM84600601E  | R0.3                | 0.6           | 4              | 0.6           | 1                  | 45             | 0.55          |            |
| SEM84600602E  | R0.3                |               | 4              | 0.6           | 2                  | 45             | 0.55          | ●          |
| SEM84600603E  | R0.3                |               | 4              | 0.6           | 3                  | 45             | 0.55          | ●          |
| SEM84600604E  | R0.3                |               | 4              | 0.6           | 4                  | 45             | 0.55          | ●          |
| SEM84600605E  | R0.3                |               | 4              | 0.6           | 5                  | 45             | 0.55          | ●          |
| SEM84600606E  | R0.3                |               | 4              | 0.6           | 6                  | 45             | 0.55          | ●          |
| SEM84600608E  | R0.3                |               | 4              | 0.6           | 8                  | 45             | 0.55          | ●          |
| SEM84600610E  | R0.3                |               | 4              | 0.6           | 10                 | 45             | 0.55          | ●          |
| SEM84600612E  | R0.3                |               | 4              | 0.6           | 12                 | 45             | 0.55          | ●          |
| SEM84600614E  | R0.3                |               | 4              | 0.6           | 14                 | 45             | 0.55          |            |
| SEM84600616E  | R0.3                |               | 4              | 0.6           | 16                 | 45             | 0.55          |            |
| SEM84600702E  | R0.35               | 0.7           | 4              | 0.7           | 2                  | 45             | 0.65          |            |
| SEM84600704E  | R0.35               |               | 4              | 0.7           | 4                  | 45             | 0.65          |            |
| SEM84600706E  | R0.35               |               | 4              | 0.7           | 6                  | 45             | 0.65          |            |
| SEM84600708E  | R0.35               |               | 4              | 0.7           | 8                  | 45             | 0.65          |            |
| SEM84600710E  | R0.35               |               | 4              | 0.7           | 10                 | 45             | 0.65          |            |
| SEM84600712E  | R0.35               |               | 4              | 0.7           | 12                 | 45             | 0.65          |            |
| SEM84600801E  | R0.4                | 0.8           | 4              | 0.8           | 1                  | 45             | 0.75          |            |
| SEM84600802E  | R0.4                |               | 4              | 0.8           | 2                  | 45             | 0.75          | ●          |

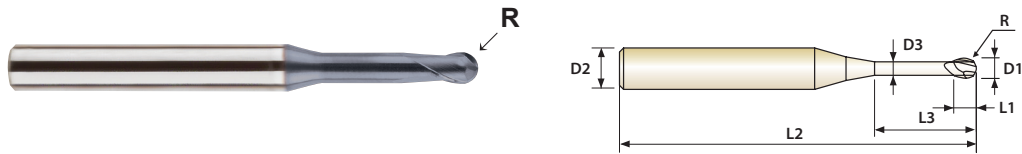
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



| EDP No.      | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84600803E | R0.4                | 0.8           | 4              | 0.8           | 3                  | 45             | 0.75          | ●          |
| SEM84600804E | R0.4                |               | 4              | 0.8           | 4                  | 45             | 0.75          | ●          |
| SEM84600805E | R0.4                |               | 4              | 0.8           | 5                  | 45             | 0.75          | ●          |
| SEM84600806E | R0.4                |               | 4              | 0.8           | 6                  | 45             | 0.75          | ●          |
| SEM84600808E | R0.4                |               | 4              | 0.8           | 8                  | 45             | 0.75          | ●          |
| SEM84600810E | R0.4                |               | 4              | 0.8           | 10                 | 45             | 0.75          | ●          |
| SEM84600812E | R0.4                |               | 4              | 0.8           | 12                 | 45             | 0.75          |            |
| SEM84600814E | R0.4                |               | 4              | 0.8           | 14                 | 45             | 0.75          |            |
| SEM84600816E | R0.4                |               | 4              | 0.8           | 16                 | 45             | 0.75          |            |
| SEM84600820E | R0.4                |               | 4              | 0.8           | 20                 | 45             | 0.75          |            |
| SEM84600904E | R0.45               | 0.9           | 4              | 0.9           | 4                  | 45             | 0.85          |            |
| SEM84600906E | R0.45               |               | 4              | 0.9           | 6                  | 45             | 0.85          |            |
| SEM84600908E | R0.45               |               | 4              | 0.9           | 8                  | 45             | 0.85          |            |
| SEM84600910E | R0.45               |               | 4              | 0.9           | 10                 | 45             | 0.85          |            |
| SEM84601002E | R0.5                | 1.0           | 4              | 1             | 2                  | 50             | 0.95          |            |
| SEM84601003E | R0.5                |               | 4              | 1             | 3                  | 50             | 0.95          | ●          |
| SEM84601004E | R0.5                |               | 4              | 1             | 4                  | 50             | 0.95          | ●          |
| SEM84601005E | R0.5                |               | 4              | 1             | 5                  | 50             | 0.95          | ●          |
| SEM84601006E | R0.5                |               | 4              | 1             | 6                  | 50             | 0.95          | ●          |
| SEM84601007E | R0.5                |               | 4              | 1             | 7                  | 50             | 0.95          |            |
| SEM84601008E | R0.5                |               | 4              | 1             | 8                  | 50             | 0.95          | ●          |
| SEM84601009E | R0.5                |               | 4              | 1             | 9                  | 50             | 0.95          |            |
| SEM84601010E | R0.5                |               | 4              | 1             | 10                 | 50             | 0.95          | ●          |
| SEM84601012E | R0.5                |               | 4              | 1             | 12                 | 50             | 0.95          | ●          |
| SEM84601014E | R0.5                |               | 4              | 1             | 14                 | 50             | 0.95          | ●          |
| SEM84601016E | R0.5                |               | 4              | 1             | 16                 | 50             | 0.95          | ●          |
| SEM84601018E | R0.5                |               | 4              | 1             | 18                 | 50             | 0.95          |            |
| SEM84601020E | R0.5                |               | 4              | 1             | 20                 | 50             | 0.95          | ●          |
| SEM84601022E | R0.5                |               | 4              | 1             | 22                 | 60             | 0.95          |            |

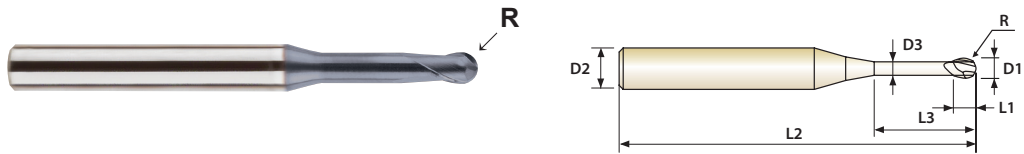
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



| EDP No.      | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84601026E | R0.5                | 1.0           | 4              | 1             | 26                 | 60             | 0.95          |            |
| SEM84601030E | R0.5                |               | 4              | 1             | 30                 | 70             | 0.95          |            |
| SEM84601040E | R0.5                |               | 4              | 1             | 40                 | 80             | 0.95          |            |
| SEM84601050E | R0.5                |               | 4              | 1             | 50                 | 100            | 0.95          |            |
| SEM84601204E | R0.6                | 1.2           | 4              | 1.2           | 4                  | 50             | 1.15          |            |
| SEM84601206E | R0.6                |               | 4              | 1.2           | 6                  | 50             | 1.15          | ●          |
| SEM84601208E | R0.6                |               | 4              | 1.2           | 8                  | 50             | 1.15          | ●          |
| SEM84601210E | R0.6                |               | 4              | 1.2           | 10                 | 50             | 1.15          | ●          |
| SEM84601212E | R0.6                |               | 4              | 1.2           | 12                 | 50             | 1.15          | ●          |
| SEM84601216E | R0.6                |               | 4              | 1.2           | 16                 | 50             | 1.15          | ●          |
| SEM84601220E | R0.6                | 1.4           | 4              | 1.2           | 20                 | 50             | 1.15          |            |
| SEM84601226E | R0.6                |               | 4              | 1.2           | 26                 | 60             | 1.15          |            |
| SEM84601406E | R0.7                |               | 4              | 1.4           | 6                  | 50             | 1.35          |            |
| SEM84601408E | R0.7                |               | 4              | 1.4           | 8                  | 50             | 1.35          |            |
| SEM84601410E | R0.7                |               | 4              | 1.4           | 10                 | 50             | 1.35          |            |
| SEM84601412E | R0.7                | 1.5           | 4              | 1.4           | 12                 | 50             | 1.35          |            |
| SEM84601416E | R0.7                |               | 4              | 1.4           | 16                 | 50             | 1.35          |            |
| SEM84601503E | R0.75               |               | 4              | 1.5           | 3                  | 50             | 1.45          |            |
| SEM84601504E | R0.75               |               | 4              | 1.5           | 4                  | 50             | 1.45          | ●          |
| SEM84601505E | R0.75               |               | 4              | 1.5           | 5                  | 50             | 1.45          |            |
| SEM84601506E | R0.75               |               | 4              | 1.5           | 6                  | 50             | 1.45          | ●          |
| SEM84601507E | R0.75               |               | 4              | 1.5           | 7                  | 50             | 1.45          |            |
| SEM84601508E | R0.75               |               | 4              | 1.5           | 8                  | 50             | 1.45          | ●          |
| SEM84601510E | R0.75               |               | 4              | 1.5           | 10                 | 50             | 1.45          | ●          |
| SEM84601512E | R0.75               |               | 4              | 1.5           | 12                 | 50             | 1.45          | ●          |
| SEM84601514E | R0.75               |               | 4              | 1.5           | 14                 | 50             | 1.45          | ●          |
| SEM84601516E | R0.75               |               | 4              | 1.5           | 16                 | 50             | 1.45          | ●          |
| SEM84601518E | R0.75               |               | 4              | 1.5           | 18                 | 50             | 1.45          | ●          |
| SEM84601520E | R0.75               |               | 4              | 1.5           | 20                 | 50             | 1.45          | ●          |

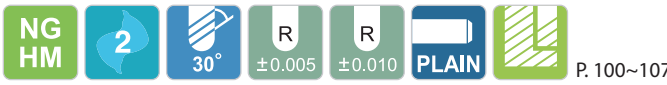
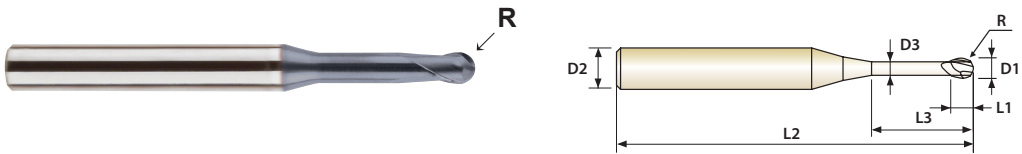
◎ : Excellent ○ : Good

| P             |              |                      |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|----------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Pearlhardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40             | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                    | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



| EDP No.      | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84601522E | R0.75               | 1.5           | 4              | 1.5           | 22                 | 60             | 1.45          |            |
| SEM84601526E | R0.75               |               | 4              | 1.5           | 26                 | 60             | 1.45          |            |
| SEM84601530E | R0.75               |               | 4              | 1.5           | 30                 | 70             | 1.45          |            |
| SEM84601535E | R0.75               |               | 4              | 1.5           | 35                 | 70             | 1.45          |            |
| SEM84601540E | R0.75               | 1.6           | 4              | 1.5           | 40                 | 80             | 1.45          |            |
| SEM84601604E | R0.8                |               | 4              | 1.6           | 4                  | 50             | 1.55          |            |
| SEM84601606E | R0.8                |               | 4              | 1.6           | 6                  | 50             | 1.55          |            |
| SEM84601608E | R0.8                |               | 4              | 1.6           | 8                  | 50             | 1.55          | ●          |
| SEM84601610E | R0.8                |               | 4              | 1.6           | 10                 | 50             | 1.55          |            |
| SEM84601612E | R0.8                |               | 4              | 1.6           | 12                 | 50             | 1.55          | ●          |
| SEM84601616E | R0.8                | 1.8           | 4              | 1.6           | 16                 | 50             | 1.55          | ●          |
| SEM84601620E | R0.8                |               | 4              | 1.6           | 20                 | 50             | 1.55          |            |
| SEM84601804E | R0.9                |               | 4              | 1.8           | 4                  | 50             | 1.75          |            |
| SEM84601806E | R0.9                |               | 4              | 1.8           | 6                  | 50             | 1.75          |            |
| SEM84601808E | R0.9                |               | 4              | 1.8           | 8                  | 50             | 1.75          | ●          |
| SEM84601810E | R0.9                | 2.0           | 4              | 1.8           | 10                 | 50             | 1.75          |            |
| SEM84601812E | R0.9                |               | 4              | 1.8           | 12                 | 50             | 1.75          | ●          |
| SEM84601816E | R0.9                |               | 4              | 1.8           | 16                 | 50             | 1.75          | ●          |
| SEM84601820E | R0.9                |               | 4              | 1.8           | 20                 | 50             | 1.75          |            |
| SEM84602004E | R1.0                |               | 4              | 2             | 4                  | 50             | 1.95          |            |
| SEM84602006E | R1.0                |               | 4              | 2             | 6                  | 50             | 1.95          | ●          |
| SEM84602008E | R1.0                |               | 4              | 2             | 8                  | 50             | 1.95          | ●          |
| SEM84602010E | R1.0                |               | 4              | 2             | 10                 | 50             | 1.95          | ●          |
| SEM84602012E | R1.0                |               | 4              | 2             | 12                 | 50             | 1.95          | ●          |
| SEM84602014E | R1.0                |               | 4              | 2             | 14                 | 50             | 1.95          | ●          |
| SEM84602016E | R1.0                |               | 4              | 2             | 16                 | 50             | 1.95          | ●          |
| SEM84602018E | R1.0                |               | 4              | 2             | 18                 | 50             | 1.95          | ●          |
| SEM84602020E | R1.0                |               | 4              | 2             | 20                 | 50             | 1.95          | ●          |
| SEM84602022E | R1.0                |               | 4              | 2             | 22                 | 60             | 1.95          |            |

◎ : Excellent ○ : Good

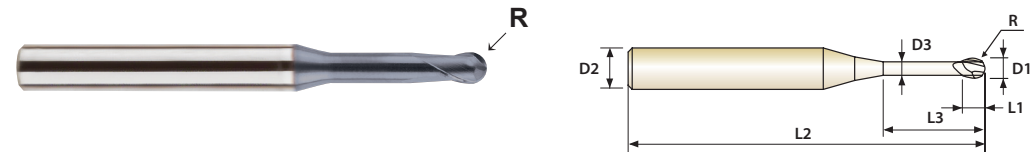
| P             |              |                      |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|----------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Pearlhardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40             | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                    | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

## SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



R≤3 R&gt;3

Unit : mm

| EDP No.      | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | R                   |               |                |               |                    |                |               |            |
| SEM84602026E | R1.0                | 2.0           | 4              | 2             | 26                 | 60             | 1.95          | ●          |
| SEM84602030E | R1.0                |               | 4              | 2             | 30                 | 70             | 1.95          | ●          |
| SEM84602035E | R1.0                |               | 4              | 2             | 35                 | 70             | 1.95          |            |
| SEM84602040E | R1.0                |               | 4              | 2             | 40                 | 80             | 1.95          |            |
| SEM84602045E | R1.0                |               | 4              | 2             | 45                 | 90             | 1.95          |            |
| SEM84602050E | R1.0                |               | 4              | 2             | 50                 | 100            | 1.95          |            |
| SEM84602060E | R1.0                | 2.5           | 4              | 2             | 60                 | 110            | 1.95          |            |
| SEM84602508E | R1.25               |               | 4              | 2.5           | 8                  | 50             | 2.40          |            |
| SEM84602510E | R1.25               |               | 4              | 2.5           | 10                 | 50             | 2.40          | ●          |
| SEM84602512E | R1.25               |               | 4              | 2.5           | 12                 | 50             | 2.40          |            |
| SEM84602516E | R1.25               |               | 4              | 2.5           | 16                 | 50             | 2.40          |            |
| SEM84602520E | R1.25               |               | 4              | 2.5           | 20                 | 50             | 2.40          | ●          |
| SEM84602522E | R1.25               |               | 4              | 2.5           | 22                 | 60             | 2.40          |            |
| SEM84602526E | R1.25               |               | 4              | 2.5           | 26                 | 60             | 2.40          |            |
| SEM84602530E | R1.25               |               | 4              | 2.5           | 30                 | 70             | 2.40          |            |
| SEM84602535E | R1.25               |               | 4              | 2.5           | 35                 | 70             | 2.40          |            |
| SEM84602540E | R1.25               |               | 4              | 2.5           | 40                 | 80             | 2.40          |            |
| SEM84602545E | R1.25               |               | 4              | 2.5           | 45                 | 90             | 2.40          |            |
| SEM84602550E | R1.25               |               | 4              | 2.5           | 50                 | 100            | 2.40          |            |
| SEM84603006E | R1.5                | 3.0           | 6              | 3             | 6                  | 50             | 2.85          |            |
| SEM84603008E | R1.5                |               | 6              | 3             | 8                  | 50             | 2.85          | ●          |
| SEM84603010E | R1.5                |               | 6              | 3             | 10                 | 50             | 2.85          | ●          |
| SEM84603012E | R1.5                |               | 6              | 3             | 12                 | 50             | 2.85          | ●          |
| SEM84603014E | R1.5                |               | 6              | 3             | 14                 | 60             | 2.85          | ●          |
| SEM84603016E | R1.5                |               | 6              | 3             | 16                 | 60             | 2.85          | ●          |
| SEM84603018E | R1.5                |               | 6              | 3             | 18                 | 60             | 2.85          | ●          |
| SEM84603020E | R1.5                |               | 6              | 3             | 20                 | 60             | 2.85          | ●          |
| SEM84603022E | R1.5                |               | 6              | 3             | 22                 | 65             | 2.85          |            |
| SEM84603026E | R1.5                |               | 6              | 3             | 26                 | 65             | 2.85          | ●          |

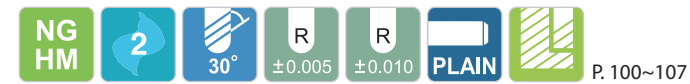
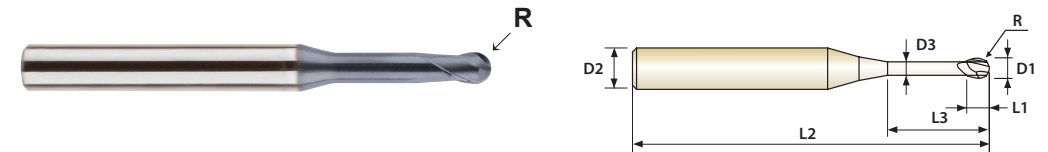
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

## SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



R≤3 R&gt;3

Unit : mm

| EDP No.      | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | R                   |               |                |               |                    |                |               |            |
| SEM84603030E | R1.5                | 3.0           | 6              | 3             | 30                 | 70             | 2.85          | ●          |
| SEM84603035E | R1.5                |               | 6              | 3             | 35                 | 70             | 2.85          | ●          |
| SEM84603040E | R1.5                |               | 6              | 3             | 40                 | 80             | 2.85          |            |
| SEM84603045E | R1.5                |               | 6              | 3             | 45                 | 90             | 2.85          |            |
| SEM84603050E | R1.5                |               | 6              | 3             | 50                 | 100            | 2.85          |            |
| SEM84603060E | R1.5                |               | 6              | 3             | 60                 | 100            | 2.85          |            |
| SEM84604008E | R2.0                | 4.0           | 6              | 4             | 8                  | 50             | 3.85          |            |
| SEM84604010E | R2.0                |               | 6              | 4             | 10                 | 50             | 3.85          | ●          |
| SEM84604012E | R2.0                |               | 6              | 4             | 12                 | 50             | 3.85          | ●          |
| SEM84604014E | R2.0                |               | 6              | 4             | 14                 | 60             | 3.85          | ●          |
| SEM84604016E | R2.0                |               | 6              | 4             | 16                 | 60             | 3.85          | ●          |
| SEM84604018E | R2.0                |               | 6              | 4             | 18                 | 60             | 3.85          | ●          |
| SEM84604020E | R2.0                |               | 6              | 4             | 20                 | 60             | 3.85          | ●          |
| SEM84604022E | R2.0                |               | 6              | 4             | 22                 | 65             | 3.85          |            |
| SEM84604026E | R2.0                |               | 6              | 4             | 26                 | 65             | 3.85          | ●          |
| SEM84604030E | R2.0                |               | 6              | 4             | 30                 | 70             | 3.85          | ●          |
| SEM84604035E | R2.0                |               | 6              | 4             | 35                 | 70             | 3.85          | ●          |
| SEM84604040E | R2.0                |               | 6              | 4             | 40                 | 80             | 3.85          | ●          |
| SEM84604045E | R2.0                |               | 6              | 4             | 45                 | 90             | 3.85          |            |
| SEM84604050E | R2.0                |               | 6              | 4             | 50                 | 100            | 3.85          |            |
| SEM84604055E | R2.0                | 5.0           | 6              | 4             | 55                 | 100            | 3.85          |            |
| SEM84604060E | R2.0                |               | 6              | 4             | 60                 | 100            | 3.85          |            |
| SEM84605015E | R2.5                |               | 6              | 6             | 15                 | 60             | 4.85          |            |
| SEM84605020E | R2.5                |               | 6              | 6             | 20                 | 60             | 4.85          |            |
| SEM84605026E | R2.5                |               | 6              | 6             | 26                 | 65             | 4.85          |            |
| SEM84605030E | R2.5                |               | 6              | 6             | 30                 | 70             | 4.85          | ●          |
| SEM84605035E | R2.5                |               | 6              | 6             | 35                 | 70             | 4.85          |            |
| SEM84605040E | R2.5                |               | 6              | 6             | 40                 | 80             | 4.85          |            |
| SEM84605045E | R2.5                |               | 6              | 6             | 45                 | 90             | 4.85          |            |

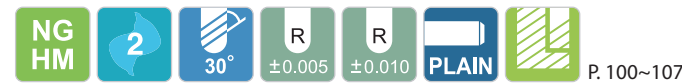
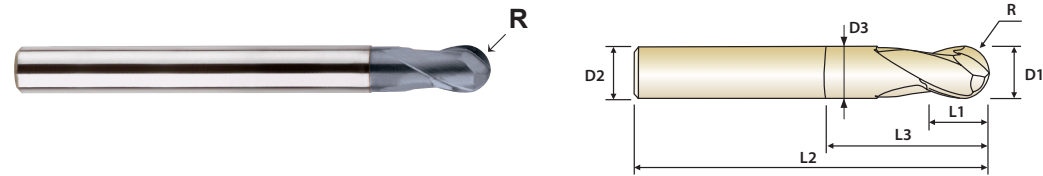
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and so wear resistance increased.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.



R≤3 R&gt;3

Unit : mm

| EDP No.         | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|-----------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|                 | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84605050E    | R2.5                | 5.0           | 6              | 6             | 50                 | 100            | 4.85          |            |
| SEM84605055E    | R2.5                |               | 6              | 6             | 55                 | 100            | 4.85          |            |
| SEM84605060E    | R2.5                |               | 6              | 6             | 60                 | 100            | 4.85          |            |
| SEM84606020E    | R3.0                | 6.0           | 6              | 8             | 20                 | 60             | 5.85          | ●          |
| SEM84606030E    | R3.0                |               | 6              | 8             | 30                 | 60             | 5.85          | ●          |
| SEM84606020090E | R3.0                |               | 6              | 12            | 20                 | 90             | 5.85          |            |
| SEM84606030090E | R3.0                |               | 6              | 12            | 30                 | 90             | 5.85          |            |
| SEM84608025E    | R4.0                | 8.0           | 8              | 10            | 25                 | 70             | 7.70          | ●          |
| SEM84608035E    | R4.0                |               | 8              | 10            | 35                 | 70             | 7.70          |            |
| SEM84608025100E | R4.0                |               | 8              | 14            | 25                 | 100            | 7.70          |            |
| SEM84608035100E | R4.0                | 10.0          | 8              | 14            | 35                 | 100            | 7.70          | ●          |
| SEM84610030E    | R5.0                |               | 10             | 12            | 30                 | 75             | 9.70          | ●          |
| SEM84610040E    | R5.0                |               | 10             | 12            | 40                 | 75             | 9.70          |            |
| SEM84610030100E | R5.0                |               | 10             | 18            | 30                 | 100            | 9.70          | ●          |
| SEM84610040100E | R5.0                |               | 10             | 18            | 40                 | 100            | 9.70          | ●          |
| SEM84612032E    | R6.0                | 12.0          | 12             | 14            | 32                 | 80             | 11.70         | ●          |
| SEM84612045E    | R6.0                |               | 12             | 14            | 45                 | 80             | 11.70         |            |
| SEM84612032110E | R6.0                |               | 12             | 22            | 32                 | 110            | 11.70         | ●          |
| SEM84612045110E | R6.0                |               | 12             | 22            | 45                 | 110            | 11.70         |            |

| Size     | Radius Tolerance (mm) | Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|----------|-----------------------|--------------------------|----------------------|
| up to R3 | ±0.005                | 0~-0.012                 | h6                   |
| over R3  | ±0.010                | 0~-0.015                 |                      |

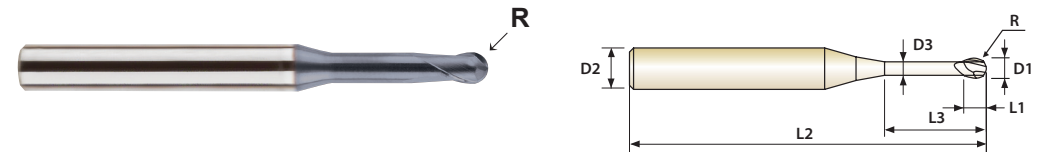
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE  
(6mm SHANK)

SEM846 SERIES

- ▶ Due to new geometry, nano grain raw material and coating, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Supplying 6 mm enlarged shank diameter end mills, strong gripping holding force results in highly efficient cutting.



P. 100~107

Unit : mm

| EDP No.        | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|----------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|                | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM846005016SE | R0.25               | 0.5           | 6              | 0.5           | 1                  | 45             | 0.45          |            |
| SEM846005026SE | R0.25               |               | 6              | 0.5           | 2                  | 45             | 0.45          |            |
| SEM846005046SE | R0.25               |               | 6              | 0.5           | 4                  | 45             | 0.45          |            |
| SEM846006016SE | R0.3                | 0.6           | 6              | 0.6           | 1                  | 45             | 0.55          |            |
| SEM846006026SE | R0.3                |               | 6              | 0.6           | 2                  | 45             | 0.55          |            |
| SEM846006036SE | R0.3                |               | 6              | 0.6           | 3                  | 45             | 0.55          |            |
| SEM846006046SE | R0.3                |               | 6              | 0.6           | 4                  | 45             | 0.55          |            |
| SEM846006056SE | R0.3                |               | 6              | 0.6           | 5                  | 45             | 0.55          |            |
| SEM846006066SE | R0.3                |               | 6              | 0.6           | 6                  | 45             | 0.55          |            |
| SEM846006086SE | R0.3                |               | 6              | 0.6           | 8                  | 45             | 0.55          |            |
| SEM846006106SE | R0.3                |               | 6              | 0.6           | 10                 | 45             | 0.55          |            |
| SEM846006126SE | R0.3                |               | 6              | 0.6           | 12                 | 45             | 0.55          |            |
| SEM846006146SE | R0.3                |               | 6              | 0.6           | 14                 | 45             | 0.55          |            |
| SEM846006166SE | R0.3                |               | 6              | 0.6           | 16                 | 45             | 0.55          |            |
| SEM846008016SE | R0.4                | 0.8           | 6              | 0.8           | 1                  | 45             | 0.75          |            |
| SEM846008026SE | R0.4                |               | 6              | 0.8           | 2                  | 45             | 0.75          |            |
| SEM846008036SE | R0.4                |               | 6              | 0.8           | 3                  | 45             | 0.75          |            |
| SEM846008046SE | R0.4                |               | 6              | 0.8           | 4                  | 45             | 0.75          |            |
| SEM846008056SE | R0.4                |               | 6              | 0.8           | 5                  | 45             | 0.75          |            |
| SEM846008066SE | R0.4                |               | 6              | 0.8           | 6                  | 45             | 0.75          |            |
| SEM846008086SE | R0.4                |               | 6              | 0.8           | 8                  | 45             | 0.75          |            |
| SEM846008106SE | R0.4                |               | 6              | 0.8           | 10                 | 45             | 0.75          |            |
| SEM846008126SE | R0.4                |               | 6              | 0.8           | 12                 | 45             | 0.75          |            |
| SEM846008146SE | R0.4                |               | 6              | 0.8           | 14                 | 45             | 0.75          |            |
| SEM846008166SE | R0.4                |               | 6              | 0.8           | 16                 | 45             | 0.75          |            |
| SEM846008206SE | R0.4                |               | 6              | 0.8           | 20                 | 45             | 0.75          |            |
| SEM846010026SE | R0.5                | 1.0           | 6              | 1             | 2                  | 50             | 0.95          |            |
| SEM846010036SE | R0.5                |               | 6              | 1             | 3                  | 50             | 0.95          |            |
| SEM846010046SE | R0.5                |               | 6              | 1             | 4                  | 50             | 0.95          |            |

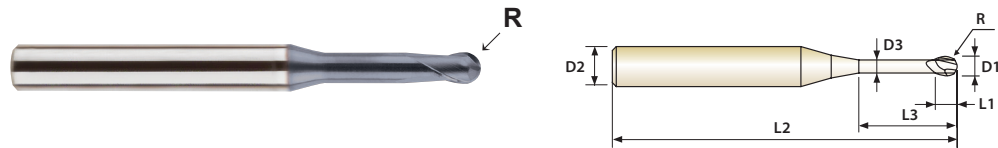
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE  
(6mm SHANK)

SEM846 SERIES

- ▶ Due to new geometry, nano grain raw material and coating, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Supplying 6 mm enlarged shank diameter end mills, strong gripping holding force results in highly efficient cutting.



| Unit : mm      |                     |               |                |               |                    |                |               |            |
|----------------|---------------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
| EDP No.        | Radius of Ball Nose | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|                | R                   | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM846010056SE | R0.5                | 1.0           | 6              | 1             | 5                  | 50             | 0.95          |            |
| SEM846010066SE | R0.5                |               | 6              | 1             | 6                  | 50             | 0.95          |            |
| SEM846010076SE | R0.5                |               | 6              | 1             | 7                  | 50             | 0.95          |            |
| SEM846010086SE | R0.5                |               | 6              | 1             | 8                  | 50             | 0.95          |            |
| SEM846010096SE | R0.5                |               | 6              | 1             | 9                  | 50             | 0.95          |            |
| SEM846010106SE | R0.5                |               | 6              | 1             | 10                 | 50             | 0.95          |            |
| SEM846010126SE | R0.5                |               | 6              | 1             | 12                 | 50             | 0.95          |            |
| SEM846010146SE | R0.5                |               | 6              | 1             | 14                 | 50             | 0.95          |            |
| SEM846010166SE | R0.5                |               | 6              | 1             | 16                 | 50             | 0.95          |            |
| SEM846010186SE | R0.5                |               | 6              | 1             | 18                 | 50             | 0.95          |            |
| SEM846010206SE | R0.5                |               | 6              | 1             | 20                 | 50             | 0.95          |            |
| SEM846010226SE | R0.5                |               | 6              | 1             | 22                 | 60             | 0.95          |            |
| SEM846010266SE | R0.5                |               | 6              | 1             | 26                 | 60             | 0.95          |            |
| SEM846010306SE | R0.5                |               | 6              | 1             | 30                 | 70             | 0.95          |            |
| SEM846015036SE | R0.75               | 1.5           | 6              | 1.5           | 3                  | 50             | 1.45          |            |
| SEM846015046SE | R0.75               |               | 6              | 1.5           | 4                  | 50             | 1.45          |            |
| SEM846015066SE | R0.75               |               | 6              | 1.5           | 6                  | 50             | 1.45          |            |
| SEM846015086SE | R0.75               |               | 6              | 1.5           | 8                  | 50             | 1.45          |            |
| SEM846015106SE | R0.75               |               | 6              | 1.5           | 10                 | 50             | 1.45          |            |
| SEM846015126SE | R0.75               |               | 6              | 1.5           | 12                 | 50             | 1.45          |            |
| SEM846015146SE | R0.75               |               | 6              | 1.5           | 14                 | 50             | 1.45          |            |
| SEM846015166SE | R0.75               |               | 6              | 1.5           | 16                 | 50             | 1.45          |            |
| SEM846015186SE | R0.75               |               | 6              | 1.5           | 18                 | 50             | 1.45          |            |
| SEM846015206SE | R0.75               |               | 6              | 1.5           | 20                 | 50             | 1.45          |            |
| SEM846015226SE | R0.75               |               | 6              | 1.5           | 22                 | 60             | 1.45          |            |
| SEM846015266SE | R0.75               |               | 6              | 1.5           | 26                 | 60             | 1.45          |            |
| SEM846015306SE | R0.75               |               | 6              | 1.5           | 30                 | 70             | 1.45          |            |
| SEM846015356SE | R0.75               |               | 6              | 1.5           | 35                 | 70             | 1.45          |            |
| SEM846015406SE | R0.75               |               | 6              | 1.5           | 40                 | 80             | 1.45          |            |

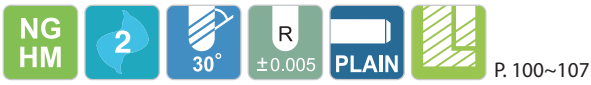
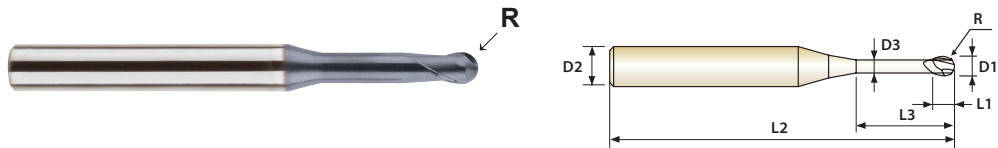
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRc55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE  
(6mm SHANK)

SEM846 SERIES

- ▶ Due to new geometry, nano grain raw material and coating, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to unique ball nose geometry and cutting edges, cutting force decreased, and wear resistance increased.
- ▶ Supplying 6 mm enlarged shank diameter end mills, strong gripping holding force results in highly efficient cutting.



| Unit : mm                |                     |                       |                |                      |                    |                |               |            |
|--------------------------|---------------------|-----------------------|----------------|----------------------|--------------------|----------------|---------------|------------|
| EDP No.                  | Radius of Ball Nose | Mill Diameter         | Shank Diameter | Length of Cut        | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|                          | R                   | D1                    | D2             | L1                   | L3                 | L2             | D3            |            |
| SEM846020046SE           | R1.0                | 2.0                   | 6              | 2                    | 4                  | 50             | 1.95          |            |
| SEM846020066SE           | R1.0                |                       | 6              | 2                    | 6                  | 50             | 1.95          |            |
| SEM846020086SE           | R1.0                |                       | 6              | 2                    | 8                  | 50             | 1.95          |            |
| SEM846020106SE           | R1.0                |                       | 6              | 2                    | 10                 | 50             | 1.95          |            |
| SEM846020126SE           | R1.0                |                       | 6              | 2                    | 12                 | 50             | 1.95          |            |
| SEM846020146SE           | R1.0                |                       | 6              | 2                    | 14                 | 50             | 1.95          |            |
| SEM846020166SE           | R1.0                |                       | 6              | 2                    | 16                 | 50             | 1.95          |            |
| SEM846020186SE           | R1.0                |                       | 6              | 2                    | 18                 | 50             | 1.95          |            |
| SEM846020206SE           | R1.0                |                       | 6              | 2                    | 20                 | 50             | 1.95          |            |
| SEM846020226SE           | R1.0                |                       | 6              | 2                    | 22                 | 60             | 1.95          |            |
| SEM846020266SE           | R1.0                |                       | 6              | 2                    | 26                 | 60             | 1.95          |            |
| SEM846020306SE           | R1.0                |                       | 6              | 2                    | 30                 | 70             | 1.95          |            |
| SEM846020356SE           | R1.0                |                       | 6              | 2                    | 35                 | 70             | 1.95          |            |
| SEM846020406SE           | R1.0                |                       | 6              | 2                    | 40                 | 80             | 1.95          |            |
| SEM846020456SE           | R1.0                |                       | 6              | 2                    | 45                 | 90             | 1.95          |            |
| SEM846020506SE           | R1.0                |                       | 6              | 2                    | 50                 | 100            | 1.95          |            |
| Mill Dia. Tolerance (mm) |                     | Radius Tolerance (mm) |                | Shank Dia. Tolerance |                    |                |               |            |
| 0~-0.012                 |                     | ±0.005                |                | h6                   |                    |                |               |            |

◎ : Excellent ○ : Good

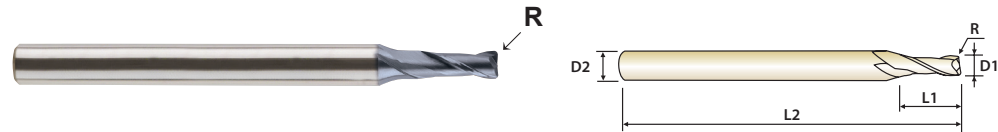
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEMD99 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available short, regular and long shank end mills.
- ▶ Available various corner radius end mills, from 0.02 mm to 5.0mm corner radius.



P. 108~109

\* NEW SIZES

D≤6

D&gt;6

Unit : mm

| EDP No.           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|-------------------|---------------|---------------|----------------|---------------|----------------|------------|-----------|
|                   | R             | D1            | D2             | L1            | L2             |            |           |
| SEMD99002002E     | R0.02         | 0.2           | 4              | 0.4           | 40             |            | -         |
| SEMD99002005E     | R0.05         |               | 4              | 0.4           | 40             |            | -         |
| SEMD99003002E     | R0.02         | 0.3           | 4              | 0.6           | 40             |            | -         |
| SEMD99003005E     | R0.05         |               | 4              | 0.6           | 40             |            | -         |
| SEMD99004005E     | R0.05         | 0.4           | 4              | 0.8           | 40             |            | -         |
| SEMD9900401E      | R0.1          |               | 4              | 0.8           | 40             |            | -         |
| SEMD99005005E     | R0.05         | 0.5           | 4              | 1.0           | 40             |            | -         |
| SEMD9900501E      | R0.1          |               | 4              | 1.0           | 40             |            | -         |
| SEMD99006005E     | R0.05         | 0.6           | 4              | 1.2           | 40             |            | -         |
| SEMD9900601E      | R0.1          |               | 4              | 1.2           | 40             |            | -         |
| SEMD9900602E      | R0.2          | 0.7           | 4              | 1.2           | 40             |            | -         |
| SEMD99007005E     | R0.05         |               | 4              | 1.4           | 40             |            | -         |
| SEMD9900701E      | R0.1          | 0.8           | 4              | 1.4           | 40             |            | -         |
| SEMD9900702E      | R0.2          |               | 4              | 1.4           | 40             |            | -         |
| SEMD99008005E     | R0.05         | 0.9           | 4              | 1.6           | 40             |            | -         |
| SEMD9900801E      | R0.1          |               | 4              | 1.6           | 40             |            | -         |
| SEMD9900802E      | R0.2          | 1.0           | 4              | 1.6           | 40             |            | -         |
| SEMD99009005E     | R0.05         |               | 4              | 1.8           | 40             |            | -         |
| SEMD9900901E      | R0.1          | 1.2           | 4              | 1.8           | 40             |            | -         |
| * SEMD990100054SE | R0.05         |               | 4              | 2.5           | 50             |            | 4mm Shank |
| * SEMD99010014SE  | R0.1          | 1.0           | 4              | 2.5           | 50             |            | 4mm Shank |
| * SEMD99010024SE  | R0.2          |               | 4              | 2.5           | 50             |            | 4mm Shank |
| * SEMD99010034SE  | R0.3          | 1.0           | 4              | 2.5           | 50             |            | 4mm Shank |
| SEMD99010005E     | R0.05         |               | 6              | 2.5           | 50             |            | -         |
| SEMD9901001E      | R0.1          | 1.0           | 6              | 2.5           | 50             |            | -         |
| SEMD9901002E      | R0.2          |               | 6              | 2.5           | 50             | ●          | -         |
| SEMD9901003E      | R0.3          | 1.0           | 6              | 2.5           | 50             | ●          | -         |
| * SEMD990120054SE | R0.05         |               | 4              | 3             | 50             |            | 4mm Shank |
| * SEMD99012014SE  | R0.1          | 1.2           | 4              | 3             | 50             |            | 4mm Shank |
| * SEMD99012024SE  | R0.2          |               | 4              | 3             | 50             |            | 4mm Shank |

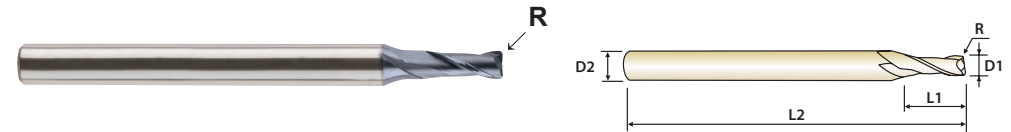
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |  |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|--|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |  |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |  |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |  |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEMD99 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available short, regular and long shank end mills.
- ▶ Available various corner radius end mills, from 0.02 mm to 5.0mm corner radius.



P. 108~109

\* NEW SIZES

D≤6

D&gt;6

Unit : mm

| EDP No.           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|-------------------|---------------|---------------|----------------|---------------|----------------|------------|-----------|
|                   | R             | D1            | D2             | L1            | L2             |            |           |
| * SEMD99012034SE  | R0.3          | 1.2           | 4              | 3             | 50             |            | 4mm Shank |
| SEMD99012005E     | R0.05         |               | 6              | 3             | 50             |            | -         |
| SEMD9901201E      | R0.1          |               | 6              | 3             | 50             |            | -         |
| SEMD9901202E      | R0.2          |               | 6              | 3             | 50             |            | -         |
| SEMD9901203E      | R0.3          |               | 6              | 3             | 50             |            | -         |
| * SEMD990150054SE | R0.05         | 1.5           | 4              | 4             | 50             |            | -         |
| * SEMD99015014SE  | R0.1          |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEMD99015024SE  | R0.2          |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEMD99015034SE  | R0.3          |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEMD99015054SE  | R0.5          |               | 4              | 4             | 50             |            | 4mm Shank |
| SEMD99015005E     | R0.05         |               | 6              | 4             | 50             |            | -         |
| SEMD9901501E      | R0.1          |               | 6              | 4             | 50             |            | -         |
| SEMD9901502E      | R0.2          |               | 6              | 4             | 50             | ●          | -         |
| SEMD9901503E      | R0.3          |               | 6              | 4             | 50             | ●          | -         |
| SEMD9901505E      | R0.5          |               | 6              | 4             | 50             | ●          | -         |
| * SEMD99020014SE  | R0.1          | 2.0           | 4              | 6             | 50             |            | 4mm Shank |
| * SEMD99020024SE  | R0.2          |               | 4              | 6             | 50             |            | 4mm Shank |
| * SEMD99020034SE  | R0.3          |               | 4              | 6             | 50             |            | 4mm Shank |
| * SEMD99020054SE  | R0.5          |               | 4              | 6             | 50             |            | 4mm Shank |
| SEMD9902001E      | R0.1          |               | 6              | 6             | 50             |            | -         |
| SEMD9902002E      | R0.2          | 2.5           | 6              | 6             | 50             | ●          | -         |
| SEMD9902003E      | R0.3          |               | 6              | 6             | 50             | ●          | -         |
| SEMD9902005E      | R0.5          |               | 6              | 6             | 50             | ●          | -         |
| * SEMD99025014SE  | R0.1          |               | 4              | 7             | 60             |            | 4mm Shank |
| * SEMD99025024SE  | R0.2          |               | 4              | 7             | 60             |            | 4mm Shank |
| * SEMD99025034SE  | R0.3          |               | 4              | 7             | 60             |            | 4mm Shank |
| * SEMD99025054SE  | R0.5          |               | 4              | 7             | 60             |            | 4mm Shank |
| SEMD9902501E      | R0.1          | 2.5           | 6              | 7             | 60             |            | -         |
| SEMD9902502E      | R0.2          |               | 6              | 7             | 60             |            | -         |
| SEMD9902503E      | R0.3          |               | 6              | 7             | 60             |            | -         |
| SEMD9902505E      | R0.5          |               | 6              | 7             | 60             |            | -         |

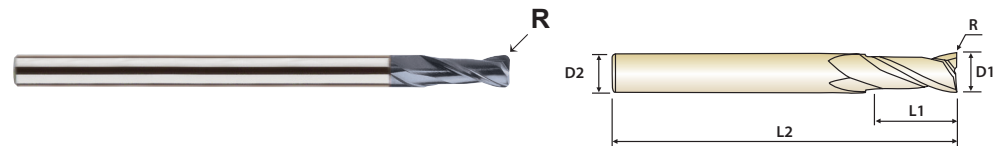
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |  |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|--|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |  |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |  |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |  |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEMD99 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available short, regular and long shank end mills.
- ▶ Available various corner radius end mills, from 0.02 mm to 5.0mm corner radius.



P. 108~109

\* NEW SIZES

D≤6

D&gt;6

Unit : mm

| EDP No.           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|-------------------|---------------|---------------|----------------|---------------|----------------|------------|-----------|
|                   | R             | D1            | D2             | L1            | L2             |            |           |
| SEMD9903001E      | R0.1          | 3.0           | 6              | 8             | 60             |            | -         |
| SEMD9903002E      | R0.2          |               | 6              | 8             | 60             | ●          | -         |
| SEMD9903003E      | R0.3          |               | 6              | 8             | 60             | ●          | -         |
| SEMD9903005E      | R0.5          |               | 6              | 8             | 60             | ●          | -         |
| SEMD9903010E      | R1.0          |               | 6              | 8             | 60             |            | -         |
| SEMD9903501E      | R0.1          | 3.5           | 6              | 10            | 70             |            | -         |
| SEMD9903502E      | R0.2          |               | 6              | 10            | 70             |            | -         |
| SEMD9903503E      | R0.3          |               | 6              | 10            | 70             |            | -         |
| SEMD9903505E      | R0.5          |               | 6              | 10            | 70             |            | -         |
| SEMD99040014SE    | R0.1          | 4.0           | 4              | 10            | 70             |            | 4mm Shank |
| SEMD99040024SE    | R0.2          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEMD99040034SE    | R0.3          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEMD99040054SE    | R0.5          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEMD99040104SE    | R1.0          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEMD99040011004SE | R0.1          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEMD99040021004SE | R0.2          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEMD99040031004SE | R0.3          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEMD99040051004SE | R0.5          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEMD99040101004SE | R1.0          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEMD9904001E      | R0.1          |               | 6              | 10            | 70             |            | Regular   |
| SEMD9904002E      | R0.2          |               | 6              | 10            | 70             | ●          | Regular   |
| SEMD9904003E      | R0.3          |               | 6              | 10            | 70             | ●          | Regular   |
| SEMD9904005E      | R0.5          |               | 6              | 10            | 70             | ●          | Regular   |
| SEMD9904010E      | R1.0          |               | 6              | 10            | 70             | ●          | Regular   |
| SEMD9904501E      | R0.1          | 4.5           | 6              | 11            | 80             |            | -         |
| SEMD9904502E      | R0.2          |               | 6              | 11            | 80             |            | -         |
| SEMD9904503E      | R0.3          |               | 6              | 11            | 80             |            | -         |
| SEMD9904505E      | R0.5          |               | 6              | 11            | 80             |            | -         |
| SEMD9905001E      | R0.1          | 5.0           | 6              | 13            | 90             |            | -         |

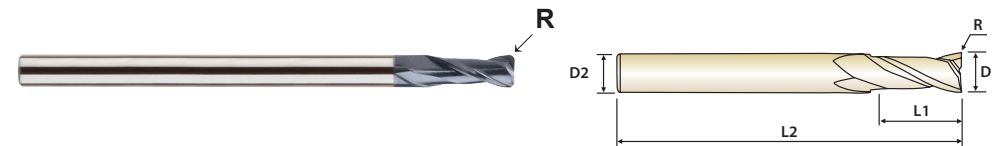
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEMD99 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available short, regular and long shank end mills.
- ▶ Available various corner radius end mills, from 0.02 mm to 5.0mm corner radius.



P. 108~109

\* NEW SIZES

D≤6

D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|----------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L2             |            |            |
| SEMD9905002E    | R0.2          | 5.0           | 6              | 13            | 90             | ●          | -          |
| SEMD9905003E    | R0.3          |               | 6              | 13            | 90             | ●          | -          |
| SEMD9905005E    | R0.5          |               | 6              | 13            | 90             | ●          | -          |
| SEMD9905010E    | R1.0          |               | 6              | 13            | 90             | ●          | -          |
| SEMD9905501E    | R0.1          |               | 6              | 13            | 90             |            | -          |
| SEMD9905502E    | R0.2          | 5.5           | 6              | 13            | 90             |            | -          |
| SEMD9905503E    | R0.3          |               | 6              | 13            | 90             |            | -          |
| SEMD9905505E    | R0.5          |               | 6              | 13            | 90             |            | -          |
| SEMD9905510E    | R1.0          |               | 6              | 13            | 90             |            | -          |
| SEMD9906002060E | R0.2          | 6.0           | 6              | 15            | 60             | ●          | Short      |
| SEMD9906003060E | R0.3          |               | 6              | 15            | 60             | ●          | Short      |
| SEMD9906005060E | R0.5          |               | 6              | 15            | 60             | ●          | Short      |
| SEMD9906010060E | R1.0          |               | 6              | 15            | 60             | ●          | Short      |
| SEMD9906001E    | R0.1          |               | 6              | 15            | 90             |            | Regular    |
| SEMD9906002E    | R0.2          |               | 6              | 15            | 90             | ●          | Regular    |
| SEMD9906003E    | R0.3          |               | 6              | 15            | 90             | ●          | Regular    |
| SEMD9906005E    | R0.5          |               | 6              | 15            | 90             | ●          | Regular    |
| SEMD9906010E    | R1.0          |               | 6              | 15            | 90             | ●          | Regular    |
| SEMD9906015E    | R1.5          |               | 6              | 15            | 90             |            | Regular    |
| SEMD9906020E    | R2.0          |               | 6              | 15            | 90             |            | Regular    |
| SEMD9906005E    | R0.5          |               | 6              | 15            | 110            |            | Long Shank |
| SEMD9906010110E | R1.0          |               | 6              | 15            | 110            |            | Long Shank |
| SEMD9906005130E | R0.5          |               | 6              | 15            | 130            |            | Long Shank |
| SEMD9906010130E | R1.0          |               | 6              | 15            | 130            |            | Long Shank |
| SEMD9907001E    | R0.1          | 7.0           | 8              | 16            | 90             |            | -          |
| SEMD9907002E    | R0.2          |               | 8              | 16            | 90             |            | -          |
| SEMD9907003E    | R0.3          |               | 8              | 16            | 90             |            | -          |
| SEMD9907005E    | R0.5          |               | 8              | 16            | 90             |            | -          |
| SEMD9907010E    | R1.0          |               | 8              | 16            | 90             |            | -          |
| SEMD9907020E    | R2.0          |               | 8              | 16            | 90             |            | -          |

◎ : Excellent ○ : Good

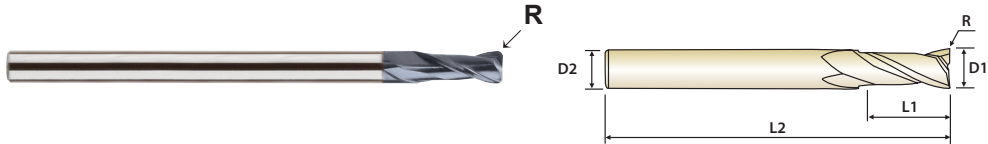
| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)



SEMD99 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available short, regular and long shank end mills.
- ▶ Available various corner radius end mills, from 0.02 mm to 5.0mm corner radius.



| * NEW SIZES     |               | D≤6           | D>6            |               |                |            |            | Unit : mm |
|-----------------|---------------|---------------|----------------|---------------|----------------|------------|------------|-----------|
| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |           |
|                 | R             | D1            | D2             | L1            | L2             |            |            |           |
| SEMD9908003070E | R0.3          | 8.0           | 8              | 20            | 70             |            | Short      |           |
| SEMD9908005070E | R0.5          |               | 8              | 20            | 70             | ●          | Short      |           |
| SEMD9908010070E | R1.0          |               | 8              | 20            | 70             | ●          | Short      |           |
| SEMD9908001E    | R0.1          |               | 8              | 20            | 100            |            | Regular    |           |
| SEMD9908002E    | R0.2          |               | 8              | 20            | 100            |            | Regular    |           |
| SEMD9908003E    | R0.3          |               | 8              | 20            | 100            |            | Regular    |           |
| SEMD9908005E    | R0.5          |               | 8              | 20            | 100            | ●          | Regular    |           |
| SEMD9908010E    | R1.0          |               | 8              | 20            | 100            | ●          | Regular    |           |
| SEMD9908015E    | R1.5          |               | 8              | 20            | 100            | ●          | Regular    |           |
| SEMD9908020E    | R2.0          |               | 8              | 20            | 100            | ●          | Regular    |           |
| SEMD9908025E    | R2.5          |               | 8              | 20            | 100            |            | Regular    |           |
| SEMD9908030E    | R3.0          |               | 8              | 20            | 100            |            | Regular    |           |
| SEMD9908005120E | R0.5          |               | 8              | 20            | 120            |            | Long Shank |           |
| SEMD9908010120E | R1.0          |               | 8              | 20            | 120            |            | Long Shank |           |
| SEMD9908015150E | R0.5          | 10.0          | 8              | 20            | 150            |            | Long Shank |           |
| SEMD9908010150E | R1.0          |               | 8              | 20            | 150            |            | Long Shank |           |
| SEMD9910003075E | R0.3          |               | 10             | 25            | 75             |            | Short      |           |
| SEMD9910005075E | R0.5          |               | 10             | 25            | 75             | ●          | Short      |           |
| SEMD9910010075E | R1.0          |               | 10             | 25            | 75             | ●          | Short      |           |
| SEMD9910001E    | R0.1          |               | 10             | 25            | 100            |            | Regular    |           |
| SEMD9910002E    | R0.2          |               | 10             | 25            | 100            |            | Regular    |           |
| SEMD9910003E    | R0.3          |               | 10             | 25            | 100            |            | Regular    |           |
| SEMD9910005E    | R0.5          |               | 10             | 25            | 100            | ●          | Regular    |           |
| SEMD9910010E    | R1.0          |               | 10             | 25            | 100            | ●          | Regular    |           |
| SEMD9910015E    | R1.5          | 10.0          | 10             | 25            | 100            | ●          | Regular    |           |
| SEMD9910020E    | R2.0          |               | 10             | 25            | 100            | ●          | Regular    |           |
| SEMD9910025E    | R2.5          |               | 10             | 25            | 100            |            | Regular    |           |
| SEMD9910030E    | R3.0          |               | 10             | 25            | 100            |            | Regular    |           |
| SEMD9910040E    | R4.0          |               | 10             | 25            | 100            |            | Regular    |           |
| SEMD9910005130E | R0.5          |               | 10             | 25            | 130            |            | Long Shank |           |

◎ : Excellent ○ : Good

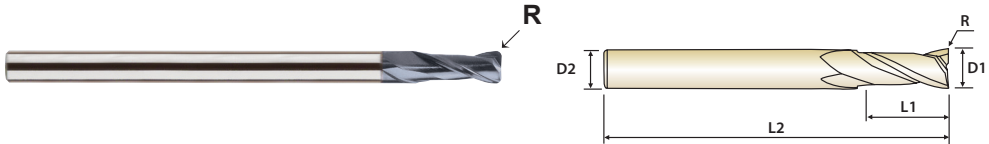
| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)



SEMD99 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available short, regular and long shank end mills.
- ▶ Available various corner radius end mills, from 0.02 mm to 5.0mm corner radius.



| * NEW SIZES     |               | D≤6           | D>6            |               |                |            |            | Unit : mm |
|-----------------|---------------|---------------|----------------|---------------|----------------|------------|------------|-----------|
| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |           |
|                 | R             | D1            | D2             | L1            | L2             |            |            |           |
| SEMD9910010130E | R1.0          | 10.0          | 10             | 25            | 130            |            | Long Shank |           |
| SEMD9910005150E | R0.5          |               | 10             | 25            | 150            |            | Long Shank |           |
| SEMD9910010150E | R1.0          |               | 10             | 25            | 150            |            | Long Shank |           |
| SEMD9911002E    | R0.2          | 11.0          | 12             | 25            | 110            |            | -          |           |
| SEMD9911003E    | R0.3          |               | 12             | 25            | 110            |            | -          |           |
| SEMD9911005E    | R0.5          |               | 12             | 25            | 110            |            | -          |           |
| SEMD9911010E    | R1.0          |               | 12             | 25            | 110            |            | -          |           |
| SEMD9911020E    | R2.0          |               | 12             | 25            | 110            |            | -          |           |
| SEMD9912003080E | R0.3          | 12.0          | 12             | 30            | 80             |            | Short      |           |
| SEMD9912005080E | R0.5          |               | 12             | 30            | 80             | ●          | Short      |           |
| SEMD9912010080E | R1.0          |               | 12             | 30            | 80             | ●          | Short      |           |
| SEMD9912001E    | R0.1          |               | 12             | 30            | 110            |            | Regular    |           |
| SEMD9912002E    | R0.2          |               | 12             | 30            | 110            |            | Regular    |           |
| SEMD9912003E    | R0.3          |               | 12             | 30            | 110            |            | Regular    |           |
| SEMD9912005E    | R0.5          |               | 12             | 30            | 110            | ●          | Regular    |           |
| SEMD9912010E    | R1.0          |               | 12             | 30            | 110            | ●          | Regular    |           |
| SEMD9912015E    | R1.5          |               | 12             | 30            | 110            | ●          | Regular    |           |
| SEMD9912020E    | R2.0          |               | 12             | 30            | 110            | ●          | Regular    |           |
| SEMD9912025E    | R2.5          | 12.0          | 12             | 30            | 110            | ●          | Regular    |           |
| SEMD9912030E    | R3.0          |               | 12             | 30            | 110            | ●          | Regular    |           |
| SEMD9912040E    | R4.0          |               | 12             | 30            | 110            |            | Regular    |           |
| SEMD9912050E    | R5.0          |               | 12             | 30            | 110            |            | Regular    |           |
| SEMD9912005130E | R0.5          |               | 12             | 30            | 130            |            | Long Shank |           |
| SEMD9912010130E | R1.0          |               | 12             | 30            | 130            |            | Long Shank |           |
| SEMD9912005150E | R0.5          |               | 12             | 30            | 150            |            | Long Shank |           |
| SEMD9912010150E | R1.0          |               | 12             | 30            | 150            |            | Long Shank |           |
| SEMD9914005E    | R0.5          | 14.0          | 16             | 35            | 150            |            | -          |           |
| SEMD9914010E    | R1.0          |               | 16             | 35            | 150            | ●          | -          |           |
| SEMD9914020E    | R2.0          |               | 16             | 35            | 150            |            | -          |           |
| SEMD9916005E    | R0.5          | 16.0          | 16             | 32            | 150            |            | -          |           |

◎ : Excellent ○ : Good

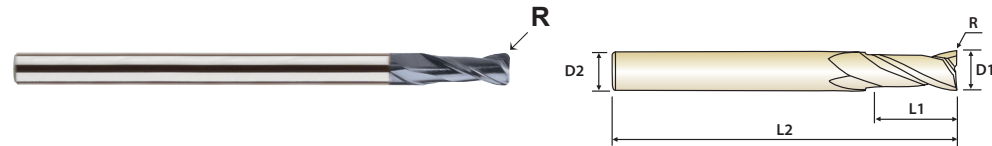
| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

## SEMD99 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available short, regular and long shank end mills.
- ▶ Available various corner radius end mills, from 0.02 mm to 5.0mm corner radius.



\* NEW SIZES

D≤6

D&gt;6

Unit : mm

| EDP No.      | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark |
|--------------|---------------|---------------|----------------|---------------|----------------|------------|--------|
|              | R             | D1            | D2             | L1            | L2             |            |        |
| SEMD9916010E | R1.0          | 16.0          | 16             | 32            | 150            | ●          | -      |
| SEMD9916015E | R1.5          |               | 16             | 32            | 150            |            | -      |
| SEMD9916020E | R2.0          |               | 16             | 32            | 150            | ●          | -      |
| SEMD9920005E | R0.5          | 20.0          | 20             | 38            | 150            |            | -      |
| SEMD9920010E | R1.0          |               | 20             | 38            | 150            | ●          | -      |
| SEMD9920015E | R1.5          |               | 20             | 38            | 150            |            | -      |
| SEMD9920020E | R2.0          |               | 20             | 38            | 150            | ●          | -      |

| Size     | Corner Radius Tolerance (mm) | Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|----------|------------------------------|--------------------------|----------------------|
| up to Ø6 | ±0.010                       | 0~-0.012                 | h6                   |
| over Ø6  | ±0.015                       | 0~-0.015                 |                      |

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

◎ : Excellent ○ : Good

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6

D&gt;6

Unit : mm

| EDP No.          | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|------------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                  | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME61002002005E | R0.02         | 0.2           | 4              | 0.3           | 0.5                | 40             | 0.17          |            | -      |
| SEME6100200201E  | R0.02         |               | 4              | 0.3           | 1                  | 40             | 0.17          | ●          | -      |
| SEME61002002015E | R0.02         |               | 4              | 0.3           | 1.5                | 40             | 0.17          |            | -      |
| SEME6100200202E  | R0.02         |               | 4              | 0.3           | 2                  | 40             | 0.17          |            | -      |
| SEME61002005005E | R0.05         |               | 4              | 0.3           | 0.5                | 40             | 0.17          |            | -      |
| SEME6100200501E  | R0.05         |               | 4              | 0.3           | 1                  | 40             | 0.17          | ●          | -      |
| SEME61002005015E | R0.05         |               | 4              | 0.3           | 1.5                | 40             | 0.17          |            | -      |
| SEME6100200502E  | R0.05         |               | 4              | 0.3           | 2                  | 40             | 0.17          |            | -      |
| SEME6100300201E  | R0.02         | 0.3           | 4              | 0.5           | 1                  | 40             | 0.27          | ●          | -      |
| SEME6100300202E  | R0.02         |               | 4              | 0.5           | 2                  | 40             | 0.27          | ●          | -      |
| SEME6100300203E  | R0.02         |               | 4              | 0.5           | 3                  | 40             | 0.27          |            | -      |
| SEME6100300501E  | R0.05         |               | 4              | 0.5           | 1                  | 40             | 0.27          | ●          | -      |
| SEME6100300502E  | R0.05         |               | 4              | 0.5           | 2                  | 40             | 0.27          | ●          | -      |
| SEME6100300503E  | R0.05         |               | 4              | 0.5           | 3                  | 40             | 0.27          |            | -      |
| SEME6100400501E  | R0.05         | 0.4           | 4              | 0.6           | 1                  | 40             | 0.37          | ●          | -      |
| SEME61004005015E | R0.05         |               | 4              | 0.6           | 1.5                | 40             | 0.37          | ●          | -      |
| SEME6100400502E  | R0.05         |               | 4              | 0.6           | 2                  | 40             | 0.37          | ●          | -      |
| SEME61004005025E | R0.05         |               | 4              | 0.6           | 2.5                | 40             | 0.37          | ●          | -      |
| SEME6100400503E  | R0.05         |               | 4              | 0.6           | 3                  | 40             | 0.37          |            | -      |
| SEME6100400504E  | R0.05         |               | 4              | 0.6           | 4                  | 40             | 0.37          |            | -      |
| SEME610040101E   | R0.1          |               | 4              | 0.6           | 1                  | 40             | 0.37          | ●          | -      |
| SEME6100401015E  | R0.1          |               | 4              | 0.6           | 1.5                | 40             | 0.37          |            | -      |
| SEME610040102E   | R0.1          |               | 4              | 0.6           | 2                  | 40             | 0.37          | ●          | -      |
| SEME6100401025E  | R0.1          |               | 4              | 0.6           | 2.5                | 40             | 0.37          |            | -      |
| SEME610040103E   | R0.1          | 0.5           | 4              | 0.6           | 3                  | 40             | 0.37          |            | -      |
| SEME610040104E   | R0.1          |               | 4              | 0.6           | 4                  | 40             | 0.37          |            | -      |
| SEME6100500501E  | R0.05         |               | 4              | 0.7           | 1                  | 45             | 0.45          | ●          | -      |
| SEME61005005015E | R0.05         |               | 4              | 0.7           | 1.5                | 45             | 0.45          | ●          | -      |
| SEME6100500502E  | R0.05         |               | 4              | 0.7           | 2                  | 45             | 0.45          | ●          | -      |
| SEME61005005025E | R0.05         |               | 4              | 0.7           | 2.5                | 45             | 0.45          |            | -      |

◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME6100500503E | R0.05         | 0.5           | 4              | 0.7           | 3                  | 45             | 0.45          |            | -      |
| SEME6100500504E | R0.05         |               | 4              | 0.7           | 4                  | 45             | 0.45          | ●          | -      |
| SEME6100500505E | R0.05         |               | 4              | 0.7           | 5                  | 45             | 0.45          |            | -      |
| SEME6100500506E | R0.05         |               | 4              | 0.7           | 6                  | 45             | 0.45          |            | -      |
| SEME610050101E  | R0.1          |               | 4              | 0.7           | 1                  | 45             | 0.45          |            | -      |
| SEME6100501015E | R0.1          |               | 4              | 0.7           | 1.5                | 45             | 0.45          |            | -      |
| SEME610050102E  | R0.1          |               | 4              | 0.7           | 2                  | 45             | 0.45          | ●          | -      |
| SEME6100501025E | R0.1          |               | 4              | 0.7           | 2.5                | 45             | 0.45          |            | -      |
| SEME610050103E  | R0.1          |               | 4              | 0.7           | 3                  | 45             | 0.45          | ●          | -      |
| SEME610050104E  | R0.1          |               | 4              | 0.7           | 4                  | 45             | 0.45          |            | -      |
| SEME610050105E  | R0.1          |               | 4              | 0.7           | 5                  | 45             | 0.45          |            | -      |
| SEME610050106E  | R0.1          |               | 4              | 0.7           | 6                  | 45             | 0.45          |            | -      |
| SEME6100600502E | R0.05         | 0.6           | 4              | 0.9           | 2                  | 45             | 0.55          |            | -      |
| SEME6100600503E | R0.05         |               | 4              | 0.9           | 3                  | 45             | 0.55          | ●          | -      |
| SEME6100600504E | R0.05         |               | 4              | 0.9           | 4                  | 45             | 0.55          |            | -      |
| SEME6100600506E | R0.05         |               | 4              | 0.9           | 6                  | 45             | 0.55          | ●          | -      |
| SEME6100600508E | R0.05         |               | 4              | 0.9           | 8                  | 45             | 0.55          |            | -      |
| SEME6100600510E | R0.05         |               | 4              | 0.9           | 10                 | 45             | 0.55          |            | -      |
| SEME610060102E  | R0.1          |               | 4              | 0.9           | 2                  | 45             | 0.55          | ●          | -      |
| SEME610060103E  | R0.1          |               | 4              | 0.9           | 3                  | 45             | 0.55          |            | -      |
| SEME610060104E  | R0.1          |               | 4              | 0.9           | 4                  | 45             | 0.55          | ●          | -      |
| SEME610060106E  | R0.1          |               | 4              | 0.9           | 6                  | 45             | 0.55          | ●          | -      |
| SEME610060108E  | R0.1          |               | 4              | 0.9           | 8                  | 45             | 0.55          |            | -      |
| SEME610060110E  | R0.1          |               | 4              | 0.9           | 10                 | 45             | 0.55          |            | -      |
| SEME610060202E  | R0.2          |               | 4              | 0.9           | 2                  | 45             | 0.55          | ●          | -      |
| SEME610060203E  | R0.2          |               | 4              | 0.9           | 3                  | 45             | 0.55          |            | -      |
| SEME610060204E  | R0.2          |               | 4              | 0.9           | 4                  | 45             | 0.55          | ●          | -      |
| SEME610060206E  | R0.2          |               | 4              | 0.9           | 6                  | 45             | 0.55          | ●          | -      |
| SEME610060208E  | R0.2          |               | 4              | 0.9           | 8                  | 45             | 0.55          |            | -      |
| SEME610060210E  | R0.2          |               | 4              | 0.9           | 10                 | 45             | 0.55          |            | -      |

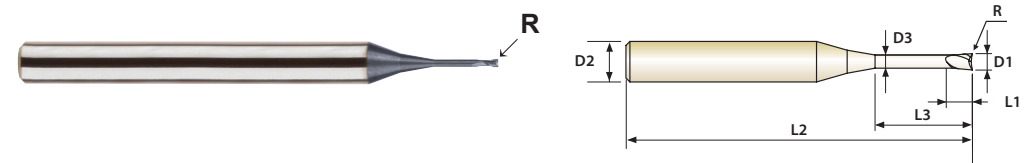
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME6100700502E | R0.05         | 0.7           | 4              | 1.2           | 2                  | 45             | 0.65          |            | -      |
| SEME6100700504E | R0.05         |               | 4              | 1.2           | 4                  | 45             | 0.65          |            | -      |
| SEME6100700506E | R0.05         |               | 4              | 1.2           | 6                  | 45             | 0.65          |            | -      |
| SEME6100700508E | R0.05         |               | 4              | 1.2           | 8                  | 45             | 0.65          |            | -      |
| SEME6100700510E | R0.05         |               | 4              | 1.2           | 10                 | 45             | 0.65          |            | -      |
| SEME610070102E  | R0.1          |               | 4              | 1.2           | 2                  | 45             | 0.65          |            | -      |
| SEME610070104E  | R0.1          |               | 4              | 1.2           | 4                  | 45             | 0.65          |            | -      |
| SEME610070106E  | R0.1          |               | 4              | 1.2           | 6                  | 45             | 0.65          |            | -      |
| SEME610070108E  | R0.1          |               | 4              | 1.2           | 8                  | 45             | 0.65          |            | -      |
| SEME610070110E  | R0.1          |               | 4              | 1.2           | 10                 | 45             | 0.65          |            | -      |
| SEME610070202E  | R0.2          |               | 4              | 1.2           | 2                  | 45             | 0.65          |            | -      |
| SEME610070204E  | R0.2          |               | 4              | 1.2           | 4                  | 45             | 0.65          |            | -      |
| SEME610070206E  | R0.2          | 0.8           | 4              | 1.2           | 6                  | 45             | 0.65          |            | -      |
| SEME610070208E  | R0.2          |               | 4              | 1.2           | 8                  | 45             | 0.65          |            | -      |
| SEME610070210E  | R0.2          |               | 4              | 1.2           | 10                 | 45             | 0.65          |            | -      |
| SEME6100800502E | R0.05         |               | 4              | 1.2           | 2                  | 45             | 0.75          | ●          | -      |
| SEME6100800503E | R0.05         |               | 4              | 1.2           | 3                  | 45             | 0.75          |            | -      |
| SEME6100800504E | R0.05         |               | 4              | 1.2           | 4                  | 45             | 0.75          | ●          | -      |
| SEME6100800506E | R0.05         |               | 4              | 1.2           | 6                  | 45             | 0.75          | ●          | -      |
| SEME6100800508E | R0.05         |               | 4              | 1.2           | 8                  | 45             | 0.75          |            | -      |
| SEME6100800510E | R0.05         |               | 4              | 1.2           | 10                 | 45             | 0.75          |            | -      |
| SEME610080102E  | R0.1          |               | 4              | 1.2           | 2                  | 45             | 0.75          | ●          | -      |
| SEME610080103E  | R0.1          |               | 4              | 1.2           | 3                  | 45             | 0.75          |            | -      |
| SEME610080104E  | R0.1          |               | 4              | 1.2           | 4                  | 45             | 0.75          | ●          | -      |
| SEME610080106E  | R0.1          |               | 4              | 1.2           | 6                  | 45             | 0.75          | ●          | -      |
| SEME610080108E  | R0.1          |               | 4              | 1.2           | 8                  | 45             | 0.75          | ●          | -      |
| SEME610080110E  | R0.1          |               | 4              | 1.2           | 10                 | 45             | 0.75          |            | -      |
| SEME610080202E  | R0.2          |               | 4              | 1.2           | 2                  | 45             | 0.75          |            | -      |
| SEME610080203E  | R0.2          |               | 4              | 1.2           | 3                  | 45             | 0.75          |            | -      |
| SEME610080204E  | R0.2          |               | 4              | 1.2           | 4                  | 45             | 0.75          | ●          | -      |

◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610080206E  | R0.2          | 0.8           | 4              | 1.2           | 6                  | 45             | 0.75          | ●          | -      |
| SEME610080208E  | R0.2          |               | 4              | 1.2           | 8                  | 45             | 0.75          | ●          | -      |
| SEME610080210E  | R0.2          |               | 4              | 1.2           | 10                 | 45             | 0.75          |            | -      |
| SEME6101000503E | R0.05         |               | 4              | 1.5           | 3                  | 50             | 0.95          | ●          | -      |
| SEME6101000504E | R0.05         |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          | -      |
| SEME6101000506E | R0.05         |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          | -      |
| SEME6101000508E | R0.05         |               | 4              | 1.5           | 8                  | 50             | 0.95          |            | -      |
| SEME6101000510E | R0.05         |               | 4              | 1.5           | 10                 | 50             | 0.95          |            | -      |
| SEME6101000512E | R0.05         | 1.0           | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME6101000514E | R0.05         |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME6101000516E | R0.05         |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME6101000520E | R0.05         |               | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |
| SEME610100103E  | R0.1          |               | 4              | 1.5           | 3                  | 50             | 0.95          | ●          | -      |
| SEME610100104E  | R0.1          |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          | -      |
| SEME610100106E  | R0.1          |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          | -      |
| SEME610100108E  | R0.1          |               | 4              | 1.5           | 8                  | 50             | 0.95          | ●          | -      |
| SEME610100110E  | R0.1          |               | 4              | 1.5           | 10                 | 50             | 0.95          | ●          | -      |
| SEME610100112E  | R0.1          |               | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME610100114E  | R0.1          |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME610100116E  | R0.1          |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME610100120E  | R0.1          |               | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |
| SEME610100203E  | R0.2          |               | 4              | 1.5           | 3                  | 50             | 0.95          | ●          | -      |
| SEME610100204E  | R0.2          |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          | -      |
| SEME610100206E  | R0.2          |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          | -      |
| SEME610100208E  | R0.2          |               | 4              | 1.5           | 8                  | 50             | 0.95          | ●          | -      |
| SEME610100210E  | R0.2          |               | 4              | 1.5           | 10                 | 50             | 0.95          | ●          | -      |
| SEME610100212E  | R0.2          |               | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME610100214E  | R0.2          |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME610100216E  | R0.2          |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME610100220E  | R0.2          |               | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |

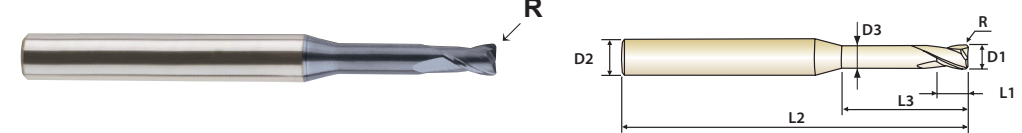
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610100303E  | R0.3          | 1.0           | 4              | 1.5           | 3                  | 50             | 0.95          |            | -      |
| SEME610100304E  | R0.3          |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          | -      |
| SEME610100306E  | R0.3          |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          | -      |
| SEME610100308E  | R0.3          |               | 4              | 1.5           | 8                  | 50             | 0.95          | ●          | -      |
| SEME610100310E  | R0.3          |               | 4              | 1.5           | 10                 | 50             | 0.95          | ●          | -      |
| SEME610100312E  | R0.3          |               | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME610100314E  | R0.3          |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME610100316E  | R0.3          |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME610100320E  | R0.3          | 1.2           | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |
| SEME6101200503E | R0.05         |               | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME6101200504E | R0.05         |               | 4              | 1.8           | 4                  | 50             | 1.15          |            | -      |
| SEME6101200506E | R0.05         |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          | -      |
| SEME6101200508E | R0.05         |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          | -      |
| SEME6101200510E | R0.05         |               | 4              | 1.8           | 10                 | 50             | 1.15          | ●          | -      |
| SEME6101200512E | R0.05         |               | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME6101200516E | R0.05         |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME6101200520E | R0.05         |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |
| SEME610120103E  | R0.1          |               | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME610120104E  | R0.1          |               | 4              | 1.8           | 4                  | 50             | 1.15          | ●          | -      |
| SEME610120106E  | R0.1          |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          | -      |
| SEME610120108E  | R0.1          |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          | -      |
| SEME610120110E  | R0.1          |               | 4              | 1.8           | 10                 | 50             | 1.15          |            | -      |
| SEME610120112E  | R0.1          |               | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME610120116E  | R0.1          |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME610120120E  | R0.1          |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |
| SEME610120203E  | R0.2          |               | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME610120204E  | R0.2          |               | 4              | 1.8           | 4                  | 50             | 1.15          | ●          | -      |
| SEME610120206E  | R0.2          |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          | -      |
| SEME610120208E  | R0.2          |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          | -      |
| SEME610120210E  | R0.2          |               | 4              | 1.8           | 10                 | 50             | 1.15          |            | -      |

◎ : Excellent ○ : Good

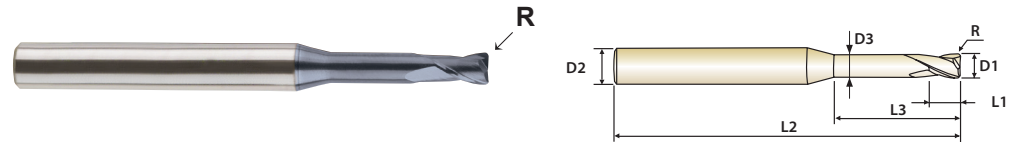
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610120212E  | R0.2          | 1.2           | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME610120216E  | R0.2          |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME610120220E  | R0.2          |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |
| SEME610120303E  | R0.3          |               | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME610120304E  | R0.3          |               | 4              | 1.8           | 4                  | 50             | 1.15          | ●          | -      |
| SEME610120306E  | R0.3          |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          | -      |
| SEME610120308E  | R0.3          |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          | -      |
| SEME610120310E  | R0.3          |               | 4              | 1.8           | 10                 | 50             | 1.15          |            | -      |
| SEME610120312E  | R0.3          |               | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME610120316E  | R0.3          |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME610120320E  | R0.3          |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |
| SEME6101500504E | R0.05         | 1.5           | 4              | 2.3           | 4                  | 50             | 1.45          | ●          | -      |
| SEME6101500506E | R0.05         |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |
| SEME6101500508E | R0.05         |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME6101500510E | R0.05         |               | 4              | 2.3           | 10                 | 50             | 1.45          |            | -      |
| SEME6101500512E | R0.05         |               | 4              | 2.3           | 12                 | 50             | 1.45          |            | -      |
| SEME6101500514E | R0.05         |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME6101500516E | R0.05         |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME6101500520E | R0.05         |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME6101500522E | R0.05         |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME6101500526E | R0.05         |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME610150104E  | R0.1          |               | 4              | 2.3           | 4                  | 50             | 1.45          | ●          | -      |
| SEME610150106E  | R0.1          |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |
| SEME610150108E  | R0.1          |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME610150110E  | R0.1          |               | 4              | 2.3           | 10                 | 50             | 1.45          |            | -      |
| SEME610150112E  | R0.1          |               | 4              | 2.3           | 12                 | 50             | 1.45          |            | -      |
| SEME610150114E  | R0.1          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME610150116E  | R0.1          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME610150120E  | R0.1          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME610150122E  | R0.1          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |

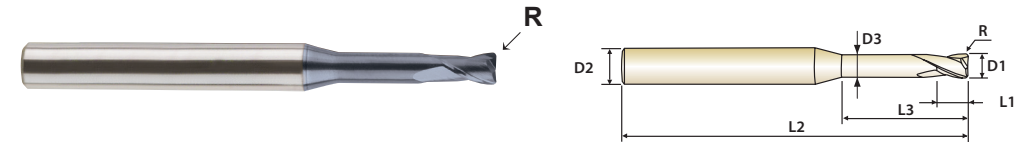
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRc55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610150126E | R0.1          | 1.5           | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME610150204E | R0.2          |               | 4              | 2.3           | 4                  | 50             | 1.45          | ●          | -      |
| SEME610150206E | R0.2          |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |
| SEME610150208E | R0.2          |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME610150210E | R0.2          |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          | -      |
| SEME610150212E | R0.2          |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          | -      |
| SEME610150214E | R0.2          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME610150216E | R0.2          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME610150220E | R0.2          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME610150222E | R0.2          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME610150226E | R0.2          |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME610150304E | R0.3          |               | 4              | 2.3           | 4                  | 50             | 1.45          | ●          | -      |
| SEME610150306E | R0.3          |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |
| SEME610150308E | R0.3          |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME610150310E | R0.3          |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          | -      |
| SEME610150312E | R0.3          |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          | -      |
| SEME610150314E | R0.3          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME610150316E | R0.3          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME610150320E | R0.3          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME610150322E | R0.3          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME610150326E | R0.3          |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME610150504E | R0.5          |               | 4              | 2.3           | 4                  | 50             | 1.45          |            | -      |
| SEME610150506E | R0.5          |               | 4              | 2.3           | 6                  | 50             | 1.45          |            | -      |
| SEME610150508E | R0.5          |               | 4              | 2.3           | 8                  | 50             | 1.45          |            | -      |
| SEME610150510E | R0.5          |               | 4              | 2.3           | 10                 | 50             | 1.45          |            | -      |
| SEME610150512E | R0.5          |               | 4              | 2.3           | 12                 | 50             | 1.45          |            | -      |
| SEME610150514E | R0.5          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME610150516E | R0.5          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME610150520E | R0.5          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME610150522E | R0.5          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |

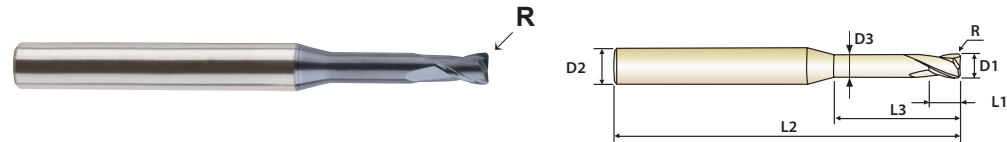
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610150526E | R0.5          | 1.5           | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME610200106E | R0.1          | 2.0           | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME610200108E | R0.1          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |
| SEME610200110E | R0.1          |               | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME610200112E | R0.1          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME610200114E | R0.1          |               | 4              | 3             | 14                 | 50             | 1.95          |            | -      |
| SEME610200116E | R0.1          |               | 4              | 3             | 16                 | 50             | 1.95          |            | -      |
| SEME610200120E | R0.1          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME610200122E | R0.1          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME610200126E | R0.1          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |
| SEME610200130E | R0.1          |               | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME610200206E | R0.2          |               | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME610200208E | R0.2          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |
| SEME610200210E | R0.2          |               | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME610200212E | R0.2          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME610200214E | R0.2          |               | 4              | 3             | 14                 | 50             | 1.95          |            | -      |
| SEME610200216E | R0.2          |               | 4              | 3             | 16                 | 50             | 1.95          | ●          | -      |
| SEME610200220E | R0.2          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME610200222E | R0.2          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME610200226E | R0.2          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |
| SEME610200230E | R0.2          |               | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME610200306E | R0.3          |               | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME610200308E | R0.3          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |
| SEME610200310E | R0.3          |               | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME610200312E | R0.3          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME610200314E | R0.3          |               | 4              | 3             | 14                 | 50             | 1.95          |            | -      |
| SEME610200316E | R0.3          |               | 4              | 3             | 16                 | 50             | 1.95          | ●          | -      |
| SEME610200320E | R0.3          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME610200322E | R0.3          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME610200326E | R0.3          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |

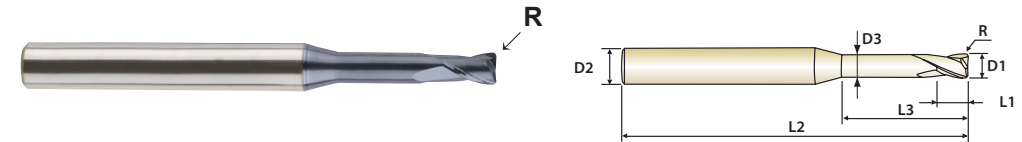
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610200330E | R0.3          | 2.0           | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME610200506E | R0.5          |               | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME610200508E | R0.5          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |
| SEME610200510E | R0.5          |               | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME610200512E | R0.5          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME610200514E | R0.5          |               | 4              | 3             | 14                 | 50             | 1.95          | ●          | -      |
| SEME610200516E | R0.5          |               | 4              | 3             | 16                 | 50             | 1.95          |            | -      |
| SEME610200520E | R0.5          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME610200522E | R0.5          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME610200526E | R0.5          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |
| SEME610200530E | R0.5          |               | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME610250108E | R0.1          | 2.5           | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME610250110E | R0.1          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME610250112E | R0.1          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |
| SEME610250114E | R0.1          |               | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME610250116E | R0.1          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME610250120E | R0.1          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |
| SEME610250126E | R0.1          |               | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME610250130E | R0.1          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME610250208E | R0.2          |               | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME610250210E | R0.2          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME610250212E | R0.2          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |
| SEME610250214E | R0.2          |               | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME610250216E | R0.2          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME610250220E | R0.2          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |
| SEME610250226E | R0.2          |               | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME610250230E | R0.2          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME610250308E | R0.3          |               | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME610250310E | R0.3          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME610250312E | R0.3          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |

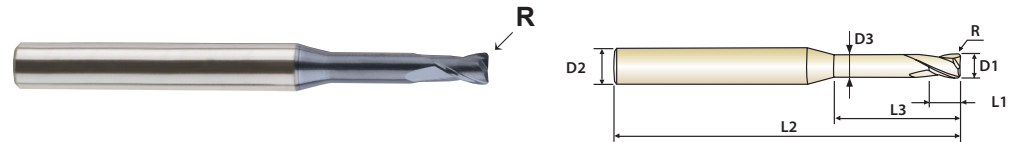
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610250314E | R0.3          | 2.5           | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME610250316E | R0.3          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME610250320E | R0.3          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |
| SEME610250326E | R0.3          |               | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME610250330E | R0.3          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME610250508E | R0.5          |               | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME610250510E | R0.5          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME610250512E | R0.5          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |
| SEME610250514E | R0.5          |               | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME610250516E | R0.5          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME610250520E | R0.5          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |
| SEME610250526E | R0.5          |               | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME610250530E | R0.5          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME610300108E | R0.1          | 3.0           | 6              | 4.5           | 8                  | 50             | 2.85          |            | -      |
| SEME610300110E | R0.1          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME610300112E | R0.1          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME610300114E | R0.1          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME610300116E | R0.1          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME610300120E | R0.1          |               | 6              | 4.5           | 20                 | 60             | 2.85          |            | -      |
| SEME610300126E | R0.1          |               | 6              | 4.5           | 26                 | 65             | 2.85          |            | -      |
| SEME610300130E | R0.1          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME610300135E | R0.1          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME610300140E | R0.1          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME610300208E | R0.2          |               | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME610300210E | R0.2          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME610300212E | R0.2          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME610300214E | R0.2          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME610300216E | R0.2          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME610300220E | R0.2          |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          | -      |
| SEME610300226E | R0.2          |               | 6              | 4.5           | 26                 | 65             | 2.85          | ●          | -      |

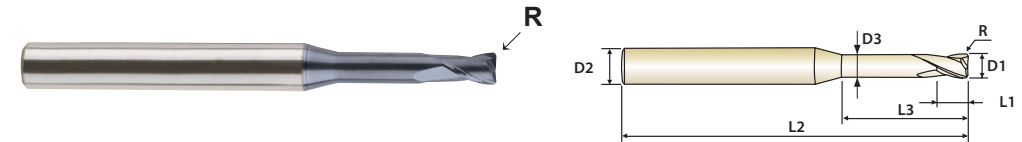
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRc55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610300230E | R0.2          | 3.0           | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME610300235E | R0.2          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME610300240E | R0.2          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME610300308E | R0.3          |               | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME610300310E | R0.3          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME610300312E | R0.3          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME610300314E | R0.3          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME610300316E | R0.3          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME610300320E | R0.3          |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          | -      |
| SEME610300326E | R0.3          |               | 6              | 4.5           | 26                 | 65             | 2.85          |            | -      |
| SEME610300330E | R0.3          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME610300335E | R0.3          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME610300340E | R0.3          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME610300508E | R0.5          |               | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME610300510E | R0.5          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME610300512E | R0.5          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME610300514E | R0.5          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME610300516E | R0.5          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME610300520E | R0.5          |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          | -      |
| SEME610300526E | R0.5          |               | 6              | 4.5           | 26                 | 65             | 2.85          | ●          | -      |
| SEME610300530E | R0.5          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME610300535E | R0.5          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME610300540E | R0.5          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME610301008E | R1.0          |               | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME610301010E | R1.0          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME610301012E | R1.0          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME610301014E | R1.0          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME610301016E | R1.0          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME610301020E | R1.0          |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          | -      |
| SEME610301026E | R1.0          |               | 6              | 4.5           | 26                 | 65             | 2.85          |            | -      |

◎ : Excellent ○ : Good

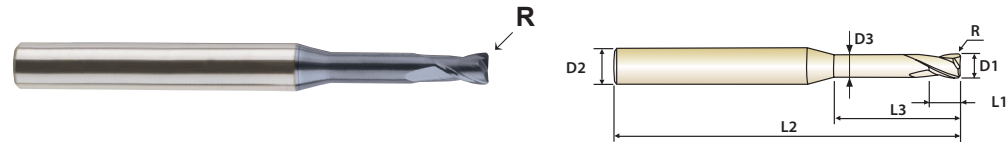
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610301030E | R1.0          | 3.0           | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME610301035E | R1.0          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME610301040E | R1.0          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME610400110E | R0.1          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME610400112E | R0.1          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME610400114E | R0.1          | 4.0           | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME610400116E | R0.1          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME610400120E | R0.1          |               | 6              | 6             | 20                 | 60             | 3.85          |            | -      |
| SEME610400126E | R0.1          |               | 6              | 6             | 26                 | 65             | 3.85          |            | -      |
| SEME610400130E | R0.1          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME610400135E | R0.1          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME610400140E | R0.1          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME610400145E | R0.1          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME610400150E | R0.1          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME610400210E | R0.2          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME610400212E | R0.2          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME610400214E | R0.2          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME610400216E | R0.2          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME610400220E | R0.2          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME610400226E | R0.2          |               | 6              | 6             | 26                 | 65             | 3.85          | ●          | -      |
| SEME610400230E | R0.2          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME610400235E | R0.2          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME610400240E | R0.2          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME610400245E | R0.2          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME610400250E | R0.2          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME610400310E | R0.3          |               | 6              | 6             | 10                 | 50             | 3.85          |            | -      |
| SEME610400312E | R0.3          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME610400314E | R0.3          |               | 6              | 6             | 14                 | 50             | 3.85          |            | -      |
| SEME610400316E | R0.3          |               | 6              | 6             | 16                 | 50             | 3.85          | ●          | -      |
| SEME610400320E | R0.3          |               | 6              | 6             | 20                 | 50             | 3.85          | ●          | -      |

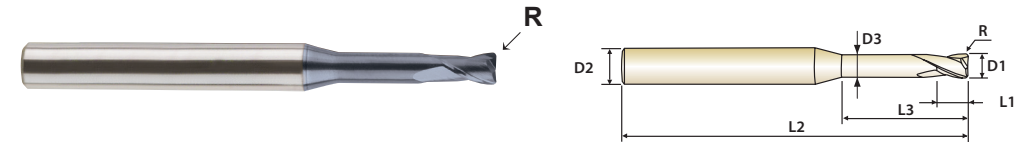
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME610400326E | R0.3          | 4.0           | 6              | 6             | 26                 | 65             | 3.85          | ●          | -      |
| SEME610400330E | R0.3          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME610400335E | R0.3          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME610400340E | R0.3          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME610400345E | R0.3          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME610400350E | R0.3          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME610400510E | R0.5          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME610400512E | R0.5          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME610400514E | R0.5          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME610400516E | R0.5          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME610400520E | R0.5          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME610400526E | R0.5          |               | 6              | 6             | 26                 | 65             | 3.85          | ●          | -      |
| SEME610400530E | R0.5          |               | 6              | 6             | 30                 | 70             | 3.85          | ●          | -      |
| SEME610400535E | R0.5          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME610400540E | R0.5          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME610400545E | R0.5          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME610400550E | R0.5          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME610401010E | R1.0          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME610401012E | R1.0          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME610401014E | R1.0          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME610401016E | R1.0          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME610401020E | R1.0          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME610401026E | R1.0          |               | 6              | 6             | 26                 | 65             | 3.85          |            | -      |
| SEME610401030E | R1.0          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME610401035E | R1.0          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME610401040E | R1.0          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME610401045E | R1.0          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME610401050E | R1.0          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME6105001E   | R0.1          | 5.0           | 6              | 8             | 15                 | 60             | 4.85          |            | -      |
| SEME6105002E   | R0.2          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -      |

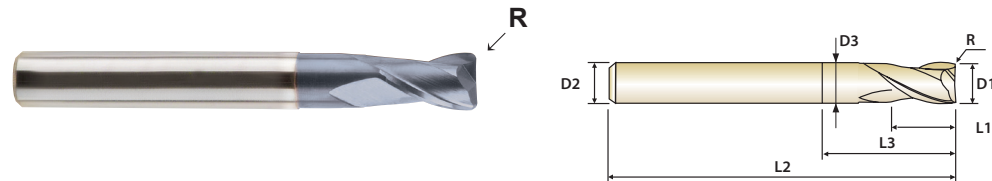
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |            |
| SEME6105003E    | R0.3          | 5.0           | 6              | 8             | 15                 | 60             | 4.85          |            | -          |
| SEME6105005E    | R0.5          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -          |
| SEME6105010E    | R1.0          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -          |
| SEME6105015E    | R1.5          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -          |
| SEME6105020E    | R2.0          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -          |
| SEME6106001E    | R0.1          | 6.0           | 6              | 9             | 20                 | 60             | 5.85          |            | Regular    |
| SEME6106002E    | R0.2          |               | 6              | 9             | 20                 | 60             | 5.85          | ●          | Regular    |
| SEME6106003E    | R0.3          |               | 6              | 9             | 20                 | 60             | 5.85          | ●          | Regular    |
| SEME6106005E    | R0.5          |               | 6              | 9             | 20                 | 60             | 5.85          | ●          | Regular    |
| SEME6106010E    | R1.0          |               | 6              | 9             | 20                 | 60             | 5.85          | ●          | Regular    |
| SEME6106015E    | R1.5          |               | 6              | 9             | 20                 | 60             | 5.85          |            | Regular    |
| SEME6106020E    | R2.0          |               | 6              | 9             | 20                 | 60             | 5.85          |            | Regular    |
| SEME6106003090E | R0.3          |               | 6              | 15            | 30                 | 90             | 5.85          |            | Long Shank |
| SEME6106005090E | R0.5          |               | 6              | 15            | 30                 | 90             | 5.85          | ●          | Long Shank |
| SEME6106010090E | R1.0          |               | 6              | 15            | 30                 | 90             | 5.85          |            | Long Shank |
| SEME6108001E    | R0.1          | 8.0           | 8              | 12            | 25                 | 70             | 7.70          |            | Regular    |
| SEME6108002E    | R0.2          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6108003E    | R0.3          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6108005E    | R0.5          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6108010E    | R1.0          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6108015E    | R1.5          |               | 8              | 12            | 25                 | 70             | 7.70          |            | Regular    |
| SEME6108020E    | R2.0          |               | 8              | 12            | 25                 | 70             | 7.70          |            | Regular    |
| SEME6108003100E | R0.3          |               | 8              | 20            | 35                 | 100            | 7.70          |            | Long Shank |
| SEME6108005100E | R0.5          |               | 8              | 20            | 35                 | 100            | 7.70          |            | Long Shank |
| SEME6108010100E | R1.0          |               | 8              | 20            | 35                 | 100            | 7.70          |            | Long Shank |
| SEME6110001E    | R0.1          | 10.0          | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6110002E    | R0.2          |               | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6110003E    | R0.3          |               | 10             | 15            | 30                 | 75             | 9.70          | ●          | Regular    |
| SEME6110005E    | R0.5          |               | 10             | 15            | 30                 | 75             | 9.70          | ●          | Regular    |
| SEME6110010E    | R1.0          |               | 10             | 15            | 30                 | 75             | 9.70          | ●          | Regular    |

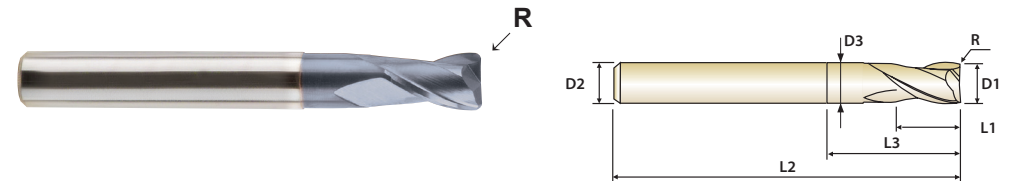
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRc55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

## SEME61 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Available various products like regular length and long shank end mills etc.
- ▶ Available various corner radius end mills, from min. 0.02mm corner radius to max. 2.0 mm corner radius.
- ▶ Available more various effective length and overall length end mills than previous standard products.



D≤6 D&gt;6

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |            |
| SEME6110015E    | R1.5          | 10.0          | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6110020E    | R2.0          |               | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6110003100E | R0.3          |               | 10             | 25            | 40                 | 100            | 9.70          |            | Long Shank |
| SEME6110005100E | R0.5          |               | 10             | 25            | 40                 | 100            | 9.70          |            | Long Shank |
| SEME6110010100E | R1.0          |               | 10             | 25            | 40                 | 100            | 9.70          |            | Long Shank |
| SEME6112002E    | R0.2          | 12.0          | 12             | 18            | 32                 | 80             | 11.70         |            | Regular    |
| SEME6112003E    | R0.3          |               | 12             | 18            | 32                 | 80             | 11.70         |            | Regular    |
| SEME6112005E    | R0.5          |               | 12             | 18            | 32                 | 80             | 11.70         | ●          | Regular    |
| SEME6112010E    | R1.0          |               | 12             | 18            | 32                 | 80             | 11.70         | ●          | Regular    |
| SEME6112015E    | R1.5          |               | 12             | 18            | 32                 | 80             | 11.70         | ●          | Regular    |
| SEME6112020E    | R2.0          |               | 12             | 18            | 32                 | 80             | 11.70         |            | Regular    |
| SEME6112003110E | R0.3          |               | 12             | 30            | 50                 | 110            | 11.70         |            | Long Shank |
| SEME6112005110E | R0.5          |               | 12             | 30            | 50                 | 110            | 11.70         |            | Long Shank |
| SEME6112010110E | R1.0          |               | 12             | 30            | 50                 | 110            | 11.70         |            | Long Shank |
| SEME6116005E    | R0.5          | 16.0          | 16             | 20            | 35                 | 100            | 15.70         | ●          | Regular    |
| SEME6116010E    | R1.0          |               | 16             | 20            | 35                 | 100            | 15.70         | ●          | Regular    |
| SEME6116005150E | R0.5          |               | 16             | 35            | 50                 | 150            | 15.70         |            | Long Shank |
| SEME6116010150E | R1.0          |               | 16             | 35            | 50                 | 150            | 15.70         |            | Long Shank |
| SEME6120005E    | R0.5          | 20.0          | 20             | 25            | 40                 | 100            | 19.70         | ●          | Regular    |
| SEME6120010E    | R1.0          |               | 20             | 25            | 40                 | 100            | 19.70         | ●          | Regular    |
| SEME6120005150E | R0.5          |               | 20             | 40            | 55                 | 150            | 19.70         |            | Long Shank |
| SEME6120010150E | R1.0          |               | 20             | 40            | 55                 | 150            | 19.70         |            | Long Shank |

| Size     | Corner Radius Tolerance (mm) | Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|----------|------------------------------|--------------------------|----------------------|
| up to Ø6 | ±0.010                       | 0~-0.012                 | h6                   |
| over Ø6  | ±0.015                       | 0~-0.015                 |                      |

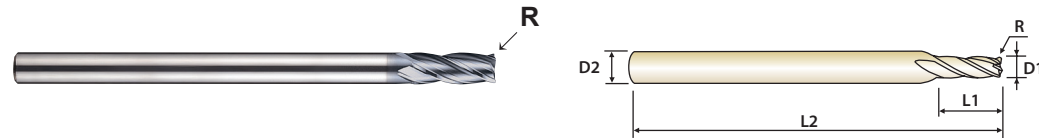
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEME01 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
- ▶ Available various products like short, regular and long shank end mills etc.



\* NEW SIZES D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|-------------------|---------------|---------------|----------------|---------------|----------------|------------|-----------|
|                   | R             | D1            | D2             | L1            | L2             |            |           |
| * SEME010100054SE | R0.05         | 1.0           | 4              | 2.5           | 50             |            | 4mm Shank |
| * SEME01010014SE  | R0.1          |               | 4              | 2.5           | 50             |            | 4mm Shank |
| * SEME01010024SE  | R0.2          |               | 4              | 2.5           | 50             |            | 4mm Shank |
| * SEME01010034SE  | R0.3          |               | 4              | 2.5           | 50             |            | 4mm Shank |
| SEME01010005E     | R0.05         |               | 6              | 2.5           | 50             |            | -         |
| SEME0101001E      | R0.1          |               | 6              | 2.5           | 50             | ●          | -         |
| SEME0101002E      | R0.2          |               | 6              | 2.5           | 50             |            | -         |
| SEME0101003E      | R0.3          |               | 6              | 2.5           | 50             |            | -         |
| * SEME010120054SE | R0.05         | 1.2           | 4              | 3             | 50             |            | 4mm Shank |
| * SEME01012014SE  | R0.1          |               | 4              | 3             | 50             |            | 4mm Shank |
| * SEME01012024SE  | R0.2          |               | 4              | 3             | 50             |            | 4mm Shank |
| * SEME01012034SE  | R0.3          |               | 4              | 3             | 50             |            | 4mm Shank |
| SEME01012005E     | R0.05         |               | 6              | 3             | 50             |            | -         |
| SEME0101201E      | R0.1          |               | 6              | 3             | 50             |            | -         |
| SEME0101202E      | R0.2          |               | 6              | 3             | 50             |            | -         |
| SEME0101203E      | R0.3          |               | 6              | 3             | 50             |            | -         |
| * SEME010150054SE | R0.05         | 1.5           | 4              | 4             | 50             |            | 4mm Shank |
| * SEME01015014SE  | R0.1          |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEME01015024SE  | R0.2          |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEME01015034SE  | R0.3          |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEME01015054SE  | R0.5          |               | 4              | 4             | 50             |            | 4mm Shank |
| SEME01015005E     | R0.05         |               | 6              | 4             | 50             |            | -         |
| SEME0101501E      | R0.1          |               | 6              | 4             | 50             |            | -         |
| SEME0101502E      | R0.2          |               | 6              | 4             | 50             |            | -         |
| SEME0101503E      | R0.3          |               | 6              | 4             | 50             |            | -         |
| SEME0101505E      | R0.5          |               | 6              | 4             | 50             |            | -         |
| * SEME01020014SE  | R0.1          | 2.0           | 4              | 6             | 50             |            | 4mm Shank |
| * SEME01020024SE  | R0.2          |               | 4              | 6             | 50             |            | 4mm Shank |
| * SEME01020034SE  | R0.3          |               | 4              | 6             | 50             |            | 4mm Shank |
| * SEME01020054SE  | R0.5          |               | 4              | 6             | 50             |            | 4mm Shank |

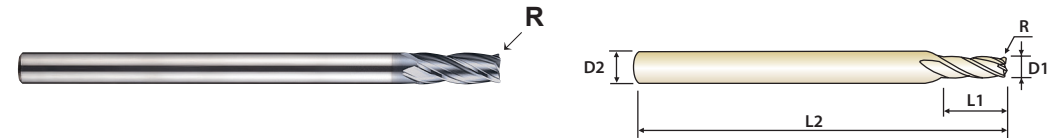
◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEME01 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
- ▶ Available various products like short, regular and long shank end mills etc.



\* NEW SIZES D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|-------------------|---------------|---------------|----------------|---------------|----------------|------------|-----------|
|                   | R             | D1            | D2             | L1            | L2             |            |           |
| SEME0102001E      | R0.1          | 2.0           | 6              | 6             | 50             | ●          | -         |
| SEME0102002E      | R0.2          |               | 6              | 6             | 50             | ●          | -         |
| SEME0102003E      | R0.3          |               | 6              | 6             | 50             |            | -         |
| SEME0102005E      | R0.5          |               | 6              | 6             | 50             |            | -         |
| * SEME01025014SE  | R0.1          |               | 4              | 7             | 60             |            | 4mm Shank |
| * SEME01025024SE  | R0.2          | 2.5           | 4              | 7             | 60             |            | 4mm Shank |
| * SEME01025034SE  | R0.3          |               | 4              | 7             | 60             |            | 4mm Shank |
| * SEME01025054SE  | R0.5          |               | 4              | 7             | 60             |            | 4mm Shank |
| SEME0102501E      | R0.1          |               | 6              | 7             | 60             |            | -         |
| SEME0102502E      | R0.2          |               | 6              | 7             | 60             |            | -         |
| SEME0102503E      | R0.3          |               | 6              | 7             | 60             |            | -         |
| SEME0102505E      | R0.5          |               | 6              | 7             | 60             |            | -         |
| SEME0103001E      | R0.1          | 3.0           | 6              | 8             | 60             |            | -         |
| SEME0103002E      | R0.2          |               | 6              | 8             | 60             | ●          | -         |
| SEME0103003E      | R0.3          |               | 6              | 8             | 60             | ●          | -         |
| SEME0103005E      | R0.5          |               | 6              | 8             | 60             | ●          | -         |
| SEME0103010E      | R1.0          | 3.5           | 6              | 8             | 60             |            | -         |
| SEME0103501E      | R0.1          |               | 6              | 10            | 70             |            | -         |
| SEME0103502E      | R0.2          |               | 6              | 10            | 70             |            | -         |
| SEME0103503E      | R0.3          |               | 6              | 10            | 70             |            | -         |
| SEME0103505E      | R0.5          |               | 6              | 10            | 70             |            | -         |
| SEME01040014SE    | R0.1          | 4.0           | 4              | 10            | 70             |            | 4mm Shank |
| SEME01040024SE    | R0.2          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEME01040034SE    | R0.3          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEME01040054SE    | R0.5          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEME01040104SE    | R1.0          |               | 4              | 10            | 70             |            | 4mm Shank |
| SEME01040011004SE | R0.1          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEME01040021004SE | R0.2          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEME01040031004SE | R0.3          |               | 4              | 10            | 100            |            | 4mm Shank |
| SEME01040051004SE | R0.5          |               | 4              | 10            | 100            |            | 4mm Shank |

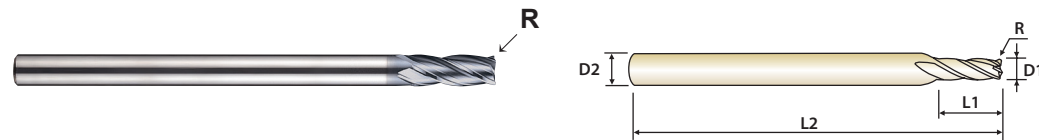
◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEME01 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
- ▶ Available various products like short, regular and long shank end mills etc.



P. 116~117

\* NEW SIZES D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.           | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|-------------------|---------------|---------------|----------------|---------------|----------------|------------|------------|
|                   | R             | D1            | D2             | L1            | L2             |            |            |
| SEME01040101004SE | R1.0          | 4.0           | 4              | 10            | 100            |            | 4mm Shank  |
| SEME0104001E      | R0.1          |               | 6              | 10            | 70             |            | Regular    |
| SEME0104002E      | R0.2          |               | 6              | 10            | 70             | ●          | Regular    |
| SEME0104003E      | R0.3          |               | 6              | 10            | 70             | ●          | Regular    |
| SEME0104005E      | R0.5          |               | 6              | 10            | 70             | ●          | Regular    |
| SEME0104010E      | R1.0          |               | 6              | 10            | 70             | ●          | Regular    |
| SEME0104501E      | R0.1          | 4.5           | 6              | 11            | 80             |            | -          |
| SEME0104502E      | R0.2          |               | 6              | 11            | 80             |            | -          |
| SEME0104503E      | R0.3          |               | 6              | 11            | 80             |            | -          |
| SEME0104505E      | R0.5          |               | 6              | 11            | 80             |            | -          |
| SEME0105001E      | R0.1          | 5.0           | 6              | 13            | 90             |            | -          |
| SEME0105002E      | R0.2          |               | 6              | 13            | 90             |            | -          |
| SEME0105003E      | R0.3          |               | 6              | 13            | 90             | ●          | -          |
| SEME0105005E      | R0.5          |               | 6              | 13            | 90             | ●          | -          |
| SEME0105010E      | R1.0          |               | 6              | 13            | 90             |            | -          |
| SEME0105501E      | R0.1          | 5.5           | 6              | 13            | 90             |            | -          |
| SEME0105502E      | R0.2          |               | 6              | 13            | 90             |            | -          |
| SEME0105503E      | R0.3          |               | 6              | 13            | 90             |            | -          |
| SEME0105505E      | R0.5          |               | 6              | 13            | 90             |            | -          |
| SEME0105510E      | R1.0          |               | 6              | 13            | 90             |            | -          |
| SEME0106001060E   | R0.1          | 6.0           | 6              | 15            | 60             |            | Short      |
| SEME0106002060E   | R0.2          |               | 6              | 15            | 60             |            | Short      |
| SEME0106001E      | R0.1          |               | 6              | 15            | 90             |            | Regular    |
| SEME0106002E      | R0.2          |               | 6              | 15            | 90             | ●          | Regular    |
| SEME0106003E      | R0.3          |               | 6              | 15            | 90             | ●          | Regular    |
| SEME0106005E      | R0.5          |               | 6              | 15            | 90             | ●          | Regular    |
| SEME0106010E      | R1.0          |               | 6              | 15            | 90             | ●          | Regular    |
| SEME0106015E      | R1.5          |               | 6              | 15            | 90             |            | Regular    |
| SEME0106020E      | R2.0          |               | 6              | 15            | 90             |            | Regular    |
| SEME0106005110E   | R0.5          |               | 6              | 15            | 110            |            | Long Shank |

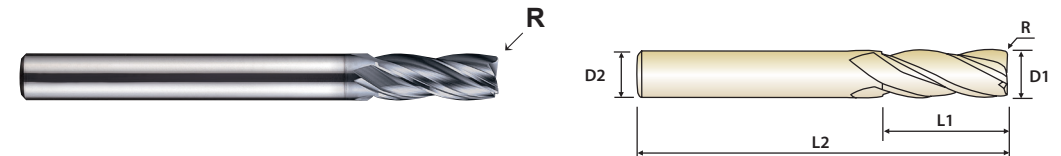
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEME01 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
- ▶ Available various products like short, regular and long shank end mills etc.



P. 116~117

\* NEW SIZES D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|----------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L2             |            |            |
| SEME0106010110E | R1.0          | 6.0           | 6              | 15            | 110            |            | Long Shank |
| SEME0106005130E | R0.5          |               | 6              | 15            | 130            |            | Long Shank |
| SEME0106010130E | R1.0          |               | 6              | 15            | 130            |            | Long Shank |
| SEME0107001E    | R0.1          | 7.0           | 8              | 16            | 90             |            | -          |
| SEME0107002E    | R0.2          |               | 8              | 16            | 90             |            | -          |
| SEME0107003E    | R0.3          |               | 8              | 16            | 90             |            | -          |
| SEME0107005E    | R0.5          |               | 8              | 16            | 90             |            | -          |
| SEME0107010E    | R1.0          |               | 8              | 16            | 90             |            | -          |
| SEME0107020E    | R2.0          |               | 8              | 16            | 90             |            | -          |
| SEME0108003070E | R0.3          | 8.0           | 8              | 20            | 70             | ●          | Short      |
| SEME0108005070E | R0.5          |               | 8              | 20            | 70             | ●          | Short      |
| SEME0108010070E | R1.0          |               | 8              | 20            | 70             | ●          | Short      |
| SEME0108001E    | R0.1          |               | 8              | 20            | 100            |            | Regular    |
| SEME0108002E    | R0.2          |               | 8              | 20            | 100            | ●          | Regular    |
| SEME0108003E    | R0.3          |               | 8              | 20            | 100            | ●          | Regular    |
| SEME0108005E    | R0.5          |               | 8              | 20            | 100            | ●          | Regular    |
| SEME0108010E    | R1.0          |               | 8              | 20            | 100            | ●          | Regular    |
| SEME0108015E    | R1.5          |               | 8              | 20            | 100            | ●          | Regular    |
| SEME0108020E    | R2.0          |               | 8              | 20            | 100            | ●          | Regular    |
| SEME0108025E    | R2.5          |               | 8              | 20            | 100            |            | Regular    |
| SEME0108030E    | R3.0          |               | 8              | 20            | 100            |            | Regular    |
| SEME0108005120E | R0.5          |               | 8              | 20            | 120            |            | Long Shank |
| SEME0108010120E | R1.0          |               | 8              | 20            | 120            |            | Long Shank |
| SEME0108005150E | R0.5          |               | 8              | 20            | 150            |            | Long Shank |
| SEME0108010150E | R1.0          | 10.0          | 10             | 25            | 75             |            | Short      |
| SEME0110003075E | R0.3          |               | 10             | 25            | 75             |            | Short      |
| SEME0110005075E | R0.5          |               | 10             | 25            | 75             |            | Short      |
| SEME0110010075E | R1.0          |               | 10             | 25            | 75             |            | Short      |
| SEME0110001E    | R0.1          |               | 10             | 25            | 100            |            | Regular    |
| SEME0110002E    | R0.2          |               | 10             | 25            | 100            |            | Regular    |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEME01 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
- ▶ Available various products like short, regular and long shank end mills etc.



P. 116~117

\* NEW SIZES D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|----------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L2             |            |            |
| SEME0110003E    | R0.3          | 10.0          | 10             | 25            | 100            |            | Regular    |
| SEME0110005E    | R0.5          |               | 10             | 25            | 100            |            | Regular    |
| SEME0110010E    | R1.0          |               | 10             | 25            | 100            | ●          | Regular    |
| SEME0110015E    | R1.5          |               | 10             | 25            | 100            | ●          | Regular    |
| SEME0110020E    | R2.0          |               | 10             | 25            | 100            | ●          | Regular    |
| SEME0110025E    | R2.5          |               | 10             | 25            | 100            | ●          | Regular    |
| SEME0110030E    | R3.0          |               | 10             | 25            | 100            |            | Regular    |
| SEME0110040E    | R4.0          |               | 10             | 25            | 100            |            | Regular    |
| SEME0110005130E | R0.5          |               | 10             | 22            | 130            |            | Long Shank |
| SEME0110010130E | R1.0          |               | 10             | 22            | 130            |            | Long Shank |
| SEME0110005150E | R0.5          | 11.0          | 10             | 22            | 150            |            | Long Shank |
| SEME0110010150E | R1.0          |               | 10             | 22            | 150            |            | Long Shank |
| SEME0111002E    | R0.2          |               | 12             | 25            | 110            | ●          | -          |
| SEME0111003E    | R0.3          |               | 12             | 25            | 110            | ●          | -          |
| SEME0111005E    | R0.5          |               | 12             | 25            | 110            |            | -          |
| SEME0111010E    | R1.0          |               | 12             | 25            | 110            |            | -          |
| SEME0111020E    | R2.0          | 12.0          | 12             | 25            | 110            |            | -          |
| SEME0112003080E | R0.3          |               | 12             | 30            | 80             |            | Short      |
| SEME0112005080E | R0.5          |               | 12             | 30            | 80             |            | Short      |
| SEME0112010080E | R1.0          |               | 12             | 30            | 80             |            | Short      |
| SEME0112001E    | R0.1          |               | 12             | 30            | 110            |            | Regular    |
| SEME0112002E    | R0.2          |               | 12             | 30            | 110            |            | Regular    |
| SEME0112003E    | R0.3          |               | 12             | 30            | 110            |            | Regular    |
| SEME0112005E    | R0.5          |               | 12             | 30            | 110            | ●          | Regular    |
| SEME0112010E    | R1.0          |               | 12             | 30            | 110            | ●          | Regular    |
| SEME0112015E    | R1.5          |               | 12             | 30            | 110            | ●          | Regular    |
| SEME0112020E    | R2.0          |               | 12             | 30            | 110            | ●          | Regular    |
| SEME0112025E    | R2.5          |               | 12             | 30            | 110            |            | Regular    |
| SEME0112030E    | R3.0          |               | 12             | 30            | 110            |            | Regular    |
| SEME0112040E    | R4.0          |               | 12             | 30            | 110            |            | Regular    |

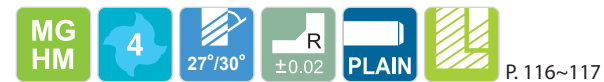
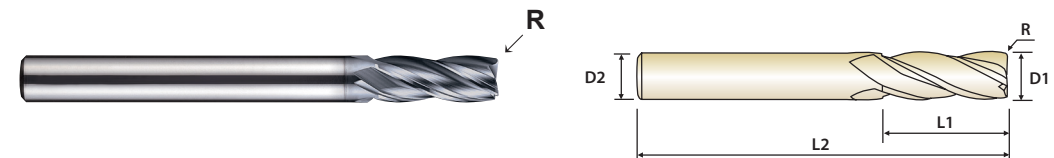
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS  
(SHORT, REGULAR, LONG SHANK)

SEME01 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
- ▶ Available various products like short, regular and long shank end mills etc.



P. 116~117

\* NEW SIZES D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|----------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L2             |            |            |
| SEME0112050E    | R5.0          | 12.0          | 12             | 30            | 110            |            | Regular    |
| SEME0112005130E | R0.5          |               | 12             | 30            | 130            |            | Long Shank |
| SEME0112010130E | R1.0          |               | 12             | 30            | 130            |            | Long Shank |
| SEME0112005150E | R0.5          |               | 12             | 30            | 130            |            | Long Shank |
| SEME0112010150E | R1.0          |               | 12             | 30            | 130            |            | Long Shank |
| SEME0114005E    | R0.5          | 14.0          | 16             | 35            | 150            |            | -          |
| SEME0114010E    | R1.0          |               | 16             | 35            | 150            |            | -          |
| SEME0114020E    | R2.0          |               | 16             | 35            | 150            |            | -          |
| SEME0116005E    | R0.5          | 16.0          | 16             | 32            | 150            | ●          | -          |
| SEME0116010E    | R1.0          |               | 16             | 32            | 150            | ●          | -          |
| SEME0116015E    | R1.5          |               | 16             | 32            | 150            | ●          | -          |
| SEME0116020E    | R2.0          |               | 16             | 32            | 150            | ●          | -          |
| SEME0120005E    | R0.5          | 20.0          | 20             | 38            | 150            |            | -          |
| SEME0120010E    | R1.0          |               | 20             | 38            | 150            | ●          | -          |
| SEME0120015E    | R1.5          |               | 20             | 38            | 150            |            | -          |
| SEME0120020E    | R2.0          |               | 20             | 38            | 150            | ●          | -          |

|                          |                              |                      |
|--------------------------|------------------------------|----------------------|
| Mill Dia. Tolerance (mm) | Corner Radius Tolerance (mm) | Shank Dia. Tolerance |
| 0~-0.03                  | ±0.02                        | h6                   |

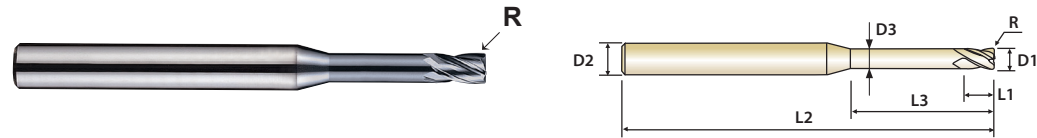
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME6401000503E | R0.05         | 1.0           | 4              | 1.5           | 3                  | 50             | 0.95          |            | -      |
| SEME6401000504E | R0.05         |               | 4              | 1.5           | 4                  | 50             | 0.95          |            | -      |
| SEME6401000506E | R0.05         |               | 4              | 1.5           | 6                  | 50             | 0.95          |            | -      |
| SEME6401000508E | R0.05         |               | 4              | 1.5           | 8                  | 50             | 0.95          |            | -      |
| SEME6401000510E | R0.05         |               | 4              | 1.5           | 10                 | 50             | 0.95          |            | -      |
| SEME6401000512E | R0.05         |               | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME6401000514E | R0.05         |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME6401000516E | R0.05         |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME6401000520E | R0.05         |               | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |
| SEME640100103E  | R0.1          |               | 4              | 1.5           | 3                  | 50             | 0.95          |            | -      |
| SEME640100104E  | R0.1          |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          | -      |
| SEME640100106E  | R0.1          |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          | -      |
| SEME640100108E  | R0.1          |               | 4              | 1.5           | 8                  | 50             | 0.95          | ●          | -      |
| SEME640100110E  | R0.1          |               | 4              | 1.5           | 10                 | 50             | 0.95          |            | -      |
| SEME640100112E  | R0.1          |               | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME640100114E  | R0.1          |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME640100116E  | R0.1          |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME640100120E  | R0.1          |               | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |
| SEME640100203E  | R0.2          |               | 4              | 1.5           | 3                  | 50             | 0.95          |            | -      |
| SEME640100204E  | R0.2          |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          | -      |
| SEME640100206E  | R0.2          |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          | -      |
| SEME640100208E  | R0.2          |               | 4              | 1.5           | 8                  | 50             | 0.95          | ●          | -      |
| SEME640100210E  | R0.2          |               | 4              | 1.5           | 10                 | 50             | 0.95          |            | -      |
| SEME640100212E  | R0.2          |               | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME640100214E  | R0.2          |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME640100216E  | R0.2          |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME640100220E  | R0.2          |               | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |
| SEME640100303E  | R0.3          |               | 4              | 1.5           | 3                  | 50             | 0.95          |            | -      |
| SEME640100304E  | R0.3          |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          | -      |
| SEME640100306E  | R0.3          |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          | -      |

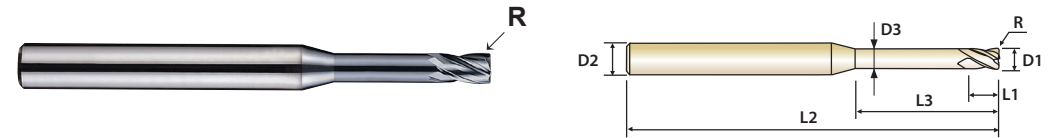
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           | ○      |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640100308E  | R0.3          | 1.0           | 4              | 1.5           | 8                  | 50             | 0.95          | ●          | -      |
| SEME640100310E  | R0.3          |               | 4              | 1.5           | 10                 | 50             | 0.95          |            | -      |
| SEME640100312E  | R0.3          |               | 4              | 1.5           | 12                 | 50             | 0.95          |            | -      |
| SEME640100314E  | R0.3          |               | 4              | 1.5           | 14                 | 50             | 0.95          |            | -      |
| SEME640100316E  | R0.3          |               | 4              | 1.5           | 16                 | 50             | 0.95          |            | -      |
| SEME640100320E  | R0.3          |               | 4              | 1.5           | 20                 | 50             | 0.95          |            | -      |
| SEME6401200503E | R0.05         | 1.2           | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME6401200504E | R0.05         |               | 4              | 1.8           | 4                  | 50             | 1.15          |            | -      |
| SEME6401200506E | R0.05         |               | 4              | 1.8           | 6                  | 50             | 1.15          |            | -      |
| SEME6401200508E | R0.05         |               | 4              | 1.8           | 8                  | 50             | 1.15          |            | -      |
| SEME6401200510E | R0.05         |               | 4              | 1.8           | 10                 | 50             | 1.15          |            | -      |
| SEME6401200512E | R0.05         |               | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME6401200516E | R0.05         |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME6401200520E | R0.05         |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |
| SEME640120103E  | R0.1          |               | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME640120104E  | R0.1          |               | 4              | 1.8           | 4                  | 50             | 1.15          | ●          | -      |
| SEME640120106E  | R0.1          |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          | -      |
| SEME640120108E  | R0.1          |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          | -      |
| SEME640120110E  | R0.1          |               | 4              | 1.8           | 10                 | 50             | 1.15          |            | -      |
| SEME640120112E  | R0.1          |               | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME640120116E  | R0.1          |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME640120120E  | R0.1          |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |
| SEME640120203E  | R0.2          |               | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME640120204E  | R0.2          |               | 4              | 1.8           | 4                  | 50             | 1.15          | ●          | -      |
| SEME640120206E  | R0.2          |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          | -      |
| SEME640120208E  | R0.2          |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          | -      |
| SEME640120210E  | R0.2          |               | 4              | 1.8           | 10                 | 50             | 1.15          |            | -      |
| SEME640120212E  | R0.2          |               | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME640120216E  | R0.2          |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME640120220E  | R0.2          |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |

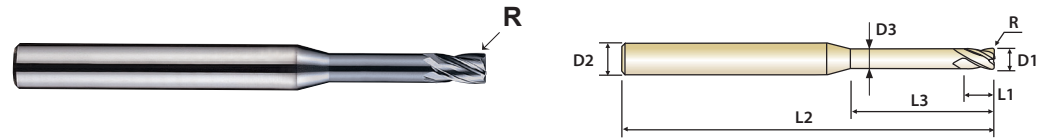
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640120303E  | R0.3          | 1.2           | 4              | 1.8           | 3                  | 50             | 1.15          |            | -      |
| SEME640120304E  | R0.3          |               | 4              | 1.8           | 4                  | 50             | 1.15          | ●          | -      |
| SEME640120306E  | R0.3          |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          | -      |
| SEME640120308E  | R0.3          |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          | -      |
| SEME640120310E  | R0.3          |               | 4              | 1.8           | 10                 | 50             | 1.15          |            | -      |
| SEME640120312E  | R0.3          |               | 4              | 1.8           | 12                 | 50             | 1.15          |            | -      |
| SEME640120316E  | R0.3          |               | 4              | 1.8           | 16                 | 50             | 1.15          |            | -      |
| SEME640120320E  | R0.3          |               | 4              | 1.8           | 20                 | 50             | 1.15          |            | -      |
| SEME6401500504E | R0.05         | 1.5           | 4              | 2.3           | 4                  | 50             | 1.45          |            | -      |
| SEME6401500506E | R0.05         |               | 4              | 2.3           | 6                  | 50             | 1.45          |            | -      |
| SEME6401500508E | R0.05         |               | 4              | 2.3           | 8                  | 50             | 1.45          |            | -      |
| SEME6401500510E | R0.05         |               | 4              | 2.3           | 10                 | 50             | 1.45          |            | -      |
| SEME6401500512E | R0.05         |               | 4              | 2.3           | 12                 | 50             | 1.45          |            | -      |
| SEME6401500514E | R0.05         |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME6401500516E | R0.05         |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME6401500520E | R0.05         |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME6401500522E | R0.05         |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME6401500526E | R0.05         |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME640150104E  | R0.1          |               | 4              | 2.3           | 4                  | 50             | 1.45          |            | -      |
| SEME640150106E  | R0.1          |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |
| SEME640150108E  | R0.1          |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME640150110E  | R0.1          |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          | -      |
| SEME640150112E  | R0.1          |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          | -      |
| SEME640150114E  | R0.1          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME640150116E  | R0.1          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME640150120E  | R0.1          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME640150122E  | R0.1          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME640150126E  | R0.1          |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME640150204E  | R0.2          |               | 4              | 2.3           | 4                  | 50             | 1.45          |            | -      |
| SEME640150206E  | R0.2          |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |

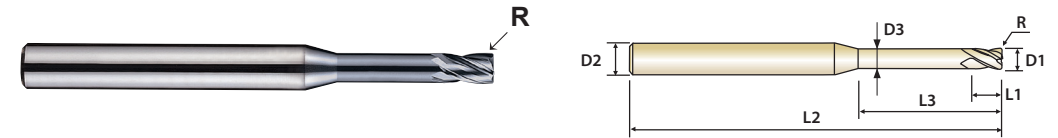
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640150208E | R0.2          | 1.5           | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME640150210E | R0.2          |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          | -      |
| SEME640150212E | R0.2          |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          | -      |
| SEME640150214E | R0.2          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME640150216E | R0.2          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME640150220E | R0.2          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME640150222E | R0.2          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME640150226E | R0.2          |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME640150304E | R0.3          |               | 4              | 2.3           | 4                  | 50             | 1.45          |            | -      |
| SEME640150306E | R0.3          |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |
| SEME640150308E | R0.3          |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME640150310E | R0.3          |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          | -      |
| SEME640150312E | R0.3          |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          | -      |
| SEME640150314E | R0.3          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME640150316E | R0.3          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME640150320E | R0.3          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME640150322E | R0.3          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME640150326E | R0.3          |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME640150504E | R0.5          |               | 4              | 2.3           | 4                  | 50             | 1.45          |            | -      |
| SEME640150506E | R0.5          |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          | -      |
| SEME640150508E | R0.5          |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          | -      |
| SEME640150510E | R0.5          |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          | -      |
| SEME640150512E | R0.5          |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          | -      |
| SEME640150514E | R0.5          |               | 4              | 2.3           | 14                 | 50             | 1.45          |            | -      |
| SEME640150516E | R0.5          |               | 4              | 2.3           | 16                 | 50             | 1.45          |            | -      |
| SEME640150520E | R0.5          |               | 4              | 2.3           | 20                 | 50             | 1.45          |            | -      |
| SEME640150522E | R0.5          |               | 4              | 2.3           | 22                 | 60             | 1.45          |            | -      |
| SEME640150526E | R0.5          |               | 4              | 2.3           | 26                 | 60             | 1.45          |            | -      |
| SEME640200106E | R0.1          | 2.0           | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME640200108E | R0.1          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |

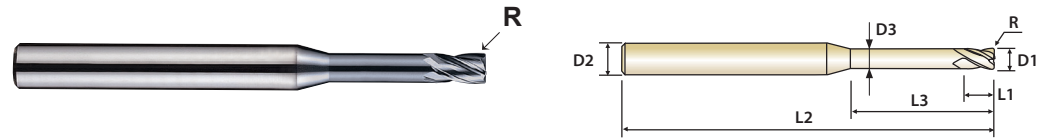
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



P. 118~121

D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640200110E | R0.1          | 2.0           | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME640200112E | R0.1          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME640200114E | R0.1          |               | 4              | 3             | 14                 | 50             | 1.95          |            | -      |
| SEME640200116E | R0.1          |               | 4              | 3             | 16                 | 50             | 1.95          |            | -      |
| SEME640200120E | R0.1          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME640200122E | R0.1          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME640200126E | R0.1          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |
| SEME640200130E | R0.1          |               | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME640200206E | R0.2          |               | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME640200208E | R0.2          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |
| SEME640200210E | R0.2          |               | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME640200212E | R0.2          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME640200214E | R0.2          |               | 4              | 3             | 14                 | 50             | 1.95          |            | -      |
| SEME640200216E | R0.2          |               | 4              | 3             | 16                 | 50             | 1.95          |            | -      |
| SEME640200220E | R0.2          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME640200222E | R0.2          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME640200226E | R0.2          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |
| SEME640200230E | R0.2          |               | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME640200306E | R0.3          |               | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME640200308E | R0.3          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |
| SEME640200310E | R0.3          |               | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME640200312E | R0.3          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME640200314E | R0.3          |               | 4              | 3             | 14                 | 50             | 1.95          |            | -      |
| SEME640200316E | R0.3          |               | 4              | 3             | 16                 | 50             | 1.95          |            | -      |
| SEME640200320E | R0.3          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME640200322E | R0.3          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME640200326E | R0.3          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |
| SEME640200330E | R0.3          |               | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME640200506E | R0.5          |               | 4              | 3             | 6                  | 50             | 1.95          | ●          | -      |
| SEME640200508E | R0.5          |               | 4              | 3             | 8                  | 50             | 1.95          | ●          | -      |

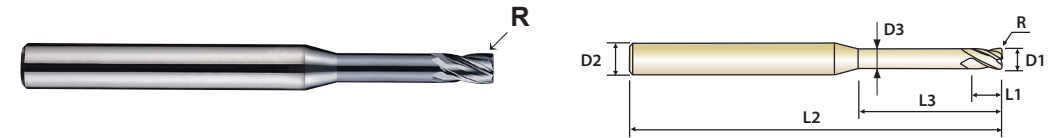
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



P. 118~121

D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640200510E | R0.5          | 2.0           | 4              | 3             | 10                 | 50             | 1.95          | ●          | -      |
| SEME640200512E | R0.5          |               | 4              | 3             | 12                 | 50             | 1.95          | ●          | -      |
| SEME640200514E | R0.5          |               | 4              | 3             | 14                 | 50             | 1.95          |            | -      |
| SEME640200516E | R0.5          |               | 4              | 3             | 16                 | 50             | 1.95          |            | -      |
| SEME640200520E | R0.5          |               | 4              | 3             | 20                 | 50             | 1.95          |            | -      |
| SEME640200522E | R0.5          |               | 4              | 3             | 22                 | 60             | 1.95          |            | -      |
| SEME640200526E | R0.5          |               | 4              | 3             | 26                 | 60             | 1.95          |            | -      |
| SEME640200530E | R0.5          |               | 4              | 3             | 30                 | 70             | 1.95          |            | -      |
| SEME640250108E | R0.1          | 2.5           | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME640250110E | R0.1          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME640250112E | R0.1          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |
| SEME640250114E | R0.1          |               | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME640250116E | R0.1          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME640250120E | R0.1          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |
| SEME640250126E | R0.1          |               | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME640250130E | R0.1          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME640250208E | R0.2          |               | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME640250210E | R0.2          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME640250212E | R0.2          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |
| SEME640250214E | R0.2          |               | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME640250216E | R0.2          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME640250220E | R0.2          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |
| SEME640250226E | R0.2          |               | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME640250230E | R0.2          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME640250308E | R0.3          |               | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME640250310E | R0.3          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME640250312E | R0.3          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |
| SEME640250314E | R0.3          |               | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME640250316E | R0.3          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME640250320E | R0.3          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |

◎ : Excellent ○ : Good

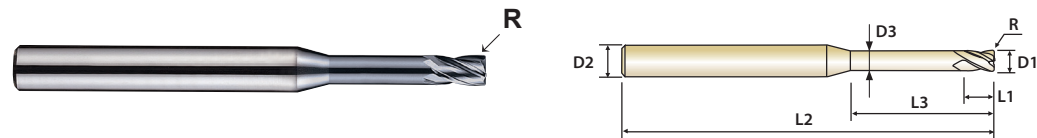
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640250326E | R0.3          | 2.5           | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME640250330E | R0.3          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME640250508E | R0.5          |               | 4              | 4             | 8                  | 50             | 2.40          |            | -      |
| SEME640250510E | R0.5          |               | 4              | 4             | 10                 | 50             | 2.40          |            | -      |
| SEME640250512E | R0.5          |               | 4              | 4             | 12                 | 50             | 2.40          |            | -      |
| SEME640250514E | R0.5          |               | 4              | 4             | 14                 | 50             | 2.40          |            | -      |
| SEME640250516E | R0.5          |               | 4              | 4             | 16                 | 50             | 2.40          |            | -      |
| SEME640250520E | R0.5          |               | 4              | 4             | 20                 | 50             | 2.40          |            | -      |
| SEME640250526E | R0.5          |               | 4              | 4             | 26                 | 60             | 2.40          |            | -      |
| SEME640250530E | R0.5          |               | 4              | 4             | 30                 | 70             | 2.40          |            | -      |
| SEME640300108E | R0.1          | 3.0           | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME640300110E | R0.1          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME640300112E | R0.1          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME640300114E | R0.1          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME640300116E | R0.1          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME640300120E | R0.1          |               | 6              | 4.5           | 20                 | 60             | 2.85          |            | -      |
| SEME640300126E | R0.1          |               | 6              | 4.5           | 26                 | 65             | 2.85          |            | -      |
| SEME640300130E | R0.1          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME640300135E | R0.1          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME640300140E | R0.1          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME640300208E | R0.2          |               | 6              | 4.5           | 8                  | 50             | 2.85          |            | -      |
| SEME640300210E | R0.2          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME640300212E | R0.2          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME640300214E | R0.2          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME640300216E | R0.2          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME640300220E | R0.2          |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          | -      |
| SEME640300226E | R0.2          |               | 6              | 4.5           | 26                 | 65             | 2.85          |            | -      |
| SEME640300230E | R0.2          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME640300235E | R0.2          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME640300240E | R0.2          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |

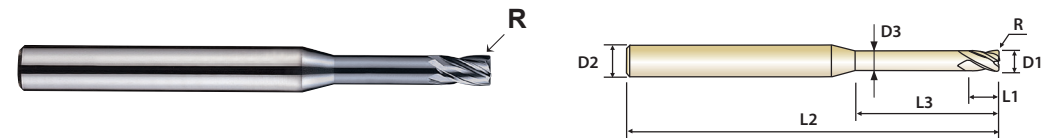
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640300308E | R0.3          | 3.0           | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME640300310E | R0.3          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME640300312E | R0.3          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME640300314E | R0.3          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME640300316E | R0.3          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME640300320E | R0.3          |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          | -      |
| SEME640300326E | R0.3          |               | 6              | 4.5           | 26                 | 65             | 2.85          |            | -      |
| SEME640300330E | R0.3          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME640300335E | R0.3          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME640300340E | R0.3          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME640300508E | R0.5          |               | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME640300510E | R0.5          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME640300512E | R0.5          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME640300514E | R0.5          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME640300516E | R0.5          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME640300520E | R0.5          |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          | -      |
| SEME640300526E | R0.5          |               | 6              | 4.5           | 26                 | 65             | 2.85          | ●          | -      |
| SEME640300530E | R0.5          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME640300535E | R0.5          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME640300540E | R0.5          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |
| SEME640301008E | R1.0          |               | 6              | 4.5           | 8                  | 50             | 2.85          | ●          | -      |
| SEME640301010E | R1.0          |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          | -      |
| SEME640301012E | R1.0          |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          | -      |
| SEME640301014E | R1.0          |               | 6              | 4.5           | 14                 | 60             | 2.85          |            | -      |
| SEME640301016E | R1.0          |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          | -      |
| SEME640301020E | R1.0          |               | 6              | 4.5           | 20                 | 60             | 2.85          |            | -      |
| SEME640301026E | R1.0          |               | 6              | 4.5           | 26                 | 65             | 2.85          |            | -      |
| SEME640301030E | R1.0          |               | 6              | 4.5           | 30                 | 70             | 2.85          |            | -      |
| SEME640301035E | R1.0          |               | 6              | 4.5           | 35                 | 70             | 2.85          |            | -      |
| SEME640301040E | R1.0          |               | 6              | 4.5           | 40                 | 80             | 2.85          |            | -      |

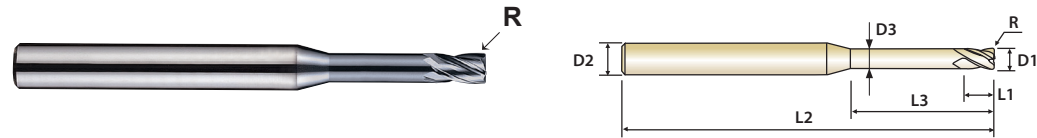
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640400110E | R0.1          | 4.0           | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME640400112E | R0.1          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME640400114E | R0.1          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME640400116E | R0.1          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME640400120E | R0.1          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME640400126E | R0.1          |               | 6              | 6             | 26                 | 65             | 3.85          |            | -      |
| SEME640400130E | R0.1          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME640400135E | R0.1          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME640400140E | R0.1          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME640400145E | R0.1          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME640400150E | R0.1          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME640400210E | R0.2          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME640400212E | R0.2          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME640400214E | R0.2          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME640400216E | R0.2          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME640400220E | R0.2          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME640400226E | R0.2          |               | 6              | 6             | 26                 | 65             | 3.85          | ●          | -      |
| SEME640400230E | R0.2          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME640400235E | R0.2          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME640400240E | R0.2          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME640400245E | R0.2          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME640400250E | R0.2          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME640400310E | R0.3          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME640400312E | R0.3          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME640400314E | R0.3          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME640400316E | R0.3          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME640400320E | R0.3          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME640400326E | R0.3          |               | 6              | 6             | 26                 | 65             | 3.85          | ●          | -      |
| SEME640400330E | R0.3          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME640400335E | R0.3          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |

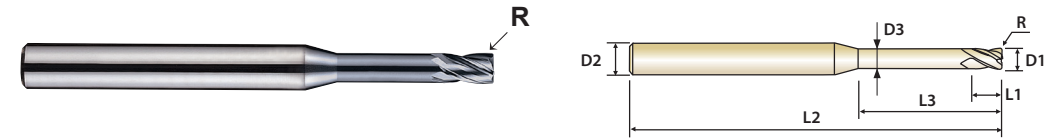
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.        | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark |
|----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|--------|
|                | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |        |
| SEME640400340E | R0.3          | 4.0           | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME640400345E | R0.3          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME640400350E | R0.3          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME640400510E | R0.5          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME640400512E | R0.5          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME640400514E | R0.5          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME640400516E | R0.5          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME640400520E | R0.5          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME640400526E | R0.5          |               | 6              | 6             | 26                 | 65             | 3.85          | ●          | -      |
| SEME640400530E | R0.5          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME640400535E | R0.5          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME640400540E | R0.5          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME640400545E | R0.5          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME640400550E | R0.5          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME640401010E | R1.0          |               | 6              | 6             | 10                 | 50             | 3.85          | ●          | -      |
| SEME640401012E | R1.0          |               | 6              | 6             | 12                 | 50             | 3.85          | ●          | -      |
| SEME640401014E | R1.0          |               | 6              | 6             | 14                 | 60             | 3.85          |            | -      |
| SEME640401016E | R1.0          |               | 6              | 6             | 16                 | 60             | 3.85          | ●          | -      |
| SEME640401020E | R1.0          |               | 6              | 6             | 20                 | 60             | 3.85          | ●          | -      |
| SEME640401026E | R1.0          |               | 6              | 6             | 26                 | 65             | 3.85          | ●          | -      |
| SEME640401030E | R1.0          |               | 6              | 6             | 30                 | 70             | 3.85          |            | -      |
| SEME640401035E | R1.0          |               | 6              | 6             | 35                 | 70             | 3.85          |            | -      |
| SEME640401040E | R1.0          |               | 6              | 6             | 40                 | 80             | 3.85          |            | -      |
| SEME640401045E | R1.0          |               | 6              | 6             | 45                 | 90             | 3.85          |            | -      |
| SEME640401050E | R1.0          |               | 6              | 6             | 50                 | 100            | 3.85          |            | -      |
| SEME6405001E   | R0.1          | 5.0           | 6              | 8             | 15                 | 60             | 4.85          |            | -      |
| SEME6405002E   | R0.2          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -      |
| SEME6405003E   | R0.3          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -      |
| SEME6405005E   | R0.5          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -      |
| SEME6405010E   | R1.0          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -      |

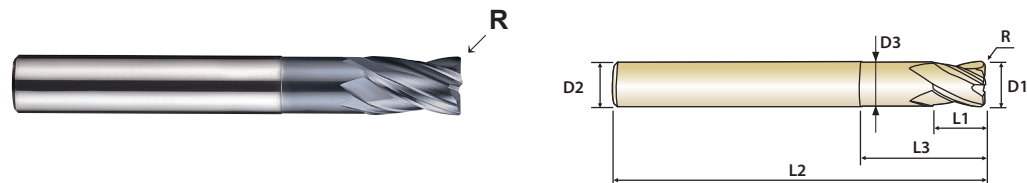
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRc55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |            |
| SEME6405015E    | R1.5          | 5.0           | 6              | 8             | 15                 | 60             | 4.85          |            | -          |
| SEME6405020E    | R2.0          |               | 6              | 8             | 15                 | 60             | 4.85          |            | -          |
| SEME6406001E    | R0.1          | 6.0           | 6              | 9             | 20                 | 60             | 5.85          |            | Regular    |
| SEME6406002E    | R0.2          |               | 6              | 9             | 20                 | 60             | 5.85          |            | Regular    |
| SEME6406003E    | R0.3          |               | 6              | 9             | 20                 | 60             | 5.85          | ●          | Regular    |
| SEME6406005E    | R0.5          |               | 6              | 9             | 20                 | 60             | 5.85          | ●          | Regular    |
| SEME6406010E    | R1.0          |               | 6              | 9             | 20                 | 60             | 5.85          | ●          | Regular    |
| SEME6406015E    | R1.5          |               | 6              | 9             | 20                 | 60             | 5.85          |            | Regular    |
| SEME6406020E    | R2.0          |               | 6              | 9             | 20                 | 60             | 5.85          |            | Regular    |
| SEME640603090E  | R0.3          |               | 6              | 15            | 30                 | 90             | 5.85          |            | Long Shank |
| SEME640605090E  | R0.5          |               | 6              | 15            | 30                 | 90             | 5.85          |            | Long Shank |
| SEME6406010090E | R1.0          |               | 6              | 15            | 30                 | 90             | 5.85          |            | Long Shank |
| SEME6408001E    | R0.1          | 8.0           | 8              | 12            | 25                 | 70             | 7.70          |            | Regular    |
| SEME6408002E    | R0.2          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6408003E    | R0.3          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6408005E    | R0.5          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6408010E    | R1.0          |               | 8              | 12            | 25                 | 70             | 7.70          | ●          | Regular    |
| SEME6408015E    | R1.5          |               | 8              | 12            | 25                 | 70             | 7.70          |            | Regular    |
| SEME6408020E    | R2.0          |               | 8              | 12            | 25                 | 70             | 7.70          |            | Regular    |
| SEME6408003100E | R0.3          |               | 8              | 20            | 35                 | 100            | 7.70          |            | Long Shank |
| SEME6408005100E | R0.5          |               | 8              | 20            | 35                 | 100            | 7.70          | ●          | Long Shank |
| SEME6408010100E | R1.0          |               | 8              | 20            | 35                 | 100            | 7.70          |            | Long Shank |
| SEME6410001E    | R0.1          | 10.0          | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6410002E    | R0.2          |               | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6410003E    | R0.3          |               | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6410005E    | R0.5          |               | 10             | 15            | 30                 | 75             | 9.70          | ●          | Regular    |
| SEME6410010E    | R1.0          |               | 10             | 15            | 30                 | 75             | 9.70          | ●          | Regular    |
| SEME6410015E    | R1.5          |               | 10             | 15            | 30                 | 75             | 9.70          | ●          | Regular    |
| SEME6410020E    | R2.0          |               | 10             | 15            | 30                 | 75             | 9.70          |            | Regular    |
| SEME6410003100E | R0.3          |               | 10             | 25            | 40                 | 100            | 9.70          |            | Long Shank |

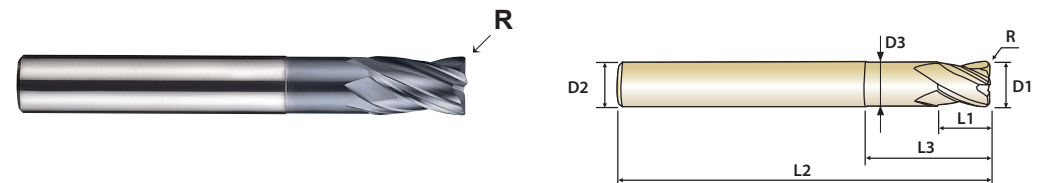
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



D&lt;Ø3, 30° HELIX

Unit : mm

| EDP No.         | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item | Remark     |
|-----------------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|------------|
|                 | R             | D1            | D2             | L1            | L3                 | L2             | D3            |            |            |
| SEME6410005100E | R0.5          | 10.0          | 10             | 25            | 40                 | 100            | 9.70          | ●          | Long Shank |
| SEME6410010100E | R1.0          |               | 10             | 25            | 40                 | 100            | 9.70          |            | Long Shank |
| SEME6412002E    | R0.2          | 12.0          | 12             | 18            | 32                 | 80             | 11.70         |            | Regular    |
| SEME6412003E    | R0.3          |               | 12             | 18            | 32                 | 80             | 11.70         |            | Regular    |
| SEME6412005E    | R0.5          |               | 12             | 18            | 32                 | 80             | 11.70         | ●          | Regular    |
| SEME6412010E    | R1.0          |               | 12             | 18            | 32                 | 80             | 11.70         | ●          | Regular    |
| SEME6412015E    | R1.5          |               | 12             | 18            | 32                 | 80             | 11.70         | ●          | Regular    |
| SEME6412020E    | R2.0          |               | 12             | 18            | 32                 | 80             | 11.70         | ●          | Regular    |
| SEME6412003110E | R0.3          |               | 12             | 30            | 45                 | 110            | 11.70         |            | Long Shank |
| SEME6412005110E | R0.5          |               | 12             | 30            | 45                 | 110            | 11.70         | ●          | Long Shank |
| SEME6412010110E | R1.0          |               | 12             | 30            | 45                 | 110            | 11.70         |            | Long Shank |
| SEME6416005E    | R0.5          | 16.0          | 16             | 20            | 35                 | 100            | 15.70         | ●          | Regular    |
| SEME6416010E    | R1.0          |               | 16             | 20            | 35                 | 100            | 15.70         | ●          | Regular    |
| SEME6416005150E | R0.5          |               | 20             | 35            | 50                 | 150            | 15.70         |            | Long Shank |
| SEME6416010150E | R1.0          | 20.0          | 20             | 35            | 50                 | 150            | 15.70         |            | Long Shank |
| SEME6420005E    | R0.5          |               | 20             | 25            | 40                 | 100            | 19.70         | ●          | Regular    |
| SEME6420010E    | R1.0          |               | 20             | 25            | 40                 | 100            | 19.70         | ●          | Regular    |
| SEME6420005150E | R0.5          |               | 20             | 40            | 55                 | 150            | 19.70         |            | Long Shank |
| SEME6420010150E | R1.0          |               | 20             | 40            | 55                 | 150            | 19.70         |            | Long Shank |

|                          |                              |                      |
|--------------------------|------------------------------|----------------------|
| Mill Dia. Tolerance (mm) | Corner Radius Tolerance (mm) | Shank Dia. Tolerance |
| 0~-0.03                  | ±0.02                        | h6                   |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE

SEME35 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to sharp edge geometry at end tooth, cutting ability at working is increased.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|--------------|---------------|----------------|---------------|----------------|------------|
|              | D1            | D2             | L1            | L2             |            |
| SEME350003E  | 0.03          | 4              | 0.04          | 40             |            |
| SEME350004E  | 0.04          | 4              | 0.06          | 40             |            |
| SEME350005E  | 0.05          | 4              | 0.07          | 40             |            |
| SEME350006E  | 0.06          | 4              | 0.09          | 40             |            |
| SEME350007E  | 0.07          | 4              | 0.1           | 40             |            |
| SEME35 0008E | 0.08          | 4              | 0.12          | 40             |            |
| SEME350009E  | 0.09          | 4              | 0.13          | 40             |            |
| SEME35001E   | 0.1           | 4              | 0.2           | 40             | ●          |
| SEME350015E  | 0.15          | 4              | 0.3           | 40             |            |
| SEME35002E   | 0.2           | 4              | 0.4           | 40             | ●          |
| SEME350025E  | 0.25          | 4              | 0.5           | 40             |            |
| SEME35003E   | 0.3           | 4              | 0.6           | 40             | ●          |
| SEME350035E  | 0.35          | 4              | 0.7           | 40             |            |
| SEME35004E   | 0.4           | 4              | 0.8           | 40             | ●          |
| SEME350045E  | 0.45          | 4              | 0.9           | 40             |            |
| SEME35005E   | 0.5           | 4              | 1.0           | 40             | ●          |
| SEME350055E  | 0.55          | 4              | 1.1           | 40             |            |
| SEME35006E   | 0.6           | 4              | 1.2           | 40             | ●          |
| SEME350065E  | 0.65          | 4              | 1.3           | 40             |            |
| SEME35007E   | 0.7           | 4              | 1.4           | 40             | ●          |
| SEME350075E  | 0.75          | 4              | 1.5           | 40             |            |
| SEME35008E   | 0.8           | 4              | 1.6           | 40             | ●          |
| SEME350085E  | 0.85          | 4              | 1.7           | 40             |            |
| SEME35009E   | 0.9           | 4              | 1.8           | 40             | ●          |
| SEME350095E  | 0.95          | 4              | 2             | 40             |            |
| SEME35010E   | 1.0           | 6              | 2.5           | 50             | ●          |
| SEME35012E   | 1.2           | 6              | 3             | 50             | ●          |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE

SEME35 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to sharp edge geometry at end tooth, cutting ability at working is increased.



| EDP No.       | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|---------------|---------------|----------------|---------------|----------------|------------|
|               | D1            | D2             | L1            | L2             |            |
| SEME35015E    | 1.5           | 6              | 4             | 50             | ●          |
| SEME35020E    | 2.0           | 6              | 6             | 50             | ●          |
| SEME35025E    | 2.5           | 6              | 7             | 50             | ●          |
| SEME35030E    | 3.0           | 6              | 8             | 50             | ●          |
| SEME35035E    | 3.5           | 6              | 10            | 50             | ●          |
| SEME35040E    | 4.0           | 6              | 10            | 50             | ●          |
| SEME35045E    | 4.5           | 6              | 14            | 50             | ●          |
| SEME35050E    | 5.0           | 6              | 15            | 60             | ●          |
| SEME35055E    | 5.5           | 6              | 15            | 60             |            |
| SEME35060E    | 6.0           | 6              | 15            | 60             | ●          |
| SEME35065E    | 6.5           | 8              | 18            | 60             | ●          |
| SEME35070E    | 7.0           | 8              | 20            | 60             | ●          |
| SEME35075E    | 7.5           | 8              | 20            | 60             |            |
| SEME35080E    | 8.0           | 8              | 20            | 70             | ●          |
| SEME35085E    | 8.5           | 10             | 22            | 70             | ●          |
| SEME35090E    | 9.0           | 10             | 22            | 70             | ●          |
| SEME35095E    | 9.5           | 10             | 24            | 70             | ●          |
| SEME35100E    | 10.0          | 10             | 25            | 75             | ●          |
| SEME35105E    | 10.5          | 12             | 26            | 75             | ●          |
| SEME35110E    | 11.0          | 12             | 30            | 75             | ●          |
| SEME35115E    | 11.5          | 12             | 30            | 80             |            |
| SEME35120E    | 12.0          | 12             | 30            | 80             | ●          |
| SEME35130E    | 13.0          | 12             | 35            | 100            | ●          |
| SEME3514012SE | 14.0          | 12             | 35            | 100            |            |
| SEME3514014SE | 14.0          | 14             | 35            | 100            | ●          |
| SEME35140E    | 14.0          | 16             | 35            | 100            | ●          |
| SEME35150E    | 15.0          | 16             | 38            | 100            | ●          |

◎ : Excellent ○ : Good

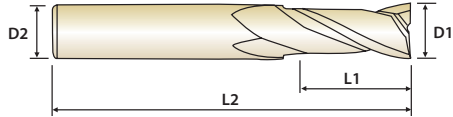
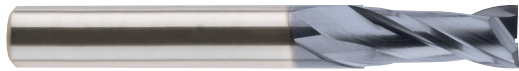
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE

SEME35 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to sharp edge geometry at end tooth, cutting ability at working is increased.



MG  
HM

2

30°

PLAIN

P. 122~123

| EDP No.       | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|---------------|---------------|----------------|---------------|----------------|------------|
|               | D1            | D2             | L1            | L2             |            |
| SEME35160E    | 16.0          | 16             | 40            | 100            | ●          |
| SEME35170E    | 17.0          | 16             | 42            | 100            |            |
| SEME35180E    | 18.0          | 16             | 45            | 100            | ●          |
| SEME3518018SE | 18.0          | 18             | 45            | 100            |            |
| SEME35190E    | 19.0          | 20             | 45            | 100            |            |
| SEME35200E    | 20.0          | 20             | 45            | 100            | ●          |
| SEME35210E    | 21.0          | 20             | 45            | 100            |            |
| SEME35220E    | 22.0          | 20             | 45            | 100            |            |
| SEME35230E    | 23.0          | 25             | 50            | 120            |            |
| SEME35240E    | 24.0          | 25             | 50            | 120            |            |
| SEME35250E    | 25.0          | 25             | 50            | 120            |            |

|          |                          |                      |
|----------|--------------------------|----------------------|
| Size     | Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
| up to Ø6 | 0~-0.012                 | h6                   |
| over Ø6  | 0~-0.015                 |                      |

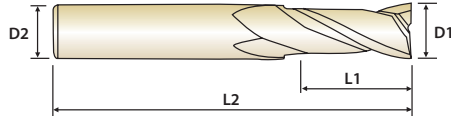
◎ : Excellent ○ : Good

| P             |              |                     |                 |                      | H                | M         | K      | N        |          |         |      |          | S                      |
|---------------|--------------|---------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Pearhardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40            | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                   | ◎               | ○                    |                  | ○         | ○      |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE (4mm SHANK)

SEME35 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to sharp edge geometry at end tooth, cutting ability at working is increased.



MG  
HM

2

30°

PLAIN

P. 122~123

| EDP No.         | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------|---------------|----------------|---------------|----------------|------------|
|                 | D1            | D2             | L1            | L2             |            |
| SEME350104SE    | 1.0           | 4              | 2.5           | 50             | ●          |
| SEME350114SE    | 1.1           | 4              | 3             | 50             |            |
| SEME350124SE    | 1.2           | 4              | 3             | 50             | ●          |
| SEME350134SE    | 1.3           | 4              | 3             | 50             | ●          |
| SEME350144SE    | 1.4           | 4              | 4             | 50             | ●          |
| SEME350154SE    | 1.5           | 4              | 4             | 50             | ●          |
| SEME350164SE    | 1.6           | 4              | 4             | 50             | ●          |
| SEME350174SE    | 1.7           | 4              | 4             | 50             |            |
| SEME350184SE    | 1.8           | 4              | 5             | 50             | ●          |
| SEME350194SE    | 1.9           | 4              | 5             | 50             |            |
| SEME350204SE    | 2.0           | 4              | 6             | 50             | ●          |
| SEME350214SE    | 2.1           | 4              | 6             | 50             |            |
| SEME350224SE    | 2.2           | 4              | 6             | 50             | ●          |
| SEME350234SE    | 2.3           | 4              | 6             | 50             |            |
| SEME350244SE    | 2.4           | 4              | 6             | 50             | ●          |
| SEME350254SE    | 2.5           | 4              | 8             | 50             | ●          |
| SEME350264SE    | 2.6           | 4              | 8             | 50             | ●          |
| SEME350274SE    | 2.7           | 4              | 8             | 50             | ●          |
| SEME350284SE    | 2.8           | 4              | 8             | 50             | ●          |
| SEME350294SE    | 2.9           | 4              | 8             | 50             |            |
| SEME350304SE    | 3.0           | 4              | 8             | 50             | ●          |
| SEME350354SE    | 3.5           | 4              | 10            | 50             |            |
| SEME350404SE    | 4.0           | 4              | 10            | 50             |            |
| SEME350404S080E | 4.0           | 4              | 10            | 80             |            |

|                          |                      |
|--------------------------|----------------------|
| Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
| 0~-0.012                 | h6                   |

◎ : Excellent ○ : Good

| P             |              |                     |                 |                      | H                | M         | K      | N        |          |         |      |          | S                      |
|---------------|--------------|---------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Pearhardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40            | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                   | ◎               | ○                    |                  | ○         | ○      |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE  
(3mm SHANK)

SEME35 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to sharp edge geometry at end tooth, cutting ability at working is increased.



P. 122~123

| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|--------------|---------------|----------------|---------------|----------------|------------|
|              | D1            | D2             | L1            | L2             |            |
| SEME350013SE | 0.1           | 3              | 0.2           | 40             | ●          |
| SEME350023SE | 0.2           | 3              | 0.4           | 40             | ●          |
| SEME350033SE | 0.3           | 3              | 0.6           | 40             | ●          |
| SEME350043SE | 0.4           | 3              | 0.8           | 40             | ●          |
| SEME350053SE | 0.5           | 3              | 1.0           | 40             | ●          |
| SEME350063SE | 0.6           | 3              | 1.2           | 40             | ●          |
| SEME350073SE | 0.7           | 3              | 1.4           | 40             | ●          |
| SEME350083SE | 0.8           | 3              | 1.6           | 40             | ●          |
| SEME350093SE | 0.9           | 3              | 1.8           | 40             | ●          |
| SEME350103SE | 1.0           | 3              | 2.5           | 50             | ●          |
| SEME350123SE | 1.2           | 3              | 3             | 50             | ●          |
| SEME350153SE | 1.5           | 3              | 4             | 50             | ●          |
| SEME350203SE | 2.0           | 3              | 6             | 50             | ●          |
| SEME350253SE | 2.5           | 3              | 7             | 50             | ●          |
| SEME350303SE | 3.0           | 3              | 8             | 50             | ●          |

|                             |                         |
|-----------------------------|-------------------------|
| Mill Dia.<br>Tolerance (mm) | Shank Dia.<br>Tolerance |
| 0~-0.012                    | h6                      |

◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length end mills.



P. 124~127

| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|--------------|---------------|----------------|---------------|----------------|------------|
|              | D1            | D2             | L1            | L2             |            |
| SEME7001003E | 1.0           | 6              | 3             | 60             | ●          |
| SEME7001004E |               | 6              | 4             | 60             | ●          |
| SEME7001005E |               | 6              | 5             | 60             |            |
| SEME7001006E |               | 6              | 6             | 60             | ●          |
| SEME7001007E |               | 6              | 7             | 60             |            |
| SEME7001008E |               | 6              | 8             | 60             | ●          |
| SEME7001010E |               | 6              | 10            | 60             | ●          |
| SEME7001012E |               | 6              | 12            | 60             |            |
| SEME7001204E | 1.2           | 6              | 4             | 60             |            |
| SEME7001206E |               | 6              | 6             | 60             |            |
| SEME7001208E |               | 6              | 8             | 60             |            |
| SEME7001210E |               | 6              | 10            | 60             |            |
| SEME7001212E |               | 6              | 12            | 60             |            |
| SEME7001506E | 1.5           | 6              | 6             | 60             | ●          |
| SEME7001508E |               | 6              | 8             | 60             | ●          |
| SEME7001510E |               | 6              | 10            | 60             | ●          |
| SEME7001512E |               | 6              | 12            | 60             | ●          |
| SEME7001514E |               | 6              | 14            | 60             |            |
| SEME7001516E |               | 6              | 16            | 60             | ●          |
| SEME7002008E | 2.0           | 6              | 8             | 60             | ●          |
| SEME7002010E |               | 6              | 10            | 60             | ●          |
| SEME7002012E |               | 6              | 12            | 60             | ●          |
| SEME7002014E |               | 6              | 14            | 60             |            |
| SEME7002016E |               | 6              | 16            | 60             | ●          |
| SEME7002510E | 2.5           | 6              | 10            | 60             |            |
| SEME7002512E |               | 6              | 12            | 60             |            |
| SEME7002516E |               | 6              | 16            | 60             | ●          |
| SEME7002520E |               | 6              | 20            | 60             |            |

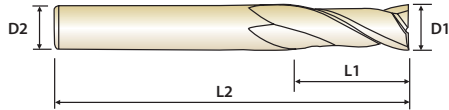
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length end mills.



| EDP No.         | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------|---------------|----------------|---------------|----------------|------------|
|                 | D1            | D2             | L1            | L2             |            |
| SEME7002526E    | 2.5           | 6              | 26            | 60             |            |
| SEME70030163SE  | 3.0           | 3              | 16            | 100            |            |
| SEME7003010E    |               | 6              | 10            | 70             | ●          |
| SEME7003012E    |               | 6              | 12            | 70             | ●          |
| SEME7003014E    |               | 6              | 14            | 70             |            |
| SEME7003016E    |               | 6              | 16            | 70             | ●          |
| SEME7003020E    |               | 6              | 20            | 70             | ●          |
| SEME7003026E    |               | 6              | 26            | 70             | ●          |
| SEME7003030E    |               | 6              | 30            | 70             |            |
| SEME70040204SE  | 4.0           | 4              | 20            | 100            |            |
| SEME7004012E    |               | 6              | 12            | 70             | ●          |
| SEME7004016E    |               | 6              | 16            | 70             | ●          |
| SEME7004020E    |               | 6              | 20            | 70             | ●          |
| SEME7004026E    |               | 6              | 26            | 70             | ●          |
| SEME7004030E    |               | 6              | 30            | 70             | ●          |
| SEME7005020E    | 5.0           | 6              | 20            | 70             | ●          |
| SEME7005025E    |               | 6              | 25            | 70             | ●          |
| SEME7005025100E |               | 6              | 25            | 100            |            |
| SEME7005030E    |               | 6              | 30            | 80             | ●          |
| SEME7005035E    |               | 6              | 35            | 90             |            |
| SEME7005040E    |               | 6              | 40            | 100            | ●          |
| SEME7006015E    | 6.0           | 6              | 15            | 60             | ●          |
| SEME7006015080E |               | 6              | 15            | 80             | ●          |
| SEME7006020E    |               | 6              | 20            | 70             | ●          |
| SEME7006020090E |               | 6              | 20            | 90             | ●          |
| SEME7006025E    |               | 6              | 25            | 75             | ●          |
| SEME7006030E    |               | 6              | 30            | 80             | ●          |
| SEME7006030100E |               | 6              | 30            | 100            | ●          |

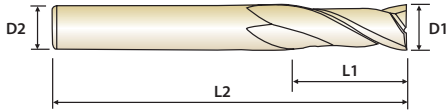
◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      |          | S                      |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length end mills.



| EDP No.         | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------|---------------|----------------|---------------|----------------|------------|
|                 | D1            | D2             | L1            | L2             |            |
| SEME7006030150E | 6.0           | 6              | 30            | 150            | ●          |
| SEME7006035E    |               | 6              | 35            | 90             | ●          |
| SEME7006040E    |               | 6              | 40            | 90             | ●          |
| SEME7006040120E |               | 6              | 40            | 120            |            |
| SEME7006045E    |               | 6              | 45            | 150            | ●          |
| SEME7008025E    | 8.0           | 8              | 25            | 80             | ●          |
| SEME7008030E    |               | 8              | 30            | 80             | ●          |
| SEME7008030100E |               | 8              | 30            | 100            |            |
| SEME7008035E    |               | 8              | 35            | 90             | ●          |
| SEME7008040E    |               | 8              | 40            | 90             | ●          |
| SEME7008040120E |               | 8              | 40            | 120            | ●          |
| SEME7008040150E |               | 8              | 40            | 150            |            |
| SEME7008045E    |               | 8              | 45            | 100            | ●          |
| SEME7008050E    |               | 8              | 50            | 100            | ●          |
| SEME7008050150E |               | 8              | 50            | 150            |            |
| SEME7010030E    | 10.0          | 10             | 30            | 80             | ●          |
| SEME7010030100E |               | 10             | 30            | 100            | ●          |
| SEME7010035E    |               | 10             | 35            | 90             | ●          |
| SEME7010040E    |               | 10             | 40            | 90             | ●          |
| SEME7010040120E |               | 10             | 40            | 120            | ●          |
| SEME7010045E    |               | 10             | 45            | 100            | ●          |
| SEME7010050E    |               | 10             | 50            | 100            | ●          |
| SEME7010050150E |               | 10             | 50            | 150            |            |
| SEME7010050200E |               | 10             | 50            | 200            |            |
| SEME7010055E    |               | 10             | 55            | 150            |            |
| SEME7010060E    |               | 10             | 60            | 110            | ●          |
| SEME7010060200E |               | 10             | 60            | 200            |            |
| SEME7012035E    | 12.0          | 12             | 35            | 90             | ●          |

◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      |          | S                      |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length end mills.



MG  
HM

2

30°

PLAIN

P. 124~127

| EDP No.         | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------|---------------|----------------|---------------|----------------|------------|
|                 | D1            | D2             | L1            | L2             |            |
| SEME7012040E    | 12.0          | 12             | 40            | 100            | ●          |
| SEME7012040120E |               | 12             | 40            | 120            | ●          |
| SEME7012045E    |               | 12             | 45            | 130            | ●          |
| SEME7012050E    |               | 12             | 50            | 100            | ●          |
| SEME7012050150E |               | 12             | 50            | 150            |            |
| SEME7012055E    |               | 12             | 55            | 110            | ●          |
| SEME7012060E    |               | 12             | 60            | 110            | ●          |
| SEME7012060150E |               | 12             | 60            | 150            | ●          |
| SEME7012060200E |               | 12             | 60            | 200            |            |
| SEME7012065E    |               | 12             | 65            | 150            |            |
| SEME7012070E    |               | 12             | 70            | 120            |            |
| SEME7012070200E |               | 12             | 70            | 200            |            |
| SEME7014050E    | 14.0          | 16             | 50            | 110            |            |
| SEME7014060E    |               | 16             | 60            | 150            |            |
| SEME7016040E    | 16.0          | 16             | 40            | 150            | ●          |
| SEME7016050E    |               | 16             | 50            | 110            |            |
| SEME7016050150E |               | 16             | 50            | 150            |            |
| SEME7016060E    |               | 16             | 60            | 120            |            |
| SEME7016070E    |               | 16             | 70            | 130            |            |
| SEME7016070150E |               | 16             | 70            | 150            |            |
| SEME7016070200E |               | 16             | 70            | 200            |            |
| SEME7016080E    |               | 16             | 80            | 150            |            |
| SEME7016090E    |               | 16             | 90            | 150            |            |
| SEME70160110E   |               | 16             | 110           | 200            |            |
| SEME70160120E   |               | 16             | 120           | 250            |            |
| SEME7018050E    | 18.0          | 20             | 50            | 120            |            |
| SEME7018070E    |               | 20             | 70            | 130            |            |
| SEME70180100E   |               | 20             | 100           | 200            |            |

◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length end mills.



MG  
HM

2

30°

PLAIN

P. 124~127

Unit : mm

| EDP No.                     | Mill Diameter           | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------------------|-------------------------|----------------|---------------|----------------|------------|
|                             | D1                      | D2             | L1            | L2             |            |
| SEME7020050E                | 20.0                    | 20             | 50            | 110            |            |
| SEME7020050150E             |                         | 20             | 50            | 150            |            |
| SEME7020060E                |                         | 20             | 60            | 130            |            |
| SEME7020070E                |                         | 20             | 70            | 130            |            |
| SEME7020080E                |                         | 20             | 80            | 150            |            |
| SEME7020090E                |                         | 20             | 90            | 150            |            |
| SEME7020090200E             |                         | 20             | 90            | 200            | ●          |
| SEME70200110E               |                         | 20             | 110           | 200            | ●          |
| SEME70200120E               |                         | 20             | 120           | 250            |            |
| SEME7022075E                | 22.0                    | 20             | 75            | 150            |            |
| SEME70220110E               |                         | 20             | 110           | 200            |            |
| SEME7025070E                | 25.0                    | 25             | 70            | 150            |            |
| SEME7025090E                |                         | 25             | 90            | 150            |            |
| SEME70250110E               |                         | 25             | 110           | 200            |            |
| SEME70250120E               |                         | 25             | 120           | 250            |            |
| Mill Dia.<br>Tolerance (mm) | Shank Dia.<br>Tolerance |                |               |                |            |
| 0~-0.03                     | h6                      |                |               |                |            |

◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ For 1.0mm and under 1.0mm diameter sizes, designed double neck for increasing tool rigidity and minimizing vibration at working.
- ▶ Available various rib processing due to supplying various effective length and overall length products.



| EDP No.       | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|               | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM845001003E | 0.1           | 4              | 0.15          | 0.3                | 40             | 0.085         |            |
| SEM845001005E |               | 4              | 0.15          | 0.5                | 40             | 0.085         |            |
| SEM84500101E  |               | 4              | 0.15          | 1                  | 40             | 0.085         |            |
| SEM845002005E | 0.2           | 4              | 0.3           | 0.5                | 40             | 0.17          |            |
| SEM84500201E  |               | 4              | 0.3           | 1                  | 40             | 0.17          | ●          |
| SEM845002015E |               | 4              | 0.3           | 1.5                | 40             | 0.17          |            |
| SEM84500202E  |               | 4              | 0.3           | 2                  | 40             | 0.17          |            |
| SEM84500301E  | 0.3           | 4              | 0.5           | 1                  | 40             | 0.27          |            |
| SEM845003015E |               | 4              | 0.5           | 1.5                | 40             | 0.27          |            |
| SEM84500302E  |               | 4              | 0.5           | 2                  | 40             | 0.27          |            |
| SEM845003025E |               | 4              | 0.5           | 2.5                | 40             | 0.27          |            |
| SEM84500303E  |               | 4              | 0.5           | 3                  | 40             | 0.27          |            |
| SEM84500304E  |               | 4              | 0.5           | 4                  | 40             | 0.27          |            |
| SEM84500305E  |               | 4              | 0.5           | 5                  | 40             | 0.27          |            |
| SEM84500401E  | 0.4           | 4              | 0.6           | 1                  | 40             | 0.37          | ●          |
| SEM845004015E |               | 4              | 0.6           | 1.5                | 40             | 0.37          |            |
| SEM84500402E  |               | 4              | 0.6           | 2                  | 40             | 0.37          | ●          |
| SEM845004025E |               | 4              | 0.6           | 2.5                | 40             | 0.37          |            |
| SEM84500403E  |               | 4              | 0.6           | 3                  | 40             | 0.37          | ●          |
| SEM84500404E  |               | 4              | 0.6           | 4                  | 40             | 0.37          | ●          |
| SEM84500405E  |               | 4              | 0.6           | 5                  | 40             | 0.37          | ●          |
| SEM84500406E  |               | 4              | 0.6           | 6                  | 40             | 0.37          |            |
| SEM84500408E  |               | 4              | 0.6           | 8                  | 40             | 0.37          |            |
| SEM84500410E  |               | 4              | 0.6           | 10                 | 40             | 0.37          |            |
| SEM84500501E  | 0.5           | 4              | 0.7           | 1                  | 45             | 0.45          |            |
| SEM845005015E |               | 4              | 0.7           | 1.5                | 45             | 0.45          |            |
| SEM84500502E  |               | 4              | 0.7           | 2                  | 45             | 0.45          | ●          |
| SEM845005025E |               | 4              | 0.7           | 2.5                | 45             | 0.45          |            |
| SEM84500503E  |               | 4              | 0.7           | 3                  | 45             | 0.45          | ●          |
| SEM84500504E  |               | 4              | 0.7           | 4                  | 45             | 0.45          | ●          |
| SEM84500505E  |               | 4              | 0.7           | 5                  | 45             | 0.45          | ●          |

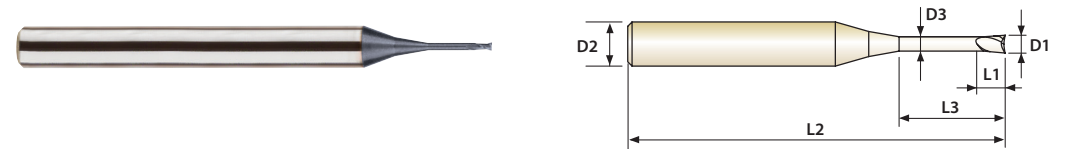
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ For 1.0mm and under 1.0mm diameter sizes, designed double neck for increasing tool rigidity and minimizing vibration at working.
- ▶ Available various rib processing due to supplying various effective length and overall length products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84500506E | 0.5           | 4              | 0.7           | 6                  | 45             | 0.45          | ●          |
| SEM84500508E |               | 4              | 0.7           | 8                  | 45             | 0.45          |            |
| SEM84500510E |               | 4              | 0.7           | 10                 | 45             | 0.45          |            |
| SEM84500512E |               | 4              | 0.7           | 12                 | 45             | 0.45          |            |
| SEM84500514E |               | 4              | 0.7           | 14                 | 45             | 0.45          |            |
| SEM84500516E | 0.6           | 4              | 0.7           | 16                 | 45             | 0.45          |            |
| SEM84500602E |               | 4              | 0.9           | 2                  | 45             | 0.55          | ●          |
| SEM84500603E |               | 4              | 0.9           | 3                  | 45             | 0.55          | ●          |
| SEM84500604E |               | 4              | 0.9           | 4                  | 45             | 0.55          | ●          |
| SEM84500605E |               | 4              | 0.9           | 5                  | 45             | 0.55          | ●          |
| SEM84500606E |               | 4              | 0.9           | 6                  | 45             | 0.55          | ●          |
| SEM84500608E |               | 4              | 0.9           | 8                  | 45             | 0.55          | ●          |
| SEM84500610E |               | 4              | 0.9           | 10                 | 45             | 0.55          | ●          |
| SEM84500612E |               | 4              | 0.9           | 12                 | 45             | 0.55          |            |
| SEM84500614E |               | 4              | 0.9           | 14                 | 45             | 0.55          |            |
| SEM84500616E | 0.7           | 4              | 0.9           | 16                 | 45             | 0.55          |            |
| SEM84500702E |               | 4              | 1.2           | 2                  | 45             | 0.65          |            |
| SEM84500704E |               | 4              | 1.2           | 4                  | 45             | 0.65          |            |
| SEM84500706E |               | 4              | 1.2           | 6                  | 45             | 0.65          |            |
| SEM84500708E |               | 4              | 1.2           | 8                  | 45             | 0.65          |            |
| SEM84500710E | 0.8           | 4              | 1.2           | 10                 | 45             | 0.65          |            |
| SEM84500712E |               | 4              | 1.2           | 12                 | 45             | 0.65          |            |
| SEM84500802E |               | 4              | 1.2           | 2                  | 45             | 0.75          | ●          |
| SEM84500803E |               | 4              | 1.2           | 3                  | 45             | 0.75          | ●          |
| SEM84500804E |               | 4              | 1.2           | 4                  | 45             | 0.75          | ●          |
| SEM84500805E |               | 4              | 1.2           | 5                  | 45             | 0.75          | ●          |
| SEM84500806E |               | 4              | 1.2           | 6                  | 45             | 0.75          | ●          |
| SEM84500808E |               | 4              | 1.2           | 8                  | 45             | 0.75          | ●          |
| SEM84500810E |               | 4              | 1.2           | 10                 | 45             | 0.75          | ●          |
| SEM84500812E |               | 4              | 1.2           | 12                 | 45             | 0.75          |            |
| SEM84500814E |               | 4              | 1.2           | 14                 | 45             | 0.75          |            |

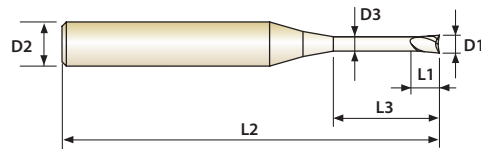
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ For 1.0mm and under 1.0mm diameter sizes, designed double neck for increasing tool rigidity and minimizing vibration at working.
- ▶ Available various rib processing due to supplying various effective length and overall length products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84500816E | 0.8           | 4              | 1.2           | 16                 | 45             | 0.75          |            |
| SEM84500820E |               | 4              | 1.2           | 20                 | 45             | 0.75          |            |
| SEM84500906E | 0.9           | 4              | 1.3           | 6                  | 45             | 0.85          |            |
| SEM84500908E |               | 4              | 1.3           | 8                  | 45             | 0.85          |            |
| SEM84500910E |               | 4              | 1.3           | 10                 | 45             | 0.85          |            |
| SEM84501002E | 1.0           | 4              | 1.5           | 2                  | 50             | 0.95          |            |
| SEM84501003E |               | 4              | 1.5           | 3                  | 50             | 0.95          | ●          |
| SEM84501004E |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          |
| SEM84501005E |               | 4              | 1.5           | 5                  | 50             | 0.95          | ●          |
| SEM84501006E |               | 4              | 1.5           | 6                  | 50             | 0.95          |            |
| SEM84501007E |               | 4              | 1.5           | 7                  | 50             | 0.95          |            |
| SEM84501008E |               | 4              | 1.5           | 8                  | 50             | 0.95          | ●          |
| SEM84501010E |               | 4              | 1.5           | 10                 | 50             | 0.95          | ●          |
| SEM84501012E |               | 4              | 1.5           | 12                 | 50             | 0.95          | ●          |
| SEM84501014E |               | 4              | 1.5           | 14                 | 50             | 0.95          | ●          |
| SEM84501016E |               | 4              | 1.5           | 16                 | 50             | 0.95          | ●          |
| SEM84501018E |               | 4              | 1.5           | 18                 | 50             | 0.95          |            |
| SEM84501020E |               | 4              | 1.5           | 20                 | 50             | 0.95          | ●          |
| SEM84501022E |               | 4              | 1.5           | 22                 | 60             | 0.95          |            |
| SEM84501026E |               | 4              | 1.5           | 26                 | 60             | 0.95          |            |
| SEM84501030E |               | 4              | 1.5           | 30                 | 70             | 0.95          |            |
| SEM84501040E |               | 4              | 1.5           | 40                 | 80             | 0.95          |            |
| SEM84501050E |               | 4              | 1.5           | 50                 | 100            | 0.95          |            |
| SEM84501204E | 1.2           | 4              | 1.8           | 4                  | 50             | 1.15          |            |
| SEM84501206E |               | 4              | 1.8           | 6                  | 50             | 1.15          | ●          |
| SEM84501208E |               | 4              | 1.8           | 8                  | 50             | 1.15          | ●          |
| SEM84501210E |               | 4              | 1.8           | 10                 | 50             | 1.15          | ●          |
| SEM84501212E |               | 4              | 1.8           | 12                 | 50             | 1.15          |            |
| SEM84501214E |               | 4              | 1.8           | 14                 | 50             | 1.15          |            |
| SEM84501216E |               | 4              | 1.8           | 16                 | 50             | 1.15          |            |
| SEM84501220E |               | 4              | 1.8           | 20                 | 50             | 1.15          |            |

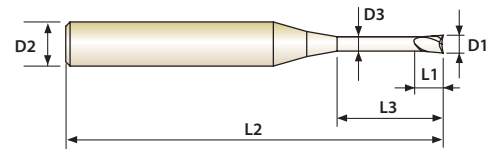
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ For 1.0mm and under 1.0mm diameter sizes, designed double neck for increasing tool rigidity and minimizing vibration at working.
- ▶ Available various rib processing due to supplying various effective length and overall length products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84501226E | 1.2           | 4              | 1.8           | 26                 | 60             | 1.15          |            |
| SEM84501230E |               | 4              | 1.8           | 30                 | 70             | 1.15          |            |
| SEM84501406E | 1.4           | 4              | 2.1           | 6                  | 50             | 1.35          | ●          |
| SEM84501408E |               | 4              | 2.1           | 8                  | 50             | 1.35          | ●          |
| SEM84501410E |               | 4              | 2.1           | 10                 | 50             | 1.35          |            |
| SEM84501414E |               | 4              | 2.1           | 14                 | 50             | 1.35          |            |
| SEM84501416E |               | 4              | 2.1           | 16                 | 50             | 1.35          |            |
| SEM84501420E |               | 4              | 2.1           | 20                 | 50             | 1.35          |            |
| SEM84501504E | 1.5           | 4              | 2.3           | 4                  | 50             | 1.45          | ●          |
| SEM84501505E |               | 4              | 2.3           | 5                  | 50             | 1.45          |            |
| SEM84501506E |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          |
| SEM84501507E |               | 4              | 2.3           | 7                  | 50             | 1.45          |            |
| SEM84501508E |               | 4              | 2.3           | 8                  | 50             | 1.45          | ●          |
| SEM84501510E |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          |
| SEM84501512E |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          |
| SEM84501514E |               | 4              | 2.3           | 14                 | 50             | 1.45          | ●          |
| SEM84501516E |               | 4              | 2.3           | 16                 | 50             | 1.45          | ●          |
| SEM84501518E |               | 4              | 2.3           | 18                 | 50             | 1.45          |            |
| SEM84501520E |               | 4              | 2.3           | 20                 | 50             | 1.45          | ●          |
| SEM84501522E |               | 4              | 2.3           | 22                 | 60             | 1.45          |            |
| SEM84501526E | 1.6           | 4              | 2.3           | 26                 | 60             | 1.45          |            |
| SEM84501530E |               | 4              | 2.3           | 30                 | 70             | 1.45          |            |
| SEM84501608E |               | 4              | 2.3           | 8                  | 50             | 1.55          |            |
| SEM84501610E |               | 4              | 2.3           | 10                 | 50             | 1.55          |            |
| SEM84501612E |               | 4              | 2.3           | 12                 | 50             | 1.55          |            |
| SEM84501616E |               | 4              | 2.3           | 16                 | 50             | 1.55          |            |
| SEM84501620E | 1.8           | 4              | 2.3           | 20                 | 50             | 1.55          |            |
| SEM84501808E |               | 4              | 2.7           | 8                  | 50             | 1.75          | ●          |
| SEM84501810E |               | 4              | 2.7           | 10                 | 50             | 1.75          | ●          |
| SEM84501812E |               | 4              | 2.7           | 12                 | 50             | 1.75          | ●          |
| SEM84501816E |               | 4              | 2.7           | 14                 | 50             | 1.75          |            |

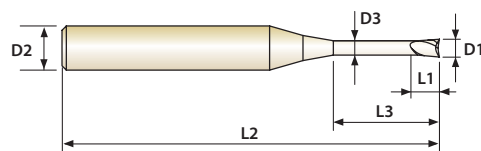
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ For 1.0mm and under 1.0mm diameter sizes, designed double neck for increasing tool rigidity and minimizing vibration at working.
- ▶ Available various rib processing due to supplying various effective length and overall length products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84501820E | 1.8           | 4              | 2.7           | 20                 | 50             | 1.75          |            |
| SEM84502006E | 2.0           | 4              | 3             | 6                  | 50             | 1.95          | ●          |
| SEM84502008E |               | 4              | 3             | 8                  | 50             | 1.95          | ●          |
| SEM84502010E |               | 4              | 3             | 10                 | 50             | 1.95          | ●          |
| SEM84502012E |               | 4              | 3             | 12                 | 50             | 1.95          | ●          |
| SEM84502014E |               | 4              | 3             | 14                 | 50             | 1.95          | ●          |
| SEM84502016E |               | 4              | 3             | 16                 | 50             | 1.95          | ●          |
| SEM84502018E |               | 4              | 3             | 18                 | 50             | 1.95          |            |
| SEM84502020E |               | 4              | 3             | 20                 | 50             | 1.95          | ●          |
| SEM84502022E |               | 4              | 3             | 22                 | 60             | 1.95          |            |
| SEM84502026E |               | 4              | 3             | 26                 | 60             | 1.95          |            |
| SEM84502030E |               | 4              | 3             | 30                 | 70             | 1.95          |            |
| SEM84502035E |               | 4              | 3             | 35                 | 70             | 1.95          |            |
| SEM84502040E |               | 4              | 3             | 40                 | 80             | 1.95          |            |
| SEM84502045E |               | 4              | 3             | 45                 | 90             | 1.95          |            |
| SEM84502050E |               | 4              | 3             | 50                 | 100            | 1.95          |            |
| SEM84502060E |               | 4              | 3             | 60                 | 110            | 1.95          |            |
| SEM84502508E | 2.5           | 4              | 4             | 8                  | 50             | 2.40          | ●          |
| SEM84502510E |               | 4              | 4             | 10                 | 50             | 2.40          |            |
| SEM84502512E |               | 4              | 4             | 12                 | 50             | 2.40          | ●          |
| SEM84502514E |               | 4              | 4             | 14                 | 50             | 2.40          |            |
| SEM84502516E |               | 4              | 4             | 16                 | 50             | 2.40          | ●          |
| SEM84502518E |               | 4              | 4             | 18                 | 50             | 2.40          |            |
| SEM84502520E |               | 4              | 4             | 20                 | 50             | 2.40          | ●          |
| SEM84502522E |               | 4              | 4             | 22                 | 60             | 2.40          |            |
| SEM84502526E |               | 4              | 4             | 26                 | 60             | 2.40          |            |
| SEM84502530E |               | 4              | 4             | 30                 | 70             | 2.40          |            |
| SEM84502535E |               | 4              | 4             | 35                 | 70             | 2.40          |            |
| SEM84502540E |               | 4              | 4             | 40                 | 80             | 2.40          |            |
| SEM84502545E |               | 4              | 4             | 45                 | 90             | 2.40          |            |
| SEM84502550E |               | 4              | 4             | 50                 | 100            | 2.40          |            |

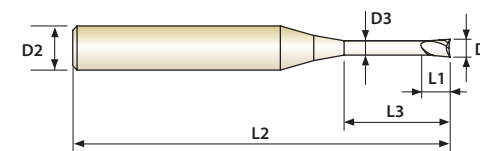
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ For 1.0mm and under 1.0mm diameter sizes, designed double neck for increasing tool rigidity and minimizing vibration at working.
- ▶ Available various rib processing due to supplying various effective length and overall length products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84503006E | 3.0           | 6              | 4.5           | 6                  | 50             | 2.85          |            |
| SEM84503008E |               | 6              | 4.5           | 8                  | 50             | 2.85          | ●          |
| SEM84503010E |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          |
| SEM84503012E |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          |
| SEM84503014E |               | 6              | 4.5           | 14                 | 60             | 2.85          | ●          |
| SEM84503016E |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          |
| SEM84503018E |               | 6              | 4.5           | 18                 | 60             | 2.85          | ●          |
| SEM84503020E |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          |
| SEM84503022E |               | 6              | 4.5           | 22                 | 65             | 2.85          |            |
| SEM84503026E |               | 6              | 4.5           | 26                 | 65             | 2.85          | ●          |
| SEM84503030E |               | 6              | 4.5           | 30                 | 70             | 2.85          |            |
| SEM84503035E |               | 6              | 4.5           | 35                 | 70             | 2.85          |            |
| SEM84503040E |               | 6              | 4.5           | 40                 | 80             | 2.85          |            |
| SEM84503045E |               | 6              | 4.5           | 45                 | 90             | 2.85          |            |
| SEM84503050E |               | 6              | 4.5           | 50                 | 100            | 2.85          |            |
| SEM84503060E |               | 6              | 4.5           | 60                 | 100            | 2.85          |            |
| SEM84504008E | 4.0           | 6              | 6             | 8                  | 50             | 3.85          |            |
| SEM84504010E |               | 6              | 6             | 10                 | 50             | 3.85          | ●          |
| SEM84504012E |               | 6              | 6             | 12                 | 50             | 3.85          | ●          |
| SEM84504014E |               | 6              | 6             | 14                 | 60             | 3.85          |            |
| SEM84504016E |               | 6              | 6             | 16                 | 60             | 3.85          | ●          |
| SEM84504018E |               | 6              | 6             | 18                 | 60             | 3.85          | ●          |
| SEM84504020E |               | 6              | 6             | 20                 | 60             | 3.85          | ●          |
| SEM84504022E |               | 6              | 6             | 22                 | 65             | 3.85          |            |
| SEM84504026E |               | 6              | 6             | 26                 | 65             | 3.85          | ●          |
| SEM84504030E |               | 6              | 6             | 30                 | 70             | 3.85          | ●          |
| SEM84504035E |               | 6              | 6             | 35                 | 70             | 3.85          |            |
| SEM84504040E |               | 6              | 6             | 40                 | 80             | 3.85          |            |
| SEM84504045E |               | 6              | 6             | 45                 | 90             | 3.85          |            |
| SEM84504050E |               | 6              | 6             | 50                 | 100            | 3.85          |            |
| SEM84504060E |               | 6              | 6             | 60                 | 100            | 3.85          |            |

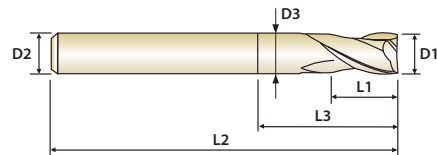
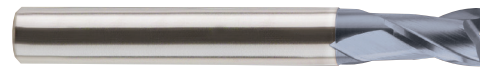
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ For 1.0mm and under 1.0mm diameter sizes, designed double neck for increasing tool rigidity and minimizing vibration at working.
- ▶ Available various rib processing due to supplying various effective length and overall length products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEM84505016E | 5.0           | 6              | 8             | 16                 | 60             | 4.85          |            |
| SEM84505020E |               | 6              | 8             | 20                 | 60             | 4.85          | ●          |
| SEM84505026E |               | 6              | 8             | 26                 | 65             | 4.85          |            |
| SEM84505030E |               | 6              | 8             | 30                 | 70             | 4.85          | ●          |
| SEM84505035E |               | 6              | 8             | 35                 | 75             | 4.85          | ●          |
| SEM84505040E |               | 6              | 8             | 40                 | 80             | 4.85          | ●          |
| SEM84505050E |               | 6              | 8             | 50                 | 90             | 4.85          | ●          |
| SEM84505060E |               | 6              | 8             | 60                 | 100            | 4.85          |            |
| SEM84506015E | 6.0           | 6              | 9             | 15                 | 60             | 5.85          | ●          |
| SEM84506020E |               | 6              | 9             | 20                 | 60             | 5.85          | ●          |
| SEM84506030E |               | 6              | 9             | 30                 | 70             | 5.85          | ●          |
| SEM84506032E |               | 6              | 9             | 32                 | 90             | 5.85          |            |
| SEM84508025E | 8.0           | 8              | 12            | 25                 | 70             | 7.70          | ●          |
| SEM84508030E |               | 8              | 12            | 30                 | 80             | 7.70          |            |
| SEM84508042E |               | 8              | 12            | 42                 | 100            | 7.70          |            |
| SEM84510030E | 10.0          | 10             | 15            | 30                 | 75             | 9.70          | ●          |
| SEM84510035E |               | 10             | 15            | 35                 | 80             | 9.70          |            |
| SEM84510045E |               | 10             | 15            | 45                 | 100            | 9.70          | ●          |
| SEM84512035E | 12.0          | 12             | 20            | 35                 | 80             | 11.70         | ●          |
| SEM84512040E |               | 12             | 20            | 40                 | 90             | 11.70         |            |
| SEM84512050E |               | 12             | 20            | 50                 | 110            | 11.70         | ●          |

| Size     | Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|----------|--------------------------|----------------------|
| up to Ø6 | 0~-0.012                 | h6                   |
| over Ø6  | 0~-0.015                 |                      |

◎ : Excellent ○ : Good

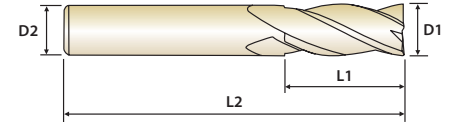
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE

NEW SIZES

## SEME36 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



\* (NEW SIZES) D&lt;Ø3, 30° HELIX

| EDP No.        | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|----------------|---------------|----------------|---------------|----------------|------------|-----------|
|                | D1            | D2             | L1            | L2             |            |           |
| SEME36008E     | 0.8           | 4              | 1.6           | 40             |            | -         |
| SEME36009E     | 0.9           | 4              | 1.8           | 40             |            | -         |
| * SEME360104SE | 1.0           | 4              | 2.5           | 50             |            | 4mm Shank |
| SEME36010E     |               | 6              | 2.5           | 50             | ●          | -         |
| * SEME360124SE | 1.2           | 4              | 3             | 50             |            | 4mm Shank |
| SEME36012E     |               | 6              | 3             | 50             |            | -         |
| * SEME360154SE | 1.5           | 4              | 4             | 50             |            | 4mm Shank |
| SEME36015E     |               | 6              | 4             | 50             | ●          | -         |
| * SEME360204SE | 2.0           | 4              | 6             | 50             |            | 4mm Shank |
| SEME36020E     |               | 6              | 6             | 50             | ●          | -         |
| * SEME360254SE | 2.5           | 4              | 7             | 50             |            | 4mm Shank |
| SEME36025E     |               | 6              | 7             | 50             | ●          | -         |
| SEME36030E     | 3.0           | 6              | 8             | 50             | ●          | -         |
| SEME36035E     | 3.5           | 6              | 10            | 50             | ●          | -         |
| SEME36040E     | 4.0           | 6              | 10            | 50             | ●          | -         |
| SEME36045E     | 4.5           | 6              | 14            | 50             | ●          | -         |
| SEME36050E     | 5.0           | 6              | 15            | 60             | ●          | -         |
| SEME36055E     | 5.5           | 6              | 15            | 60             | ●          | -         |
| SEME36060E     | 6.0           | 6              | 15            | 60             | ●          | -         |
| SEME36065E     | 6.5           | 8              | 18            | 60             | ●          | -         |
| SEME36070E     | 7.0           | 8              | 20            | 60             | ●          | -         |
| SEME36075E     | 7.5           | 8              | 20            | 60             | ●          | -         |
| SEME36080E     | 8.0           | 8              | 20            | 70             | ●          | -         |
| SEME36085E     | 8.5           | 10             | 22            | 70             | ●          | -         |
| SEME36090E     | 9.0           | 10             | 22            | 70             | ●          | -         |
| SEME36095E     | 9.5           | 10             | 24            | 70             | ●          | -         |
| SEME36100E     | 10.0          | 10             | 25            | 75             | ●          | -         |
| SEME36105E     | 10.5          | 12             | 26            | 75             |            | -         |
| SEME36110E     | 11.0          | 12             | 30            | 75             | ●          | -         |

◎ : Excellent ○ : Good

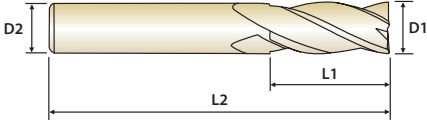
| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE

NEW SIZES SEME36 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.



MG HM

4

27°/30°

PLAIN

P. 136~137

\* NEW SIZES D<Ø3, 30° HELIX

Unit : mm

| EDP No.       | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark |
|---------------|---------------|----------------|---------------|----------------|------------|--------|
|               | D1            | D2             | L1            | L2             |            |        |
| SEME36115E    | 11.5          | 12             | 30            | 80             |            | -      |
| SEME36120E    | 12.0          | 12             | 30            | 80             | ●          | -      |
| SEME36130E    | 13.0          | 12             | 35            | 100            |            | -      |
| SEME3614012SE | 14.0          | 12             | 35            | 100            |            | -      |
| SEME3614014SE |               | 14             | 35            | 100            | ●          | -      |
| SEME36140E    |               | 16             | 35            | 100            | ●          | -      |
| SEME36150E    | 15.0          | 16             | 38            | 100            |            | -      |
| SEME36160E    | 16.0          | 16             | 40            | 100            | ●          | -      |
| SEME36170E    | 17.0          | 16             | 42            | 100            |            | -      |
| SEME36180E    | 18.0          | 16             | 45            | 100            | ●          | -      |
| SEME3618018SE | 18.0          | 18             | 45            | 100            | ●          | -      |
| SEME36190E    | 19.0          | 20             | 45            | 100            |            | -      |
| SEME36200E    | 20.0          | 20             | 45            | 100            | ●          | -      |
| SEME36210E    | 21.0          | 20             | 45            | 100            |            | -      |
| SEME36220E    | 22.0          | 20             | 45            | 100            |            | -      |
| SEME36230E    | 23.0          | 25             | 50            | 120            |            | -      |
| SEME36240E    | 24.0          | 25             | 50            | 120            |            | -      |
| SEME36250E    | 25.0          | 25             | 50            | 120            |            | -      |

|                            |                         |
|----------------------------|-------------------------|
| Mill Dia.<br>Tolerance(mm) | Shank Dia.<br>Tolerance |
| 0~-0.03                    | h6                      |

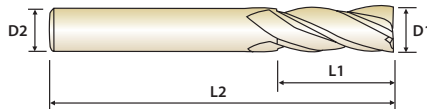
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE

NEW SIZES SEME71 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
  - Designed equal index flute for long length end mills.
- ▶ Due to gash land geometry used at end tooth, heavy duty cutting can be achieved.
- ▶ Available various length products like short, regular and long length end mills etc.



MG HM

4

35°/38°

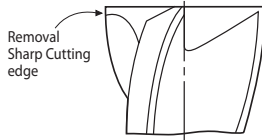
PLAIN

P. 136~137

\* NEW SIZES D<Ø3, Long Length 38° HELIX

Unit : mm

| EDP No.           | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|-------------------|---------------|----------------|---------------|----------------|------------|-----------|
|                   | D1            | D2             | L1            | L2             |            |           |
| * SEME71010014SE  | 1.0           | 4              | 1             | 40             |            | 4mm Shank |
| * SEME71010024SE  |               | 4              | 2             | 40             |            | 4mm Shank |
| * SEME710104SE    |               | 4              | 2.5           | 50             |            | 4mm Shank |
| * SEME71010034SE  |               | 4              | 3             | 50             |            | 4mm Shank |
| * SEME71010044SE  |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEME71010064SE  |               | 4              | 6             | 50             |            | 4mm Shank |
| SEME7101001E      |               | 6              | 1             | 40             |            | Short     |
| SEME7101002E      |               | 6              | 2             | 40             |            | Short     |
| SEME71010E        |               | 6              | 2.5           | 50             | ●          | Regular   |
| SEME7101003E      |               | 6              | 3             | 50             |            | Long      |
| SEME7101004E      |               | 6              | 4             | 50             |            | Long      |
| SEME7101006E      |               | 6              | 6             | 50             |            | Long      |
| * SEME71012024SE  | 1.2           | 4              | 2             | 40             |            | 4mm Shank |
| * SEME710124SE    |               | 4              | 3             | 50             |            | 4mm Shank |
| * SEME71012044SE  |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEME71012064SE  |               | 4              | 6             | 50             |            | 4mm Shank |
| SEME7101202E      |               | 6              | 2             | 40             |            | Short     |
| SEME71012E        |               | 6              | 3             | 50             | ●          | Regular   |
| SEME7101204E      |               | 6              | 4             | 50             |            | Long      |
| SEME7101206E      |               | 6              | 6             | 50             |            | Long      |
| * SEME710150154SE | 1.5           | 4              | 1.5           | 40             |            | 4mm Shank |
| * SEME71015034SE  |               | 4              | 3             | 40             |            | 4mm Shank |
| * SEME710154SE    |               | 4              | 4             | 50             |            | 4mm Shank |
| * SEME71015064SE  |               | 4              | 6             | 50             |            | 4mm Shank |
| * SEME71015084SE  |               | 4              | 8             | 50             |            | 4mm Shank |
| * SEME71015104SE  |               | 4              | 10            | 50             |            | 4mm Shank |



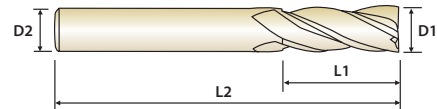
◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○                    |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTENEW  
SIZES

SEME71 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
  - Designed equal index flute for long length end mills.
- ▶ Due to gash land geometry used at end tooth, heavy duty cutting can be achieved.
- ▶ Available various length products like short, regular and long length end mills etc.

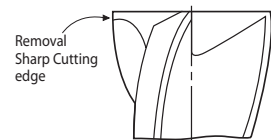


P. 136~137

\* (NEW SIZES) D&lt;Ø3, Long Length 38° HELIX

Unit : mm

| EDP No.           | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark    |
|-------------------|---------------|----------------|---------------|----------------|------------|-----------|
|                   | D1            | D2             | L1            | L2             |            |           |
| SEME71015015E     | 1.5           | 6              | 1.5           | 40             |            | Short     |
| SEME7101503E      |               | 6              | 3             | 40             |            | Short     |
| SEME71015E        |               | 6              | 4             | 50             | ●          | Regular   |
| SEME7101506E      |               | 6              | 6             | 50             |            | Long      |
| SEME7101508E      |               | 6              | 8             | 50             |            | Long      |
| SEME7101510E      |               | 6              | 10            | 50             |            | Long      |
| * SEME71020024SE  | 2.0           | 4              | 2             | 40             |            | 4mm Shank |
| * SEME71020044SE  |               | 4              | 4             | 40             |            | 4mm Shank |
| * SEME710204SE    |               | 4              | 6             | 50             |            | 4mm Shank |
| * SEME71020084SE  |               | 4              | 8             | 50             |            | 4mm Shank |
| * SEME71020104SE  |               | 4              | 10            | 50             |            | 4mm Shank |
| * SEME71020124SE  |               | 4              | 12            | 50             |            | 4mm Shank |
| SEME7102002E      |               | 6              | 2             | 40             |            | Short     |
| SEME7102004E      |               | 6              | 4             | 40             |            | Short     |
| SEME71020E        |               | 6              | 6             | 50             | ●          | Regular   |
| SEME7102008E      |               | 6              | 8             | 50             |            | Long      |
| SEME7102010E      |               | 6              | 10            | 50             |            | Long      |
| SEME7102012E      |               | 6              | 12            | 50             |            | Long      |
| * SEME710250254SE | 2.5           | 4              | 2.5           | 40             |            | 4mm Shank |
| * SEME71025054SE  |               | 4              | 5             | 40             |            | 4mm Shank |
| * SEME710254SE    |               | 4              | 7             | 50             |            | 4mm Shank |
| * SEME71025104SE  |               | 4              | 10            | 50             |            | 4mm Shank |
| * SEME71025124SE  |               | 4              | 12            | 50             |            | 4mm Shank |
| SEME71025025E     |               | 6              | 2.5           | 40             |            | Short     |
| SEME7102505E      |               | 6              | 5             | 40             |            | Short     |
| SEME71025E        |               | 6              | 7             | 50             | ●          | Regular   |
| SEME7102510E      |               | 6              | 10            | 50             |            | Long      |
|                   |               |                |               |                |            |           |



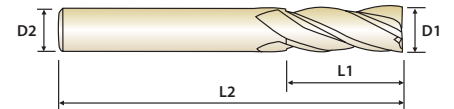
◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTENEW  
SIZES

SEME71 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
  - Designed equal index flute for long length end mills.
- ▶ Due to gash land geometry used at end tooth, heavy duty cutting can be achieved.
- ▶ Available various length products like short, regular and long length end mills etc.

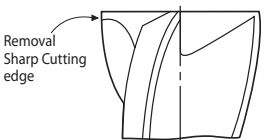


P. 136~137

\* (NEW SIZES) D&lt;Ø3, Long Length 38° HELIX

Unit : mm

| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark  |
|--------------|---------------|----------------|---------------|----------------|------------|---------|
|              | D1            | D2             | L1            | L2             |            |         |
| SEME7102512E | 2.5           | 6              | 12            | 50             |            | Long    |
| SEME7103003E | 3.0           | 6              | 3             | 40             |            | Short   |
| SEME7103006E |               | 6              | 6             | 40             |            | Short   |
| SEME71030E   |               | 6              | 8             | 50             | ●          | Regular |
| SEME7103010E |               | 6              | 10            | 50             |            | Long    |
| SEME7103012E |               | 6              | 12            | 50             |            | Long    |
| SEME7103014E |               | 6              | 14            | 50             |            | Long    |
| SEME7104004E | 4.0           | 6              | 4             | 40             |            | Short   |
| SEME7104008E |               | 6              | 8             | 40             |            | Short   |
| SEME71040E   |               | 6              | 10            | 50             | ●          | Regular |
| SEME7104012E |               | 6              | 12            | 50             |            | Long    |
| SEME7104014E |               | 6              | 14            | 50             |            | Long    |
| SEME7104016E |               | 6              | 16            | 50             |            | Long    |
| SEME7105005E | 5.0           | 6              | 5             | 50             |            | Short   |
| SEME7105010E |               | 6              | 10            | 50             |            | Short   |
| SEME71050E   |               | 6              | 15            | 60             | ●          | Regular |
| SEME7105020E |               | 6              | 20            | 60             |            | Long    |
| SEME7105025E |               | 6              | 25            | 60             |            | Long    |
| SEME7106006E | 6.0           | 6              | 6             | 50             |            | Short   |
| SEME7106012E |               | 6              | 12            | 50             |            | Short   |
| SEME71060E   |               | 6              | 15            | 60             | ●          | Regular |
| SEME7106020E |               | 6              | 20            | 60             |            | Long    |
| SEME7106025E |               | 6              | 25            | 60             |            | Long    |
| SEME7108016E | 8.0           | 8              | 16            | 60             |            | Short   |
| SEME71080E   |               | 8              | 20            | 70             | ●          | Regular |
| SEME7108025E |               | 8              | 25            | 70             |            | Long    |
| SEME7108030E |               | 8              | 30            | 70             |            | Long    |



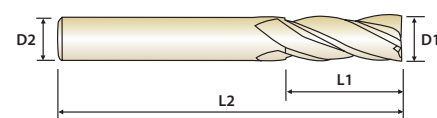
◎ : Excellent ○ : Good

| P             |              |                    |                   | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-------------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels   | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45 HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎                 | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTENEW  
SIZES

SEME71 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRC55 and machine parts.
- ▶ Due to Multiple Helix for 3.0mm and over 3.0mm diameter end mills, vibration can be minimized at cutting, and wear of cutting tool can be decreased too.
  - Designed equal index flute for long length end mills.
- ▶ Due to gash land geometry used at end tooth, heavy duty cutting can be achieved.
- ▶ Available various length products like short, regular and long length end mills etc.

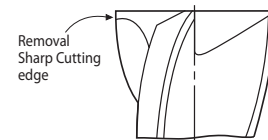


\* NEW SIZES D&lt;Ø3, Long Length 38° HELIX

Unit : mm

| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark  |
|--------------|---------------|----------------|---------------|----------------|------------|---------|
|              | D1            | D2             | L1            | L2             |            |         |
| SEME7110022E | 10.0          | 10             | 22            | 65             |            | Short   |
| SEME71100E   |               | 10             | 25            | 75             | ●          | Regular |
| SEME7110030E |               | 10             | 30            | 75             |            | Long    |
| SEME7110035E |               | 10             | 35            | 75             |            | Long    |
| SEME7112026E | 12.0          | 12             | 26            | 70             |            | Short   |
| SEME71120E   |               | 12             | 30            | 80             | ●          | Regular |
| SEME7112035E |               | 12             | 35            | 80             |            | Long    |
| SEME7112040E |               | 12             | 40            | 80             |            | Long    |
| SEME71140E   | 14.0          | 16             | 35            | 100            |            | Regular |
| SEME7116032E | 16.0          | 16             | 32            | 100            | ●          | Short   |
| SEME71160E   |               | 16             | 40            | 100            |            | Regular |
| SEME71180E   | 18.0          | 20             | 45            | 100            |            | Regular |
| SEME71200E   | 20.0          | 20             | 45            | 100            | ●          | Regular |
| SEME7108030E | 8.0           | 8              | 30            | 70             |            | Long    |
| SEME7110022E | 10.0          | 10             | 22            | 65             |            | Short   |
| SEME71100E   |               | 10             | 25            | 75             | ●          | Regular |
| SEME7110030E |               | 10             | 30            | 75             |            | Long    |
| SEME7110035E |               | 10             | 35            | 75             |            | Long    |
| SEME7112026E | 12.0          | 12             | 26            | 70             |            | Short   |
| SEME71120E   |               | 12             | 30            | 80             | ●          | Regular |
| SEME7112035E |               | 12             | 35            | 80             |            | Long    |
| SEME7112040E |               | 12             | 40            | 80             |            | Long    |
| SEME71140E   | 14.0          | 16             | 35            | 100            |            | Regular |
| SEME7116032E | 16.0          | 16             | 32            | 100            | ●          | Short   |
| SEME71160E   |               | 16             | 40            | 100            |            | Regular |
| SEME71180E   | 18.0          | 20             | 45            | 100            |            | Regular |
| SEME71200E   | 20.0          | 20             | 45            | 100            | ●          | Regular |

| Mill Dia.<br>Tolerance(mm) | Shank Dia.<br>Tolerance |
|----------------------------|-------------------------|
| 0~-0.03                    | h6                      |



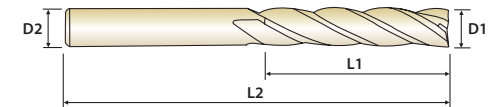
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ○             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

SEME72 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length products.



Unit : mm

| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|--------------|---------------|----------------|---------------|----------------|------------|
|              | D1            | D2             | L1            | L2             |            |
| SEME7201003E | 1.0           | 6              | 3             | 60             | ●          |
| SEME7201004E |               | 6              | 4             | 60             | ●          |
| SEME7201005E |               | 6              | 5             | 60             | ●          |
| SEME7201006E |               | 6              | 6             | 60             | ●          |
| SEME7201007E |               | 6              | 7             | 60             |            |
| SEME7201008E |               | 6              | 8             | 60             |            |
| SEME7201010E |               | 6              | 10            | 60             |            |
| SEME7201012E |               | 6              | 12            | 60             |            |
| SEME7201204E | 1.2           | 6              | 4             | 60             |            |
| SEME7201206E |               | 6              | 6             | 60             |            |
| SEME7201208E |               | 6              | 8             | 60             |            |
| SEME7201210E |               | 6              | 10            | 60             |            |
| SEME7201212E | 1.5           | 6              | 12            | 60             |            |
| SEME7201506E |               | 6              | 6             | 60             | ●          |
| SEME7201508E |               | 6              | 8             | 60             |            |
| SEME7201510E |               | 6              | 10            | 60             |            |
| SEME7201512E |               | 6              | 12            | 60             |            |
| SEME7201514E |               | 6              | 14            | 60             |            |
| SEME7201516E | 2.0           | 6              | 16            | 60             |            |
| SEME7202008E |               | 6              | 8             | 60             | ●          |
| SEME7202010E |               | 6              | 10            | 60             | ●          |
| SEME7202012E |               | 6              | 12            | 60             | ●          |
| SEME7202014E |               | 6              | 14            | 60             | ●          |
| SEME7202016E | 2.5           | 6              | 16            | 60             |            |
| SEME7202510E |               | 6              | 10            | 60             | ●          |
| SEME7202512E |               | 6              | 12            | 60             | ●          |
| SEME7202516E |               | 6              | 16            | 60             |            |
| SEME7202520E |               | 6              | 20            | 60             |            |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRc55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

SEME72 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length products.



MG  
HM

4

30°

PLAIN

P. 138~141

| EDP No.         | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------|---------------|----------------|---------------|----------------|------------|
|                 | D1            | D2             | L1            | L2             |            |
| SEME7202526E    | 2.5           | 6              | 26            | 60             |            |
| SEME72030163SE  | 3.0           | 3              | 16            | 100            |            |
| SEME7203010E    |               | 6              | 10            | 70             | ●          |
| SEME7203012E    |               | 6              | 12            | 70             | ●          |
| SEME7203014E    |               | 6              | 14            | 70             |            |
| SEME7203016E    |               | 6              | 16            | 70             | ●          |
| SEME7203020E    |               | 6              | 20            | 70             | ●          |
| SEME7203026E    |               | 6              | 26            | 70             | ●          |
| SEME7203030E    |               | 6              | 30            | 70             | ●          |
| SEME72040204SE  | 4.0           | 4              | 20            | 100            |            |
| SEME7204012E    |               | 6              | 12            | 70             | ●          |
| SEME7204016E    |               | 6              | 16            | 70             | ●          |
| SEME7204020E    |               | 6              | 20            | 70             | ●          |
| SEME7204026E    |               | 6              | 26            | 70             | ●          |
| SEME7204030E    |               | 6              | 30            | 70             | ●          |
| SEME7205020E    | 5.0           | 6              | 20            | 70             | ●          |
| SEME7205025E    |               | 6              | 25            | 70             | ●          |
| SEME7205025100E |               | 6              | 25            | 100            |            |
| SEME7205030E    |               | 6              | 30            | 80             | ●          |
| SEME7205035E    |               | 6              | 35            | 90             |            |
| SEME7205040E    |               | 6              | 40            | 100            |            |
| SEME7206015E    | 6.0           | 6              | 15            | 60             | ●          |
| SEME7206015080E |               | 6              | 15            | 80             |            |
| SEME7206020E    |               | 6              | 20            | 70             | ●          |
| SEME7206020090E |               | 6              | 20            | 90             | ●          |
| SEME7206025E    |               | 6              | 25            | 75             | ●          |
| SEME7206030E    |               | 6              | 30            | 80             | ●          |
| SEME7206030100E |               | 6              | 30            | 100            | ●          |
|                 |               |                |               |                |            |

◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      |          | S                      |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

SEME72 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length products.



MG  
HM

4

30°

PLAIN

P. 138~141

| EDP No.         | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------|---------------|----------------|---------------|----------------|------------|
|                 | D1            | D2             | L1            | L2             |            |
| SEME7206030150E | 6.0           | 6              | 30            | 150            |            |
| SEME7206035E    |               | 6              | 35            | 90             | ●          |
| SEME7206040E    |               | 6              | 40            | 90             | ●          |
| SEME7206040120E |               | 6              | 40            | 120            | ●          |
| SEME7206045E    |               | 6              | 45            | 150            | ●          |
| SEME7208025E    | 8.0           | 8              | 25            | 80             | ●          |
| SEME7208030E    |               | 8              | 30            | 80             | ●          |
| SEME7208030100E |               | 8              | 30            | 100            |            |
| SEME7208035E    |               | 8              | 35            | 90             | ●          |
| SEME7208040E    |               | 8              | 40            | 90             | ●          |
| SEME7208040120E |               | 8              | 40            | 120            |            |
| SEME7208040150E |               | 8              | 40            | 150            |            |
| SEME7208045E    |               | 8              | 45            | 100            | ●          |
| SEME7208050E    |               | 8              | 50            | 100            | ●          |
| SEME7208050150E |               | 8              | 50            | 150            | ●          |
| SEME7210030E    | 10.0          | 10             | 30            | 80             | ●          |
| SEME7210030100E |               | 10             | 30            | 100            | ●          |
| SEME7210035E    |               | 10             | 35            | 90             | ●          |
| SEME7210040E    |               | 10             | 40            | 90             | ●          |
| SEME7210040120E |               | 10             | 40            | 120            |            |
| SEME7210045E    |               | 10             | 45            | 100            | ●          |
| SEME7210050E    |               | 10             | 50            | 100            | ●          |
| SEME7210050150E |               | 10             | 50            | 150            |            |
| SEME7210050200E |               | 10             | 50            | 200            |            |
| SEME7210055E    |               | 10             | 55            | 150            |            |
| SEME7210060E    |               | 10             | 60            | 110            |            |
| SEME7210060200E |               | 10             | 60            | 200            |            |
| SEME7212035E    | 12.0          | 12             | 35            | 90             | ●          |

◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      |          | S                      |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |



Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

SEME72 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length products.



MG  
HM

4

30°

PLAIN

P. 138~141

| EDP No.         | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|-----------------|---------------|----------------|---------------|----------------|------------|
|                 | D1            | D2             | L1            | L2             |            |
| SEME7212040E    | 12.0          | 12             | 40            | 100            | ●          |
| SEME7212040120E |               | 12             | 40            | 120            |            |
| SEME7212045E    |               | 12             | 45            | 130            | ●          |
| SEME7212050E    |               | 12             | 50            | 100            | ●          |
| SEME7212050150E |               | 12             | 50            | 150            |            |
| SEME7212055E    |               | 12             | 55            | 110            | ●          |
| SEME7212060E    |               | 12             | 60            | 110            | ●          |
| SEME7212060150E |               | 12             | 60            | 150            | ●          |
| SEME7212060200E |               | 12             | 60            | 200            |            |
| SEME7212065E    |               | 12             | 65            | 150            |            |
| SEME7212070E    |               | 12             | 70            | 120            |            |
| SEME7212070200E |               | 12             | 70            | 200            |            |
| SEME7214050E    | 14.0          | 16             | 50            | 110            | ●          |
| SEME7214060E    |               | 16             | 60            | 150            |            |
| SEME7216040E    | 16.0          | 16             | 40            | 150            |            |
| SEME7216050E    |               | 16             | 50            | 110            | ●          |
| SEME7216050150E |               | 16             | 50            | 150            |            |
| SEME7216060E    |               | 16             | 60            | 120            | ●          |
| SEME7216070E    |               | 16             | 70            | 130            | ●          |
| SEME7216070150E |               | 16             | 70            | 150            | ●          |
| SEME7216070200E |               | 16             | 70            | 200            |            |
| SEME7216080E    |               | 16             | 80            | 150            |            |
| SEME7216090E    |               | 16             | 90            | 150            |            |
| SEME72160110E   |               | 16             | 110           | 200            |            |
| SEME72160120E   |               | 16             | 120           | 250            |            |
| SEME7218050E    | 18.0          | 20             | 50            | 120            |            |
| SEME7218070E    |               | 20             | 70            | 130            |            |
| SEME72180100E   |               | 20             | 100           | 200            |            |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

SEME72 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available various length of cut and overall length products.



MG  
HM

4

30°

PLAIN

P. 138~141

Unit : mm

| EDP No.                    | Mill Diameter           | Shank Diameter | Length of Cut | Overall Length | Stock Item |
|----------------------------|-------------------------|----------------|---------------|----------------|------------|
|                            | D1                      | D2             | L1            | L2             |            |
| SEME7220050E               | 20.0                    | 20             | 50            | 110            |            |
| SEME7220050150E            |                         | 20             | 50            | 150            |            |
| SEME7220060E               |                         | 20             | 60            | 130            | ●          |
| SEME7220070E               |                         | 20             | 70            | 130            |            |
| SEME7220080E               |                         | 20             | 80            | 150            |            |
| SEME7220090E               |                         | 20             | 90            | 150            |            |
| SEME7220090200E            |                         | 20             | 90            | 200            | ●          |
| SEME72200110E              |                         | 20             | 110           | 200            |            |
| SEME72200120E              |                         | 20             | 120           | 250            |            |
| SEME7222075E               | 22.0                    | 20             | 75            | 150            |            |
| SEME72220110E              |                         | 20             | 110           | 200            |            |
| SEME7225070E               | 25.0                    | 25             | 70            | 150            |            |
| SEME7225090E               |                         | 25             | 90            | 150            | ●          |
| SEME72250110E              |                         | 25             | 110           | 200            |            |
| SEME72250120               |                         | 25             | 120           | 250            |            |
| Mill Dia.<br>Tolerance(mm) | Shank Dia.<br>Tolerance |                |               |                |            |
| 0~-0.03                    | h6                      |                |               |                |            |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

## SEME73 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available more various effective lengths and overall lengths than previous standard products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEME7301002E | 1.0           | 4              | 1.5           | 2                  | 50             | 0.95          |            |
| SEME7301003E |               | 4              | 1.5           | 3                  | 50             | 0.95          |            |
| SEME7301004E |               | 4              | 1.5           | 4                  | 50             | 0.95          | ●          |
| SEME7301005E |               | 4              | 1.5           | 5                  | 50             | 0.95          | ●          |
| SEME7301006E |               | 4              | 1.5           | 6                  | 50             | 0.95          | ●          |
| SEME7301007E |               | 4              | 1.5           | 7                  | 50             | 0.95          |            |
| SEME7301008E |               | 4              | 1.5           | 8                  | 50             | 0.95          | ●          |
| SEME7301010E |               | 4              | 1.5           | 10                 | 50             | 0.95          |            |
| SEME7301012E |               | 4              | 1.5           | 12                 | 50             | 0.95          |            |
| SEME7301014E |               | 4              | 1.5           | 14                 | 50             | 0.95          |            |
| SEME7301016E |               | 4              | 1.5           | 16                 | 50             | 0.95          |            |
| SEME7301018E |               | 4              | 1.5           | 18                 | 50             | 0.95          |            |
| SEME7301020E |               | 4              | 1.5           | 20                 | 50             | 0.95          |            |
| SEME7301022E |               | 4              | 1.5           | 22                 | 60             | 0.95          |            |
| SEME7301026E |               | 4              | 1.5           | 26                 | 60             | 0.95          |            |
| SEME7301030E |               | 4              | 1.5           | 30                 | 70             | 0.95          |            |
| SEME7301040E |               | 4              | 1.5           | 40                 | 80             | 0.95          |            |
| SEME7301050E |               | 4              | 1.5           | 50                 | 100            | 0.95          |            |
| SEME7301204E | 1.2           | 4              | 1.8           | 4                  | 50             | 1.15          |            |
| SEME7301206E |               | 4              | 1.8           | 6                  | 50             | 1.15          |            |
| SEME7301208E |               | 4              | 1.8           | 8                  | 50             | 1.15          |            |
| SEME7301210E |               | 4              | 1.8           | 10                 | 50             | 1.15          |            |
| SEME7301212E |               | 4              | 1.8           | 12                 | 50             | 1.15          |            |
| SEME7301214E |               | 4              | 1.8           | 14                 | 50             | 1.15          |            |
| SEME7301216E |               | 4              | 1.8           | 16                 | 50             | 1.15          |            |
| SEME7301220E |               | 4              | 1.8           | 20                 | 50             | 1.15          |            |
| SEME7301226E |               | 4              | 1.8           | 26                 | 60             | 1.15          |            |
| SEME7301230E |               | 4              | 1.8           | 30                 | 70             | 1.15          |            |
| SEME7301504E | 1.5           | 4              | 2.3           | 4                  | 50             | 1.45          |            |
| SEME7301505E |               | 4              | 2.3           | 5                  | 50             | 1.45          |            |
| SEME7301506E |               | 4              | 2.3           | 6                  | 50             | 1.45          | ●          |
| SEME7301507E |               | 4              | 2.3           | 7                  | 50             | 1.45          |            |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

## SEME73 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available more various effective lengths and overall lengths than previous standard products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEME7301508E | 1.5           | 4              | 2.3           | 8                  | 50             | 1.45          | ●          |
| SEME7301510E |               | 4              | 2.3           | 10                 | 50             | 1.45          | ●          |
| SEME7301512E |               | 4              | 2.3           | 12                 | 50             | 1.45          | ●          |
| SEME7301514E |               | 4              | 2.3           | 14                 | 50             | 1.45          |            |
| SEME7301516E |               | 4              | 2.3           | 16                 | 50             | 1.45          | ●          |
| SEME7301518E |               | 4              | 2.3           | 18                 | 50             | 1.45          |            |
| SEME7301520E |               | 4              | 2.3           | 20                 | 50             | 1.45          |            |
| SEME7301522E |               | 4              | 2.3           | 22                 | 60             | 1.45          |            |
| SEME7301526E |               | 4              | 2.3           | 26                 | 60             | 1.45          |            |
| SEME7301530E |               | 4              | 2.3           | 30                 | 70             | 1.45          |            |
| SEME7302006E | 2.0           | 4              | 3             | 6                  | 50             | 1.95          |            |
| SEME7302008E |               | 4              | 3             | 8                  | 50             | 1.95          | ●          |
| SEME7302010E |               | 4              | 3             | 10                 | 50             | 1.95          | ●          |
| SEME7302012E |               | 4              | 3             | 12                 | 50             | 1.95          | ●          |
| SEME7302014E |               | 4              | 3             | 14                 | 50             | 1.95          |            |
| SEME7302016E |               | 4              | 3             | 16                 | 50             | 1.95          | ●          |
| SEME7302018E |               | 4              | 3             | 18                 | 50             | 1.95          |            |
| SEME7302020E |               | 4              | 3             | 20                 | 50             | 1.95          |            |
| SEME7302022E |               | 4              | 3             | 22                 | 60             | 1.95          |            |
| SEME7302026E |               | 4              | 3             | 26                 | 60             | 1.95          |            |
| SEME7302030E | 2.5           | 4              | 3             | 30                 | 70             | 1.95          |            |
| SEME7302035E |               | 4              | 3             | 35                 | 70             | 1.95          |            |
| SEME7302040E |               | 4              | 3             | 40                 | 80             | 1.95          |            |
| SEME7302045E |               | 4              | 3             | 45                 | 90             | 1.95          |            |
| SEME7302050E |               | 4              | 3             | 50                 | 100            | 1.95          |            |
| SEME7302060E |               | 4              | 3             | 60                 | 110            | 1.95          |            |
| SEME7302508E |               | 4              | 4             | 8                  | 50             | 2.40          |            |
| SEME7302510E |               | 4              | 4             | 10                 | 50             | 2.40          |            |
| SEME7302512E |               | 4              | 4             | 12                 | 50             | 2.40          |            |
| SEME7302514E |               | 4              | 4             | 14                 | 50             | 2.40          |            |
| SEME7302516E |               | 4              | 4             | 16                 | 50             | 2.40          |            |
| SEME7302518E |               | 4              | 4             | 18                 | 50             | 2.40          |            |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      |                  |           |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

## SEME73 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available more various effective lengths and overall lengths than previous standard products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEME7302520E | 2.5           | 4              | 4             | 20                 | 50             | 2.40          |            |
| SEME7302522E |               | 4              | 4             | 22                 | 60             | 2.40          |            |
| SEME7302526E |               | 4              | 4             | 26                 | 60             | 2.40          |            |
| SEME7302530E |               | 4              | 4             | 30                 | 70             | 2.40          |            |
| SEME7302535E |               | 4              | 4             | 35                 | 70             | 2.40          |            |
| SEME7302540E |               | 4              | 4             | 40                 | 80             | 2.40          |            |
| SEME7302545E |               | 4              | 4             | 45                 | 90             | 2.40          |            |
| SEME7302550E |               | 4              | 4             | 50                 | 100            | 2.40          |            |
| SEME7303006E | 3.0           | 6              | 4.5           | 6                  | 50             | 2.85          |            |
| SEME7303008E |               | 6              | 4.5           | 8                  | 50             | 2.85          |            |
| SEME7303010E |               | 6              | 4.5           | 10                 | 50             | 2.85          | ●          |
| SEME7303012E |               | 6              | 4.5           | 12                 | 50             | 2.85          | ●          |
| SEME7303014E |               | 6              | 4.5           | 14                 | 60             | 2.85          |            |
| SEME7303016E |               | 6              | 4.5           | 16                 | 60             | 2.85          | ●          |
| SEME7303018E |               | 6              | 4.5           | 18                 | 60             | 2.85          |            |
| SEME7303020E |               | 6              | 4.5           | 20                 | 60             | 2.85          | ●          |
| SEME7303022E |               | 6              | 4.5           | 22                 | 65             | 2.85          |            |
| SEME7303026E |               | 6              | 4.5           | 26                 | 65             | 2.85          |            |
| SEME7303030E |               | 6              | 4.5           | 30                 | 70             | 2.85          | ●          |
| SEME7303035E |               | 6              | 4.5           | 35                 | 70             | 2.85          |            |
| SEME7303040E |               | 6              | 4.5           | 40                 | 80             | 2.85          |            |
| SEME7303045E |               | 6              | 4.5           | 45                 | 90             | 2.85          |            |
| SEME7303050E |               | 6              | 4.5           | 50                 | 100            | 2.85          |            |
| SEME7303060E |               | 6              | 4.5           | 60                 | 100            | 2.85          |            |
| SEME7304008E | 4.0           | 6              | 6             | 8                  | 50             | 3.85          |            |
| SEME7304010E |               | 6              | 6             | 10                 | 50             | 3.85          |            |
| SEME7304012E |               | 6              | 6             | 12                 | 50             | 3.85          | ●          |
| SEME7304014E |               | 6              | 6             | 14                 | 60             | 3.85          |            |
| SEME7304016E |               | 6              | 6             | 16                 | 60             | 3.85          | ●          |
| SEME7304018E |               | 6              | 6             | 18                 | 60             | 3.85          |            |
| SEME7304020E |               | 6              | 6             | 20                 | 60             | 3.85          | ●          |
| SEME7304022E |               | 6              | 6             | 22                 | 65             | 3.85          |            |

◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         | S    |          |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

## SEME73 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Available more various effective lengths and overall lengths than previous standard products.



| EDP No.      | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | Stock Item |
|--------------|---------------|----------------|---------------|--------------------|----------------|---------------|------------|
|              | D1            | D2             | L1            | L3                 | L2             | D3            |            |
| SEME7304026E | 4.0           | 6              | 6             | 26                 | 65             | 3.85          |            |
| SEME7304030E |               | 6              | 6             | 30                 | 70             | 3.85          | ●          |
| SEME7304035E |               | 6              | 6             | 35                 | 70             | 3.85          |            |
| SEME7304040E |               | 6              | 6             | 40                 | 80             | 3.85          | ●          |
| SEME7304045E |               | 6              | 6             | 45                 | 90             | 3.85          |            |
| SEME7304050E |               | 6              | 6             | 50                 | 100            | 3.85          |            |
| SEME7304060E |               | 6              | 6             | 60                 | 100            | 3.85          |            |
| SEME7305016E | 5.0           | 6              | 8             | 16                 | 60             | 4.85          |            |
| SEME7305020E |               | 6              | 8             | 20                 | 60             | 4.85          | ●          |
| SEME7305026E |               | 6              | 8             | 26                 | 65             | 4.85          |            |
| SEME7305030E |               | 6              | 8             | 30                 | 70             | 4.85          |            |
| SEME7305035E |               | 6              | 8             | 35                 | 75             | 4.85          |            |
| SEME7305040E |               | 6              | 8             | 40                 | 80             | 4.85          | ●          |
| SEME7305050E |               | 6              | 8             | 50                 | 90             | 4.85          |            |
| SEME7305060E |               | 6              | 8             | 60                 | 100            | 4.85          |            |
| SEME7306015E | 6.0           | 6              | 9             | 15                 | 60             | 5.85          | ●          |
| SEME7306020E |               | 6              | 9             | 20                 | 60             | 5.85          |            |
| SEME7306030E |               | 6              | 9             | 30                 | 70             | 5.85          | ●          |
| SEME7306032E |               | 6              | 9             | 32                 | 90             | 5.85          |            |
| SEME7308025E | 8.0           | 8              | 12            | 25                 | 70             | 7.70          | ●          |
| SEME7308030E |               | 8              | 12            | 30                 | 80             | 7.70          |            |
| SEME7308042E |               | 8              | 12            | 42                 | 100            | 7.70          | ●          |
| SEME7310030E | 10.0          | 10             | 15            | 30                 | 75             | 9.70          | ●          |
| SEME7310035E |               | 10             | 15            | 35                 | 80             | 9.70          |            |
| SEME7310045E |               | 10             | 15            | 45                 | 100            | 9.70          | ●          |
| SEME7312035E | 12.0          | 12             | 20            | 35                 | 80             | 11.70         | ●          |
| SEME7312040E |               | 12             | 20            | 40                 | 90             | 11.70         |            |
| SEME7312050E |               | 12             | 20            | 50                 | 110            | 11.70         | ●          |

|                         |                      |
|-------------------------|----------------------|
| Mill Dia. Tolerance(mm) | Shank Dia. Tolerance |
| 0~-0.03                 | h6                   |

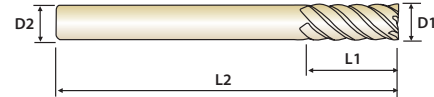
◎ : Excellent ○ : Good

| P             |              |                    |                 |          | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels |          | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55 | HRC55~70             |                  |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○        |                      | ○                | ○         |        |          |          |         |      |          |                        |

6 FLUTE 45° HELIX  
(REGULAR, LONG SHANK)

## SEME75 SERIES

- ▶ Due to new coating and new tool geometry, outstanding cutting ability and wear resistance.
- ▶ Excellent performance when cutting prehardened steels, up to HRC55 which are used for molds & dies.
- ▶ Due to 45° helix angle, better surface roughness can be achieved at side cutting.
- ▶ Available various effective length and overall length products.



| EDP No.          | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | Stock Item | Remark  |
|------------------|---------------|----------------|---------------|----------------|------------|---------|
|                  | D1            | D2             | L1            | L2             |            |         |
| SEME75060E       | 6.0           | 6              | 15            | 60             | ●          | Regular |
| SEME7506020E     |               | 6              | 20            | 70             |            | Long    |
| SEME7506030E     |               | 6              | 30            | 80             | ●          | Long    |
| SEME7506030110E  |               | 6              | 30            | 110            |            | Long    |
| SEME75080E       | 8.0           | 8              | 20            | 70             | ●          | Regular |
| SEME7508030E     |               | 8              | 30            | 80             |            | Long    |
| SEME7508035E     |               | 8              | 35            | 90             |            | Long    |
| SEME7508040E     |               | 8              | 40            | 90             | ●          | Long    |
| SEME7508040130E  | 10.0          | 8              | 40            | 130            |            | Long    |
| SEME75100E       |               | 10             | 25            | 75             | ●          | Regular |
| SEME7510030E     |               | 10             | 30            | 80             |            | Long    |
| SEME7510040E     |               | 10             | 40            | 90             | ●          | Long    |
| SEME7510050E     |               | 10             | 50            | 100            |            | Long    |
| SEME7510050150E  | 12.0          | 10             | 50            | 150            |            | Long    |
| SEME75120E       |               | 12             | 30            | 80             | ●          | Regular |
| SEME7512040E     |               | 12             | 40            | 90             |            | Long    |
| SEME7512050E     |               | 12             | 50            | 100            | ●          | Long    |
| SEME7512060E     |               | 12             | 60            | 110            |            | Long    |
| SEME7512060150E  | 16.0          | 12             | 60            | 150            |            | Long    |
| SEME75160E       |               | 16             | 40            | 100            | ●          | Regular |
| SEME7516050E     |               | 16             | 50            | 110            |            | Long    |
| SEME7516060E     |               | 16             | 60            | 120            | ●          | Long    |
| SEME7516090E     |               | 16             | 90            | 150            |            | Long    |
| SEME75160110E    | 20.0          | 16             | 110           | 200            |            | Long    |
| SEME75160110250E |               | 16             | 110           | 250            |            | Long    |
| SEME75200E       |               | 20             | 45            | 100            | ●          | Regular |
| SEME7520060E     |               | 20             | 60            | 120            | ●          | Long    |
| SEME7520070E     | 20.0          | 20             | 70            | 130            |            | Long    |
| SEME75200110E    |               | 20             | 110           | 200            |            | Long    |
| SEME75200110250E |               | 20             | 110           | 250            |            | Long    |
| SEME75200110300E |               | 20             | 110           | 300            |            | Long    |

Unit : mm

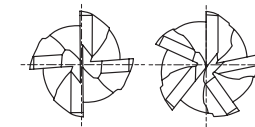
| Mill Dia.<br>Tolerance(mm) | Shank Dia.<br>Tolerance |
|----------------------------|-------------------------|
| 0~-0.03                    | h6                      |

◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ◎               | ○                    |                  | ○         |        |          |          |         |      |          |                        |

4&5 FLUTE MULTIPLE HELIX  
SHORT&LONG LENGTH CORNER RADIUSG9D75 SERIES  
G9D67 SERIESG9D76 SERIES  
G9D68 SERIES

- ▶ Unique flute design for excellent chip evacuation and vibration reduction.
- ▶ Optimal roughing tooth profile to reduce cutting forces.
- ▶ Special tool geometry for high feed rate and heavy cutting.
- ▶ Strong end tooth design for plunge and pocket milling.
- ▶ Custom engineered coating to allow long tool life and excellent chip evacuation.



5 Flute, 44°/44.5°/45°

## SHORT LENGTH

Unit : mm

| EDP No.  |          | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | No. of Flute |
|----------|----------|---------------|---------------|----------------|---------------|----------------|--------------|
| PLAIN    | FLAT     | R             | D1            | D2             | L1            | L2             |              |
| G9D75060 | G9D67060 | R0.5          | 6.0           | 6              | 9             | 9              | 4            |
| G9D75080 | G9D67080 | R0.5          | 8.0           | 8              | 12            | 12             | 4            |
| G9D75100 | G9D67100 | R0.5          | 10.0          | 10             | 15            | 15             | 4            |
| G9D75120 | G9D67120 | R0.5          | 12.0          | 12             | 18            | 18             | 4            |
| G9D75160 | G9D67160 | R1.0          | 16.0          | 16             | 24            | 24             | 5            |
| G9D75200 | G9D67200 | R1.0          | 20.0          | 10             | 30            | 30             | 5            |

## LONG LENGTH

Unit : mm

| EDP No.  |          | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | No. of Flute |
|----------|----------|---------------|---------------|----------------|---------------|----------------|--------------|
| PLAIN    | FLAT     | R             | D1            | D2             | L1            | L2             |              |
| G9D76060 | G9D68060 | R0.5          | 6.0           | 6              | 12            | 57             | 4            |
| G9D76080 | G9D68080 | R0.5          | 8.0           | 8              | 16            | 63             | 4            |
| G9D76100 | G9D68100 | R0.5          | 10.0          | 10             | 20            | 72             | 4            |
| G9D76120 | G9D68120 | R0.5          | 12.0          | 12             | 24            | 83             | 4            |
| G9D76160 | G9D68160 | R1.0          | 16.0          | 16             | 32            | 92             | 5            |
| G9D76200 | G9D68200 | R1.0          | 20.0          | 20             | 40            | 104            | 5            |

| Mill Dia.<br>Tolerance(mm) | Shank Dia.<br>Tolerance |
|----------------------------|-------------------------|
| 0~-0.05                    | h6                      |

◎ : Excellent ○ : Good

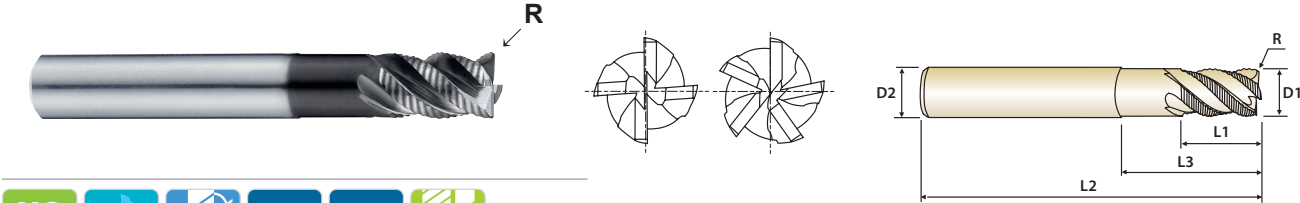
| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRC40~45        | HRC45~55             | HRC55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ○               |                      | ○                | ◎         | ○      |          |          |         |      |          |                        |



X-COATED SOLID CARBIDE END MILLS  
4&5 FLUTE MULTIPLE HELIX  
LONG REACH CORNER RADIUS

G9D77 SERIES  
G9D69 SERIES

- Unique flute design for excellent chip evacuation and vibration reduction.
- Optimal roughing tooth profile to reduce cutting forces.
- Special tool geometry for high feed rate and heavy cutting.
- Strong end tooth design for plunge and pocket milling.
- Custom engineered coating to allow long tool life and excellent chip evacuation.



5 Flute, 44°/44.5°/45°

Unit : mm

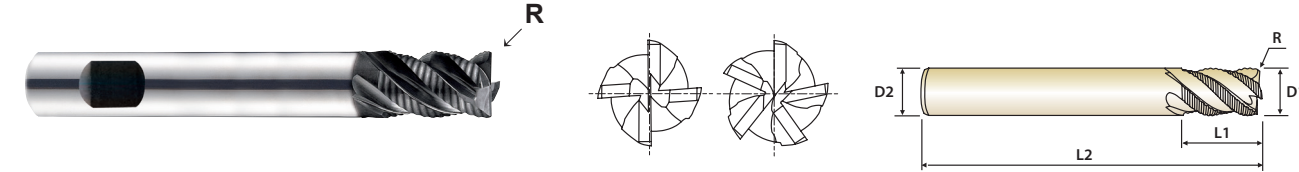
| EDP No.  |          | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Length Below Shank | Overall Length | Neck Diameter | No. of Flute |
|----------|----------|---------------|---------------|----------------|---------------|--------------------|----------------|---------------|--------------|
| PLAIN    | FLAT     | R             | D1            | D2             | L1            | L3                 | L2             | D3            |              |
| G9D77060 | G9D69060 | R0.5          | 6.0           | 6              | 9             | 18                 | 57             | 5.50          | 4            |
| G9D77080 | G9D69080 | R0.5          | 8.0           | 8              | 12            | 24                 | 63             | 7.50          | 4            |
| G9D77100 | G9D69100 | R0.5          | 10.0          | 10             | 15            | 30                 | 72             | 9.50          | 4            |
| G9D77120 | G9D69120 | R0.5          | 12.0          | 12             | 18            | 36                 | 83             | 11.50         | 4            |
| G9D77160 | G9D69160 | R1.0          | 16.0          | 16             | 24            | 48                 | 100            | 15.50         | 5            |
| G9D77200 | G9D69200 | R1.0          | 20.0          | 20             | 30            | 60                 | 110            | 19.20         | 5            |

|                            |                         |
|----------------------------|-------------------------|
| Mill Dia.<br>Tolerance(mm) | Shank Dia.<br>Tolerance |
| 0~-0.05                    | h6                      |

X-COATED HSS-PM END MILLS  
4&5 FLUTE MULTIPLE HELIX  
SHORT LENGTH CORNER RADIUS

GAE53 SERIES

- Unique flute design for excellent chip evacuation and vibration reduction.
- Optimal roughing tooth profile to reduce cutting forces.
- Special tool geometry for high feed rate and heavy cutting.
- Strong end tooth design for plunge and pocket milling.
- Custom engineered coating to allow long tool life and excellent chip evacuation.



5 Flute, 44°/44.5°/45°

Unit : mm

| EDP No.  | Corner Radius | Mill Diameter | Shank Diameter | Length of Cut | Overall Length | No. of Flute |
|----------|---------------|---------------|----------------|---------------|----------------|--------------|
| FLAT     | R             | D1(js12)      | D2(h6)         | L1            | L2             |              |
| GAE53060 | R0.5          | 6.0           | 6              | 13            | 57             | 4            |
| GAE53070 | R0.5          | 7.0           | 10             | 16            | 66             | 4            |
| GAE53080 | R0.5          | 8.0           | 10             | 19            | 69             | 4            |
| GAE53090 | R0.5          | 9.0           | 10             | 19            | 69             | 4            |
| GAE53100 | R0.5          | 10.0          | 10             | 22            | 72             | 4            |
| GAE53120 | R0.5          | 12.0          | 12             | 26            | 83             | 4            |
| GAE53140 | R1.0          | 14.0          | 16             | 26            | 83             | 5            |
| GAE53160 | R1.0          | 16.0          | 16             | 32            | 92             | 5            |
| GAE53180 | R1.0          | 18.0          | 20             | 32            | 92             | 5            |
| GAE53200 | R1.0          | 20.0          | 20             | 38            | 104            | 5            |

Tolerances according to DIN 7160 & 7161

| Tolerance range in µm  |             |             |              |               |               |               |
|------------------------|-------------|-------------|--------------|---------------|---------------|---------------|
| Nominal-Diameter in mm |             |             |              |               |               |               |
|                        | from 1 to 3 | over 3 to 6 | over 6 to 10 | over 10 to 18 | over 18 to 30 | over 30 to 50 |
| js12                   | ±50         | ±60         | ±75          | ±90           | ±105          | ±125          |
| h6                     | 0<br>-6     | 0<br>-8     | 0<br>-9      | 0<br>-11      | 0<br>-13      | 0<br>-16      |

◎ : Excellent ○ : Good

| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55             | HRc55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ◎                  | ○               |                      | ○                | ◎         | ○      |          |          |         |      |          |                        |

◎ : Excellent ○ : Good

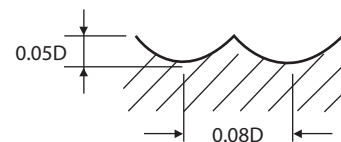
| P             |              |                    |                 | H                    | M                | K         | N      |          |          |         |      | S        |                        |
|---------------|--------------|--------------------|-----------------|----------------------|------------------|-----------|--------|----------|----------|---------|------|----------|------------------------|
| Carbon Steels | Alloy Steels | Prehardened Steels | Hardened Steels | High Hardened Steels | Stainless Steels | Cast Iron | Copper | Graphite | Aluminum | Acrylic | CFRP | Titanium | High Temperature Alloy |
| ~HB225        | HB225~352    | HRC30~40           | HRc40~45        | HRc45~55             | HRc55~70         |           |        |          |          |         |      |          |                        |
| ◎             | ◎            | ○                  |                 |                      |                  | ◎         | ◎      | ○        |          |         |      |          |                        |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE BALL NOSE

## SEMD98 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

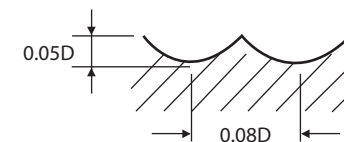
| MATERIAL     | P                                  |      |     |       |                                       |      |     |       |
|--------------|------------------------------------|------|-----|-------|---------------------------------------|------|-----|-------|
|              | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |
| HARDNESS     | ~ HRC 35                           |      |     |       | HRC 35 ~ HRC 45                       |      |     |       |
| STRENGTH     | ~ 1100N/mm <sup>2</sup>            |      |     |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |
| DIAMETER     | RPM                                | FEED | Vc  | Fz    | RPM                                   | FEED | Vc  | Fz    |
| R0.05 x 0.1  | 40000                              | 550  | 13  | 0.007 | 40000                                 | 500  | 13  | 0.006 |
| R0.1 x 0.2   | 30000                              | 720  | 19  | 0.012 | 30000                                 | 630  | 19  | 0.011 |
| R0.15 x 0.3  | 30000                              | 900  | 28  | 0.015 | 30000                                 | 810  | 28  | 0.014 |
| R0.2 x 0.4   | 30000                              | 1140 | 38  | 0.019 | 30000                                 | 1020 | 38  | 0.017 |
| R0.25 x 0.5  | 30000                              | 1440 | 47  | 0.024 | 30000                                 | 1260 | 47  | 0.021 |
| R0.3 x 0.6   | 30000                              | 1740 | 57  | 0.029 | 30000                                 | 1500 | 57  | 0.025 |
| R0.35 x 0.7  | 30000                              | 2040 | 66  | 0.034 | 30000                                 | 1740 | 66  | 0.029 |
| R0.4 x 0.8   | 30000                              | 2340 | 75  | 0.039 | 30000                                 | 1980 | 75  | 0.033 |
| R0.45 x 0.9  | 30000                              | 2610 | 85  | 0.044 | 30000                                 | 2250 | 85  | 0.038 |
| R0.5 x 1.0   | 30000                              | 2880 | 94  | 0.048 | 30000                                 | 2520 | 94  | 0.042 |
| R0.6 x 1.2   | 30000                              | 3060 | 113 | 0.051 | 28800                                 | 2580 | 109 | 0.045 |
| R0.75 x 1.5  | 30000                              | 3240 | 141 | 0.054 | 28800                                 | 2700 | 136 | 0.047 |
| R1.0 x 2.0   | 29820                              | 3420 | 187 | 0.057 | 28680                                 | 2880 | 180 | 0.050 |
| R1.25 x 2.5  | 23800                              | 3510 | 187 | 0.074 | 22900                                 | 3030 | 180 | 0.066 |
| R1.5 x 3.0   | 19860                              | 3600 | 187 | 0.091 | 19080                                 | 3180 | 180 | 0.083 |
| R1.75 x 3.5  | 17000                              | 3600 | 187 | 0.106 | 16400                                 | 3180 | 180 | 0.097 |
| R2.0 x 4.0   | 14900                              | 3600 | 187 | 0.121 | 14340                                 | 3180 | 180 | 0.111 |
| R2.25 x 4.5  | 13030                              | 3540 | 184 | 0.136 | 12510                                 | 3060 | 177 | 0.122 |
| R2.5 x 5.0   | 11160                              | 3480 | 175 | 0.156 | 10680                                 | 2940 | 168 | 0.138 |
| R2.75 x 5.5  | 9750                               | 3195 | 168 | 0.164 | 9360                                  | 2700 | 162 | 0.144 |
| R3.0 x 6.0   | 8340                               | 2910 | 157 | 0.174 | 8040                                  | 2460 | 152 | 0.153 |
| R3.25 x 6.5  | 7780                               | 2780 | 159 | 0.179 | 7500                                  | 2340 | 153 | 0.156 |
| R3.5 x 7.0   | 7220                               | 2650 | 159 | 0.184 | 6960                                  | 2220 | 153 | 0.159 |
| R4.0 x 8.0   | 6660                               | 2520 | 167 | 0.189 | 6420                                  | 2100 | 161 | 0.164 |
| R4.25 x 8.5  | 6300                               | 2420 | 168 | 0.192 | 6060                                  | 2020 | 162 | 0.167 |
| R4.5 x 9.0   | 5940                               | 2320 | 168 | 0.195 | 5700                                  | 1940 | 161 | 0.170 |
| R5.0 x 10.0  | 5580                               | 2220 | 175 | 0.199 | 5340                                  | 1860 | 168 | 0.174 |
| R5.5 x 11.0  | 4875                               | 1995 | 168 | 0.205 | 4670                                  | 1680 | 161 | 0.180 |
| R6.0 x 12.0  | 4170                               | 1770 | 157 | 0.212 | 4000                                  | 1500 | 151 | 0.188 |
| R6.5 x 13.0  | 3960                               | 1725 | 162 | 0.218 | 3800                                  | 1500 | 155 | 0.197 |
| R7.0 x 14.0  | 3750                               | 1680 | 165 | 0.224 | 3600                                  | 1500 | 158 | 0.208 |
| R7.5 x 15.0  | 3550                               | 1635 | 167 | 0.230 | 3400                                  | 1500 | 160 | 0.221 |
| R8.0 x 16.0  | 3340                               | 1590 | 168 | 0.238 | 3210                                  | 1320 | 161 | 0.206 |
| R9.0 x 18.0  | 3005                               | 1500 | 170 | 0.250 | 2895                                  | 1245 | 164 | 0.215 |
| R10.0 x 20.0 | 2670                               | 1410 | 168 | 0.264 | 2580                                  | 1170 | 162 | 0.227 |
| R12.5 x 25.0 | 2130                               | 1150 | 167 | 0.270 | 2060                                  | 950  | 162 | 0.231 |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE BALL NOSE

## SEMD98 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

| MATERIAL     | P                            |      |     |       |  | K         |      |     |       |
|--------------|------------------------------|------|-----|-------|--|-----------|------|-----|-------|
|              | HARDENED STEELS              |      |     |       |  | CAST IRON |      |     |       |
| HARDNESS     | HRC 45 ~ HRC 55              |      |     |       |  |           |      |     |       |
| STRENGTH     | 1500 ~ 2000N/mm <sup>2</sup> |      |     |       |  |           |      |     |       |
| DIAMETER     | RPM                          | FEED | Vc  | Fz    |  | RPM       | FEED | Vc  | Fz    |
| R0.05 x 0.1  | 33000                        | 400  | 10  | 0.006 |  | 40000     | 550  | 13  | 0.007 |
| R0.1 x 0.2   | 27000                        | 575  | 17  | 0.011 |  | 30000     | 720  | 19  | 0.012 |
| R0.15 x 0.3  | 27000                        | 720  | 25  | 0.013 |  | 30000     | 900  | 28  | 0.015 |
| R0.2 x 0.4   | 27000                        | 900  | 34  | 0.017 |  | 30000     | 1140 | 38  | 0.019 |
| R0.25 x 0.5  | 27000                        | 1140 | 42  | 0.021 |  | 30000     | 1440 | 47  | 0.024 |
| R0.3 x 0.6   | 27000                        | 1320 | 51  | 0.024 |  | 30000     | 1740 | 57  | 0.029 |
| R0.35 x 0.7  | 27000                        | 1560 | 59  | 0.029 |  | 30000     | 2040 | 66  | 0.034 |
| R0.4 x 0.8   | 27000                        | 1800 | 68  | 0.033 |  | 30000     | 2340 | 75  | 0.039 |
| R0.45 x 0.9  | 27000                        | 2040 | 76  | 0.038 |  | 30000     | 2610 | 85  | 0.044 |
| R0.5 x 1.0   | 27000                        | 2280 | 85  | 0.042 |  | 30000     | 2880 | 94  | 0.048 |
| R0.6 x 1.2   | 25800                        | 2310 | 97  | 0.045 |  | 30000     | 3060 | 113 | 0.051 |
| R0.75 x 1.5  | 25800                        | 2400 | 122 | 0.047 |  | 30000     | 3240 | 141 | 0.054 |
| R1.0 x 2.0   | 24000                        | 2400 | 151 | 0.050 |  | 29820     | 3420 | 187 | 0.057 |
| R1.25 x 2.5  | 19200                        | 2400 | 151 | 0.063 |  | 23800     | 3510 | 187 | 0.074 |
| R1.5 x 3.0   | 16000                        | 2400 | 151 | 0.075 |  | 19860     | 3600 | 187 | 0.091 |
| R1.75 x 3.5  | 13700                        | 2400 | 151 | 0.088 |  | 17000     | 3600 | 187 | 0.106 |
| R2.0 x 4.0   | 12000                        | 2400 | 151 | 0.100 |  | 14900     | 3600 | 187 | 0.121 |
| R2.25 x 4.5  | 10500                        | 2325 | 148 | 0.111 |  | 13030     | 3540 | 184 | 0.136 |
| R2.5 x 5.0   | 9000                         | 2250 | 141 | 0.125 |  | 11160     | 3480 | 175 | 0.156 |
| R2.75 x 5.5  | 7800                         | 2055 | 135 | 0.132 |  | 9750      | 3195 | 168 | 0.164 |
| R3.0 x 6.0   | 6600                         | 1860 | 124 | 0.141 |  | 8340      | 2910 | 157 | 0.174 |
| R3.25 x 6.5  | 6200                         | 1780 | 127 | 0.144 |  | 7780      | 2780 | 159 | 0.179 |
| R3.5 x 7.0   | 5800                         | 1700 | 128 | 0.147 |  | 7220      | 2650 | 159 | 0.184 |
| R4.0 x 8.0   | 5400                         | 1620 | 136 | 0.150 |  | 6660      | 2520 | 167 | 0.189 |
| R4.25 x 8.5  | 5100                         | 1560 | 136 | 0.153 |  | 6300      | 2420 | 168 | 0.192 |
| R4.5 x 9.0   | 4800                         | 1500 | 136 | 0.156 |  | 5940      | 2320 | 168 | 0.195 |
| R5.0 x 10.0  | 4500                         | 1440 | 141 | 0.160 |  | 5580      | 2220 | 175 | 0.199 |
| R5.5 x 11.0  | 3930                         | 1290 | 136 | 0.164 |  | 4875      | 1995 | 168 | 0.205 |
| R6.0 x 12.0  | 3360                         | 1140 | 127 | 0.170 |  | 4170      | 1770 | 157 | 0.212 |
| R6.5 x 13.0  | 3200                         | 1110 | 131 | 0.173 |  | 3960      | 1725 | 162 | 0.218 |
| R7.0 x 14.0  | 3030                         | 1080 | 133 | 0.178 |  | 3750      | 1680 | 165 | 0.224 |
| R7.5 x 15.0  | 2870                         | 1050 | 135 | 0.183 |  | 3550      | 1635 | 167 | 0.230 |
| R8.0 x 16.0  | 2700                         | 1020 | 136 | 0.189 |  | 3340      | 1590 | 168 | 0.238 |
| R9.0 x 18.0  | 2430                         | 960  | 137 | 0.198 |  | 3005      | 1500 | 170 | 0.250 |
| R10.0 x 20.0 | 2160                         | 900  | 136 | 0.208 |  | 2670      | 1410 | 168 | 0.264 |
| R12.5 x 25.0 | 1730                         | 730  | 136 | 0.211 |  | 2130      | 1150 | 167 | 0.270 |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |    |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRc 35                           |      |    |       |        | HRc 35 ~ HRc 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |    |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 0.1      | 0.2 | 50000                              | 240  | 16 | 0.002 | 0.009  | 50000                                 | 215  | 16 | 0.002 | 0.007  |
| 0.1      | 0.3 | 50000                              | 240  | 16 | 0.002 | 0.009  | 50000                                 | 215  | 16 | 0.002 | 0.007  |
| 0.1      | 0.5 | 50000                              | 240  | 16 | 0.002 | 0.006  | 50000                                 | 215  | 16 | 0.002 | 0.005  |
| 0.1      | 1   | 45000                              | 195  | 14 | 0.002 | 0.002  | 45000                                 | 175  | 14 | 0.002 | 0.002  |
| 0.2      | 0.5 | 50000                              | 335  | 31 | 0.003 | 0.018  | 50000                                 | 310  | 31 | 0.003 | 0.014  |
| 0.2      | 1   | 50000                              | 335  | 31 | 0.003 | 0.013  | 50000                                 | 310  | 31 | 0.003 | 0.010  |
| 0.2      | 1.5 | 45000                              | 270  | 28 | 0.003 | 0.007  | 45000                                 | 250  | 28 | 0.003 | 0.006  |
| 0.2      | 2   | 45000                              | 270  | 28 | 0.003 | 0.005  | 45000                                 | 250  | 28 | 0.003 | 0.004  |
| 0.2      | 3   | 45000                              | 270  | 28 | 0.003 | 0.003  | 45000                                 | 250  | 28 | 0.003 | 0.003  |
| 0.3      | 1   | 50000                              | 475  | 47 | 0.005 | 0.019  | 50000                                 | 430  | 47 | 0.004 | 0.015  |
| 0.3      | 1.5 | 50000                              | 475  | 47 | 0.005 | 0.019  | 50000                                 | 430  | 47 | 0.004 | 0.015  |
| 0.3      | 2   | 45000                              | 385  | 42 | 0.004 | 0.011  | 45000                                 | 350  | 42 | 0.004 | 0.008  |
| 0.3      | 2.5 | 45000                              | 385  | 42 | 0.004 | 0.007  | 45000                                 | 350  | 42 | 0.004 | 0.005  |
| 0.3      | 3   | 45000                              | 385  | 42 | 0.004 | 0.007  | 45000                                 | 350  | 42 | 0.004 | 0.005  |
| 0.3      | 4   | 40000                              | 305  | 38 | 0.004 | 0.004  | 40000                                 | 275  | 38 | 0.003 | 0.003  |
| 0.3      | 5   | 30000                              | 200  | 28 | 0.003 | 0.003  | 30000                                 | 180  | 28 | 0.003 | 0.002  |
| 0.4      | 1   | 41000                              | 490  | 52 | 0.006 | 0.036  | 38800                                 | 425  | 49 | 0.005 | 0.028  |
| 0.4      | 1.5 | 41000                              | 490  | 52 | 0.006 | 0.025  | 38800                                 | 425  | 49 | 0.005 | 0.020  |
| 0.4      | 2   | 41000                              | 490  | 52 | 0.006 | 0.025  | 38800                                 | 425  | 49 | 0.005 | 0.020  |
| 0.4      | 2.5 | 36900                              | 395  | 46 | 0.005 | 0.014  | 34920                                 | 345  | 44 | 0.005 | 0.011  |
| 0.4      | 3   | 36900                              | 395  | 46 | 0.005 | 0.014  | 34920                                 | 345  | 44 | 0.005 | 0.011  |
| 0.4      | 4   | 36900                              | 395  | 46 | 0.005 | 0.009  | 34920                                 | 345  | 44 | 0.005 | 0.007  |
| 0.4      | 5   | 32800                              | 315  | 41 | 0.005 | 0.009  | 31040                                 | 270  | 39 | 0.004 | 0.007  |
| 0.4      | 6   | 32800                              | 315  | 41 | 0.005 | 0.005  | 31040                                 | 270  | 39 | 0.004 | 0.004  |
| 0.4      | 8   | 24600                              | 205  | 31 | 0.004 | 0.004  | 23280                                 | 180  | 29 | 0.004 | 0.003  |
| 0.4      | 10  | 12300                              | 90   | 15 | 0.004 | 0.004  | 11640                                 | 75   | 15 | 0.003 | 0.003  |
| 0.5      | 1   | 34200                              | 685  | 54 | 0.010 | 0.045  | 32300                                 | 580  | 51 | 0.009 | 0.035  |
| 0.5      | 1.5 | 34200                              | 685  | 54 | 0.010 | 0.045  | 32300                                 | 580  | 51 | 0.009 | 0.035  |
| 0.5      | 2   | 34200                              | 685  | 54 | 0.010 | 0.032  | 32300                                 | 580  | 51 | 0.009 | 0.025  |
| 0.5      | 2.5 | 34200                              | 685  | 54 | 0.010 | 0.032  | 32300                                 | 580  | 51 | 0.009 | 0.025  |
| 0.5      | 3   | 30780                              | 555  | 48 | 0.009 | 0.018  | 29070                                 | 470  | 46 | 0.008 | 0.014  |
| 0.5      | 4   | 30780                              | 555  | 48 | 0.009 | 0.018  | 29070                                 | 470  | 46 | 0.008 | 0.014  |
| 0.5      | 5   | 30780                              | 555  | 48 | 0.009 | 0.011  | 29070                                 | 470  | 46 | 0.008 | 0.009  |
| 0.5      | 6   | 27360                              | 440  | 43 | 0.008 | 0.011  | 25840                                 | 370  | 41 | 0.007 | 0.009  |
| 0.5      | 8   | 20520                              | 290  | 32 | 0.007 | 0.007  | 19380                                 | 245  | 30 | 0.006 | 0.005  |
| 0.5      | 10  | 20520                              | 290  | 32 | 0.007 | 0.005  | 19380                                 | 245  | 30 | 0.006 | 0.004  |
| 0.5      | 12  | 10260                              | 125  | 16 | 0.006 | 0.005  | 9690                                  | 105  | 15 | 0.005 | 0.004  |
| 0.5      | 14  | 10260                              | 125  | 16 | 0.006 | 0.005  | 9690                                  | 105  | 15 | 0.005 | 0.004  |
| 0.5      | 16  | 3420                               | 35   | 5  | 0.005 | 0.005  | 3230                                  | 30   | 5  | 0.005 | 0.004  |
| 0.6      | 1   | 34200                              | 1025 | 64 | 0.015 | 0.038  | 32300                                 | 840  | 61 | 0.013 | 0.029  |
| 0.6      | 2   | 34200                              | 1025 | 64 | 0.015 | 0.038  | 32300                                 | 840  | 61 | 0.013 | 0.029  |
| 0.6      | 3   | 34200                              | 1025 | 64 | 0.015 | 0.038  | 32300                                 | 840  | 61 | 0.013 | 0.029  |
| 0.6      | 4   | 30780                              | 830  | 58 | 0.013 | 0.022  | 29070                                 | 680  | 55 | 0.012 | 0.017  |
| 0.6      | 5   | 30780                              | 830  | 58 | 0.013 | 0.014  | 29070                                 | 680  | 55 | 0.012 | 0.011  |
| 0.6      | 6   | 30780                              | 830  | 58 | 0.013 | 0.014  | 29070                                 | 680  | 55 | 0.012 | 0.011  |
| 0.6      | 8   | 27360                              | 655  | 52 | 0.012 | 0.008  | 25840                                 | 540  | 49 | 0.010 | 0.006  |
| 0.6      | 10  | 20520                              | 430  | 39 | 0.010 | 0.005  | 19380                                 | 355  | 37 | 0.009 | 0.004  |
| 0.6      | 12  | 20520                              | 430  | 39 | 0.010 | 0.005  | 19380                                 | 355  | 37 | 0.009 | 0.004  |
| 0.6      | 14  | 10260                              | 185  | 19 | 0.009 | 0.005  | 9690                                  | 150  | 18 | 0.008 | 0.004  |
| 0.6      | 16  | 10260                              | 185  | 19 | 0.009 | 0.005  | 9690                                  | 150  | 18 | 0.008 | 0.004  |
| 0.7      | 2   | 34200                              | 1130 | 75 | 0.017 | 0.063  | 32300                                 | 930  | 71 | 0.014 | 0.049  |
| 0.7      | 4   | 30780                              | 915  | 68 | 0.015 | 0.025  | 29070                                 | 755  | 64 | 0.013 | 0.020  |
| 0.7      | 6   | 30780                              | 915  | 68 | 0.015 | 0.016  | 29070                                 | 755  | 64 | 0.013 | 0.012  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |    |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |    |       |        |
| HARDNESS |     | HRc 45 ~ HRc 55              |      |    |       |        |           |      |    |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |    |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc | Fz    | Ap(mm) |
| 0.1      | 0.2 | 50000                        | 190  | 16 | 0.002 | 0.005  | 50000     | 240  | 16 | 0.002 | 0.009  |
| 0.1      | 0.3 | 50000                        | 190  | 16 | 0.002 | 0.005  | 50000     | 240  | 16 | 0.002 | 0.009  |
| 0.1      | 0.5 | 50000                        | 190  | 16 | 0.002 | 0.004  | 50000     | 240  | 16 | 0.002 | 0.006  |
| 0.1      | 1   | 45000                        | 155  | 14 | 0.002 | 0.001  | 45000     | 195  | 14 | 0.002 | 0.002  |
| 0.2      | 0.5 | 43200                        | 260  | 27 | 0.003 | 0.010  | 50000     | 335  | 31 | 0.003 | 0.018  |
| 0.2      | 1   | 43200                        | 260  | 27 | 0.003 | 0.007  | 50000     | 335  | 31 | 0.003 | 0.013  |
| 0.2      | 1.5 | 38880                        | 210  | 24 | 0.003 | 0.004  | 45000     | 270  | 28 | 0.003 | 0.007  |
| 0.2      | 2   | 38880                        | 210  | 24 | 0.003 | 0.003  | 45000     | 270  | 28 | 0.003 | 0.005  |
| 0.2      | 3   | 38880                        | 210  | 24 | 0.003 | 0.002  | 45000     | 270  | 28 | 0.003 | 0.003  |
| 0.3      | 1   | 42800                        | 365  | 40 | 0.004 | 0.011  | 50000     | 475  | 47 | 0.005 | 0.019  |
| 0.3      | 1.5 | 42800                        | 365  | 40 | 0.004 | 0.011  | 50000     | 475  | 47 | 0.005 | 0.019  |
| 0.3      | 2   | 38520                        | 295  | 36 | 0.004 | 0.006  | 45000     | 385  | 42 | 0.004 | 0.011  |
| 0.3      | 2.5 | 38520                        | 295  | 36 | 0.004 | 0.004  | 45000     | 385  | 42 | 0.004 | 0.007  |
| 0.3      | 3   | 38520                        | 295  | 36 | 0.004 | 0.004  | 45000     | 385  | 42 | 0.004 | 0.007  |
| 0.3      | 4   | 34240                        | 235  | 32 | 0.003 | 0.002  | 40000     | 305  | 38 | 0.004 | 0.004  |
| 0.3      | 5   | 25680                        | 155  | 24 | 0.003 | 0.002  | 30000     | 200  | 28 | 0.003 | 0.003  |
| 0.4      | 1   | 34200                        | 340  | 43 | 0.005 | 0.020  | 41000     | 490  | 52 | 0.006 | 0.036  |
| 0.4      | 1.5 | 34200                        | 340  | 43 | 0.005 | 0.014  | 41000     | 490  | 52 | 0.006 | 0.025  |
| 0.4      | 2   | 34200                        | 340  | 43 | 0.005 | 0.014  | 41000     | 490  | 52 | 0.006 | 0.025  |
| 0.4      | 2.5 | 30780                        | 275  | 39 | 0.004 | 0.008  | 36900     | 395  | 46 | 0.005 | 0.014  |
| 0.4      | 3   | 30780                        | 275  | 39 | 0.004 | 0.008  | 36900     | 395  | 46 | 0.005 | 0.014  |
| 0.4      | 4   | 30780                        | 275  | 39 | 0.004 | 0.005  | 36900     | 395  | 46 | 0.005 | 0.009  |
| 0.4      | 5   | 27360                        | 220  | 34 | 0.004 | 0.005  | 32800     | 315  | 41 | 0.005 | 0.009  |
| 0.4      | 6   | 27360                        | 220  | 34 | 0.004 | 0.003  | 32800     | 315  | 41 | 0.005 | 0.005  |
| 0.4      | 8   | 20520                        | 145  | 26 | 0.004 | 0.002  | 24600     | 205  | 31 | 0.004 | 0.004  |
| 0.4      | 10  | 10260                        | 60   | 13 | 0.003 | 0.002  | 12300     | 90   | 15 | 0.004 | 0.004  |
| 0.5      | 1   | 28500                        | 515  | 45 | 0.009 | 0.025  | 34200     | 685  | 54 | 0.010 | 0.045  |
| 0.5      | 1.5 | 28500                        | 515  | 45 | 0.009 | 0.025  | 34200     | 685  | 54 | 0.010 | 0.045  |
| 0.5      | 2   | 28500                        | 515  | 45 | 0.009 | 0.018  | 34200     | 685  | 54 | 0.010 | 0.032  |
| 0.5      | 2.5 | 28500                        | 515  | 45 | 0.009 | 0.018  | 34200     | 685  | 54 | 0.010 | 0.032  |
| 0.5      | 3   | 25650                        | 415  | 40 | 0.008 | 0.010  | 30780     | 555  | 48 | 0.009 | 0.018  |
| 0.5      | 4   | 25650                        | 415  | 40 | 0.008 | 0.010  | 30780     | 555  | 48 | 0.009 | 0.018  |
| 0.5      | 5   | 25650                        | 415  | 40 | 0.008 | 0.006  | 30780     | 555  | 48 | 0.009 | 0.011  |
| 0.5      | 6   | 22800                        | 330  | 36 | 0.007 | 0.006  | 27360     | 440  | 43 | 0.008 | 0.011  |
| 0.5      | 8   | 17100                        | 215  | 27 | 0.006 | 0.004  | 20520     | 290  | 32 | 0.007 | 0.007  |
| 0.5      | 10  | 17100                        | 215  | 27 | 0.006 | 0.003  | 20520     | 290  | 32 | 0.007 | 0.005  |
| 0.5      | 12  | 8550                         | 95   | 13 | 0.006 | 0.003  | 10260     | 125  | 16 | 0.006 | 0.005  |
| 0.5      | 14  | 8550                         | 95   | 13 | 0.006 | 0.003  | 10260     | 125  | 16 | 0.006 | 0.005  |
| 0.5      | 16  | 2850                         | 25   | 4  | 0.004 | 0.003  | 3420      | 35   | 5  | 0.005 | 0.005  |
| 0.6      | 1   | 28500                        | 685  | 54 | 0.012 | 0.021  | 34200     | 1025 | 64 | 0.015 | 0.038  |
| 0.6      | 2   | 28500                        | 685  | 54 | 0.012 | 0.021  | 34200     | 1025 | 64 | 0.015 | 0.038  |
| 0.6      | 3   | 28500                        | 685  | 54 | 0.012 | 0.021  | 34200     | 1025 | 64 | 0.015 | 0.038  |
| 0.6      | 4   | 25650                        | 555  | 48 | 0.011 | 0.012  | 30780     | 830  | 58 | 0.013 | 0.022  |
| 0.6      | 5   | 25650                        | 555  | 48 | 0.011 | 0.008  | 30780     | 830  | 58 | 0.013 | 0.014  |
| 0.6      | 6   | 25650                        | 555  | 48 | 0.011 | 0.008  | 30780     | 830  | 58 | 0.013 | 0.014  |
| 0.6      | 8   | 22800                        | 440  | 43 | 0.010 | 0.005  | 27360     | 655  | 52 | 0.012 | 0.008  |
| 0.6      | 10  | 17100                        | 290  | 32 | 0.008 | 0.003  | 20520     | 430  | 39 | 0.010 | 0.005  |
| 0.6      | 12  | 17100                        | 290  | 32 | 0.008 | 0.003  | 20520     | 430  | 39 | 0.010 | 0.005  |
| 0.6      | 14  | 8550                         | 125  | 16 | 0.007 | 0.003  | 10260     | 185  | 19 | 0.009 | 0.005  |
| 0.6      | 16  | 8550                         | 125  | 16 | 0.007 | 0.003  | 10260     | 185  | 19 | 0.009 | 0.005  |
| 0.7      | 2   | 28500                        | 765  | 63 | 0.013 | 0.035  | 34200     | 1130 | 75 | 0.017 | 0.063  |
| 0.7      | 4   | 25650                        | 620  | 56 | 0.012 | 0.014  | 30780     | 915  | 68 | 0.015 | 0.025  |
| 0.7      | 6   | 25650                        | 620  | 56 | 0.012 | 0.009  | 30780     | 915  | 68 | 0.015 | 0.016  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |     |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|-----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |     |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc  | Fz    | Ap(mm) |
| 0.7      | 8   | 27360                              | 725  | 60  | 0.013 | 0.016  | 25840                                 | 595  | 57  | 0.012 | 0.012  |
| 0.7      | 10  | 27360                              | 725  | 60  | 0.013 | 0.009  | 25840                                 | 595  | 57  | 0.012 | 0.007  |
| 0.7      | 12  | 20520                              | 475  | 45  | 0.012 | 0.006  | 19380                                 | 390  | 43  | 0.010 | 0.005  |
| 0.8      | 2   | 34200                              | 1230 | 86  | 0.018 | 0.072  | 32300                                 | 1035 | 81  | 0.016 | 0.056  |
| 0.8      | 3   | 34200                              | 1230 | 86  | 0.018 | 0.050  | 32300                                 | 1035 | 81  | 0.016 | 0.039  |
| 0.8      | 4   | 34200                              | 1230 | 86  | 0.018 | 0.050  | 32300                                 | 1035 | 81  | 0.016 | 0.039  |
| 0.8      | 5   | 30780                              | 995  | 77  | 0.016 | 0.029  | 29070                                 | 840  | 73  | 0.014 | 0.022  |
| 0.8      | 6   | 30780                              | 995  | 77  | 0.016 | 0.029  | 29070                                 | 840  | 73  | 0.014 | 0.022  |
| 0.8      | 8   | 30780                              | 995  | 77  | 0.016 | 0.018  | 29070                                 | 840  | 73  | 0.014 | 0.014  |
| 0.8      | 10  | 27360                              | 785  | 69  | 0.014 | 0.018  | 25840                                 | 660  | 65  | 0.013 | 0.014  |
| 0.8      | 12  | 27360                              | 785  | 69  | 0.014 | 0.011  | 25840                                 | 660  | 65  | 0.013 | 0.008  |
| 0.8      | 14  | 20520                              | 515  | 52  | 0.013 | 0.007  | 19380                                 | 435  | 49  | 0.011 | 0.006  |
| 0.8      | 16  | 20520                              | 515  | 52  | 0.013 | 0.007  | 19380                                 | 435  | 49  | 0.011 | 0.006  |
| 0.8      | 20  | 10260                              | 220  | 26  | 0.011 | 0.007  | 9690                                  | 185  | 24  | 0.010 | 0.006  |
| 0.9      | 4   | 29250                              | 1120 | 83  | 0.019 | 0.032  | 27630                                 | 935  | 78  | 0.017 | 0.025  |
| 0.9      | 6   | 29250                              | 1120 | 83  | 0.019 | 0.032  | 27630                                 | 935  | 78  | 0.017 | 0.025  |
| 0.9      | 8   | 29250                              | 1120 | 83  | 0.019 | 0.020  | 27630                                 | 935  | 78  | 0.017 | 0.016  |
| 0.9      | 10  | 26000                              | 885  | 74  | 0.017 | 0.020  | 24560                                 | 740  | 69  | 0.015 | 0.016  |
| 1.0      | 2   | 30800                              | 1540 | 97  | 0.025 | 0.090  | 29100                                 | 1310 | 91  | 0.023 | 0.070  |
| 1.0      | 3   | 30800                              | 1540 | 97  | 0.025 | 0.090  | 29100                                 | 1310 | 91  | 0.023 | 0.070  |
| 1.0      | 4   | 30800                              | 1540 | 97  | 0.025 | 0.063  | 29100                                 | 1310 | 91  | 0.023 | 0.049  |
| 1.0      | 5   | 30800                              | 1540 | 97  | 0.025 | 0.063  | 29100                                 | 1310 | 91  | 0.023 | 0.049  |
| 1.0      | 6   | 27720                              | 1245 | 87  | 0.022 | 0.036  | 26190                                 | 1060 | 82  | 0.020 | 0.028  |
| 1.0      | 7   | 27720                              | 1245 | 87  | 0.022 | 0.036  | 26190                                 | 1060 | 82  | 0.020 | 0.028  |
| 1.0      | 8   | 27720                              | 1245 | 87  | 0.022 | 0.036  | 26190                                 | 1060 | 82  | 0.020 | 0.028  |
| 1.0      | 10  | 27720                              | 1245 | 87  | 0.022 | 0.023  | 26190                                 | 1060 | 82  | 0.020 | 0.018  |
| 1.0      | 12  | 24640                              | 985  | 77  | 0.020 | 0.023  | 23280                                 | 840  | 73  | 0.018 | 0.018  |
| 1.0      | 14  | 24640                              | 985  | 77  | 0.020 | 0.014  | 23280                                 | 840  | 73  | 0.018 | 0.011  |
| 1.0      | 16  | 18480                              | 645  | 58  | 0.017 | 0.014  | 17460                                 | 550  | 55  | 0.016 | 0.011  |
| 1.0      | 18  | 18480                              | 645  | 58  | 0.017 | 0.009  | 17460                                 | 550  | 55  | 0.016 | 0.007  |
| 1.0      | 20  | 18480                              | 645  | 58  | 0.017 | 0.009  | 17460                                 | 550  | 55  | 0.016 | 0.007  |
| 1.0      | 22  | 9240                               | 275  | 29  | 0.015 | 0.009  | 8730                                  | 235  | 27  | 0.013 | 0.007  |
| 1.0      | 26  | 9240                               | 275  | 29  | 0.015 | 0.009  | 8730                                  | 235  | 27  | 0.013 | 0.007  |
| 1.0      | 30  | 9240                               | 275  | 29  | 0.015 | 0.009  | 8730                                  | 235  | 27  | 0.013 | 0.007  |
| 1.0      | 40  | 3080                               | 75   | 10  | 0.012 | 0.009  | 2910                                  | 65   | 9   | 0.011 | 0.007  |
| 1.0      | 50  | 3080                               | 75   | 10  | 0.012 | 0.006  | 2910                                  | 65   | 9   | 0.011 | 0.005  |
| 1.2      | 4   | 26300                              | 1375 | 99  | 0.026 | 0.076  | 24800                                 | 1150 | 93  | 0.023 | 0.059  |
| 1.2      | 6   | 26300                              | 1375 | 99  | 0.026 | 0.076  | 24800                                 | 1150 | 93  | 0.023 | 0.059  |
| 1.2      | 8   | 23670                              | 1115 | 89  | 0.024 | 0.043  | 22320                                 | 930  | 84  | 0.021 | 0.034  |
| 1.2      | 10  | 23670                              | 1115 | 89  | 0.024 | 0.027  | 22320                                 | 930  | 84  | 0.021 | 0.021  |
| 1.2      | 12  | 23670                              | 1115 | 89  | 0.024 | 0.027  | 22320                                 | 930  | 84  | 0.021 | 0.021  |
| 1.2      | 16  | 21040                              | 880  | 79  | 0.021 | 0.016  | 19840                                 | 735  | 75  | 0.019 | 0.013  |
| 1.2      | 20  | 15780                              | 580  | 59  | 0.018 | 0.011  | 14880                                 | 485  | 56  | 0.016 | 0.008  |
| 1.2      | 26  | 7890                               | 245  | 30  | 0.016 | 0.011  | 7440                                  | 205  | 28  | 0.014 | 0.008  |
| 1.4      | 6   | 21500                              | 1295 | 95  | 0.030 | 0.088  | 20300                                 | 1100 | 89  | 0.027 | 0.069  |
| 1.4      | 8   | 19350                              | 1050 | 85  | 0.027 | 0.050  | 18270                                 | 890  | 80  | 0.024 | 0.039  |
| 1.4      | 10  | 19350                              | 1050 | 85  | 0.027 | 0.050  | 18270                                 | 890  | 80  | 0.024 | 0.039  |
| 1.4      | 16  | 17200                              | 830  | 76  | 0.024 | 0.032  | 16240                                 | 705  | 71  | 0.022 | 0.025  |
| 1.5      | 4   | 23900                              | 1580 | 113 | 0.033 | 0.135  | 22600                                 | 1355 | 106 | 0.030 | 0.105  |
| 1.5      | 5   | 23900                              | 1580 | 113 | 0.033 | 0.095  | 22600                                 | 1355 | 106 | 0.030 | 0.074  |
| 1.5      | 6   | 23900                              | 1580 | 113 | 0.033 | 0.095  | 22600                                 | 1355 | 106 | 0.030 | 0.074  |
| 1.5      | 7   | 23900                              | 1580 | 113 | 0.033 | 0.095  | 22600                                 | 1355 | 106 | 0.030 | 0.074  |
| 1.5      | 8   | 21510                              | 1280 | 101 | 0.030 | 0.054  | 20340                                 | 1100 | 96  | 0.027 | 0.042  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 0.7      | 8   | 22800                        | 490  | 50 | 0.011 | 0.009  | 27360     | 725  | 60  | 0.013 | 0.016  |
| 0.7      | 10  | 22800                        | 490  | 50 | 0.011 | 0.005  | 27360     | 725  | 60  | 0.013 | 0.009  |
| 0.7      | 12  | 17100                        | 320  | 38 | 0.009 | 0.004  | 20520     | 475  | 45  | 0.012 | 0.006  |
| 0.8      | 2   | 28500                        | 855  | 72 | 0.015 | 0.040  | 34200     | 1230 | 86  | 0.018 | 0.072  |
| 0.8      | 3   | 28500                        | 855  | 72 | 0.015 | 0.028  | 34200     | 1230 | 86  | 0.018 | 0.050  |
| 0.8      | 4   | 28500                        | 855  | 72 | 0.015 | 0.028  | 34200     | 1230 | 86  | 0.018 | 0.050  |
| 0.8      | 5   | 25650                        | 695  | 64 | 0.014 | 0.016  | 30780     | 995  | 77  | 0.016 | 0.029  |
| 0.8      | 6   | 25650                        | 695  | 64 | 0.014 | 0.016  | 30780     | 995  | 77  | 0.016 | 0.029  |
| 0.8      | 8   | 25650                        | 695  | 64 | 0.014 | 0.010  | 30780     | 995  | 77  | 0.016 | 0.018  |
| 0.8      | 10  | 22800                        | 545  | 57 | 0.012 | 0.010  | 27360     | 785  | 69  | 0.014 | 0.018  |
| 0.8      | 12  | 22800                        | 545  | 57 | 0.012 | 0.006  | 27360     | 785  | 69  | 0.014 | 0.011  |
| 0.8      | 14  | 17100                        | 360  | 43 | 0.011 | 0.004  | 20520     | 515  | 52  | 0.013 | 0.007  |
| 0.8      | 16  | 17100                        | 360  | 43 | 0.011 | 0.004  | 20520     | 515  | 52  | 0.013 | 0.007  |
| 0.8      | 20  | 8550                         | 155  | 21 | 0.009 | 0.004  | 10260     | 220  | 26  | 0.011 | 0.007  |
| 0.9      | 4   | 24390                        | 775  | 69 | 0.016 | 0.018  | 29250     | 1120 | 83  | 0.019 | 0.032  |
| 0.9      | 6   | 24390                        | 775  | 69 | 0.016 | 0.018  | 29250     | 1120 | 83  | 0.019 | 0.032  |
| 0.9      | 8   | 24390                        | 775  | 69 | 0.016 | 0.011  | 29250     | 1120 | 83  | 0.019 | 0.020  |
| 0.9      | 10  | 21680                        | 610  | 61 | 0.014 | 0.011  | 26000     | 885  | 74  | 0.017 | 0.020  |
| 1.0      | 2   | 25700                        | 1075 | 81 | 0.021 | 0.050  | 30800     | 1540 | 97  | 0.025 | 0.090  |
| 1.0      | 3   | 25700                        | 1075 | 81 | 0.021 | 0.050  | 30800     | 1540 | 97  | 0.025 | 0.090  |
| 1.0      | 4   | 25700                        | 1075 | 81 | 0.021 | 0.035  | 30800     | 1540 | 97  | 0.025 | 0.063  |
| 1.0      | 5   | 25700                        | 1075 | 81 | 0.021 | 0.035  | 30800     | 1540 | 97  | 0.025 | 0.063  |
| 1.0      | 6   | 23130                        | 870  | 73 | 0.019 | 0.020  | 27720     | 1245 | 87  | 0.022 | 0.036  |
| 1.0      | 7   | 23130                        | 870  | 73 | 0.019 | 0.020  | 27720     | 1245 | 87  | 0.022 | 0.036  |
| 1.0      | 8   | 23130                        | 870  | 73 | 0.019 | 0.020  | 27720     | 1245 | 87  | 0.022 | 0.036  |
| 1.0      | 10  | 23130                        | 870  | 73 | 0.019 | 0.013  | 27720     | 1245 | 87  | 0.022 | 0.023  |
| 1.0      | 12  | 20560                        | 690  | 65 | 0.017 | 0.013  | 24640     | 985  | 77  | 0.020 | 0.023  |
| 1.0      | 14  | 20560                        | 690  | 65 | 0.017 | 0.008  | 24640     | 985  | 77  | 0.020 | 0.014  |
| 1.0      | 16  | 15420                        | 450  | 48 | 0.015 | 0.008  | 18480     | 645  | 58  | 0.017 | 0.014  |
| 1.0      | 18  | 15420                        | 450  | 48 | 0.015 | 0.005  | 18480     | 645  | 58  | 0.017 | 0.009  |
| 1.0      | 20  | 15420                        | 450  | 48 | 0.015 | 0.005  | 18480     | 645  | 58  | 0.017 | 0.009  |
| 1.0      | 22  | 7710                         | 195  | 24 | 0.013 | 0.005  | 9240      | 275  | 29  | 0.015 | 0.009  |
| 1.0      | 26  | 7710                         | 195  | 24 | 0.013 | 0.005  | 9240      | 275  | 29  | 0.015 | 0.009  |
| 1.0      | 30  | 7710                         | 195  | 24 | 0.013 | 0.005  | 9240      | 275  | 29  | 0.015 | 0.009  |
| 1.0      | 40  | 2570                         | 55   | 8  | 0.011 | 0.005  | 3080      | 75   | 10  | 0.012 | 0.009  |
| 1.0      | 50  | 2570                         | 55   | 8  | 0.011 | 0.003  | 3080      | 75   | 10  | 0.012 | 0.006  |
| 1.2      | 4   | 21900                        | 950  | 83 | 0.022 | 0.042  | 26300     | 1375 | 99  | 0.026 | 0.076  |
| 1.2      | 6   | 21900                        | 950  | 83 | 0.022 | 0.042  | 26300     | 1375 | 99  | 0.026 | 0.076  |
| 1.2      | 8   | 19710                        | 770  | 74 | 0.020 | 0.024  | 23670     | 1115 | 89  | 0.024 | 0.043  |
| 1.2      | 10  | 19710                        | 770  | 74 | 0.020 | 0.015  | 23670     | 1115 | 89  | 0.024 | 0.027  |
| 1.2      | 12  | 19710                        | 770  | 74 | 0.020 | 0.015  | 23670     | 1115 | 89  | 0.024 | 0.027  |
| 1.2      | 16  | 17520                        | 610  | 66 | 0.017 | 0.009  | 21040     | 880  | 79  | 0.021 | 0.016  |
| 1.2      | 20  | 13140                        | 400  | 50 | 0.015 | 0.006  | 15780     | 580  | 59  | 0.018 | 0.011  |
| 1.2      | 26  | 6570                         | 170  | 25 | 0.013 | 0.006  | 7890      | 245  | 30  | 0.016 | 0.011  |
| 1.4      | 6   | 18000                        | 935  | 79 | 0.026 | 0.049  | 21500     | 1295 | 95  | 0.030 | 0.088  |
| 1.4      | 8   | 16200                        | 755  | 71 | 0.023 | 0.028  | 19350     | 1050 | 85  | 0.027 | 0.050  |
| 1.4      | 10  | 16200                        | 755  | 71 | 0.023 | 0.028  | 19350     | 1050 | 85  | 0.027 | 0.050  |
| 1.4      | 16  | 14400                        | 600  | 63 | 0.021 | 0.018  | 17200     | 830  | 76  | 0.024 | 0.032  |
| 1.5      | 4   | 20000                        | 1075 | 94 | 0.027 | 0.075  | 23900     | 1580 | 113 | 0.033 | 0.135  |
| 1.5      | 5   | 20000                        | 1075 | 94 | 0.027 | 0.053  | 23900     | 1580 | 113 | 0.033 | 0.095  |
| 1.5      | 6   | 20000                        | 1075 | 94 | 0.027 | 0.053  | 23900     | 1580 | 113 | 0.033 | 0.095  |
| 1.5      | 7   | 20000                        | 1075 | 94 | 0.027 | 0.053  | 23900     | 1580 | 113 | 0.033 | 0.095  |
| 1.5      | 8   | 18000                        | 870  | 85 | 0.024 | 0.030  | 21510     | 1280 | 101 | 0.030 | 0.054  |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |     |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|-----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |     |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc  | Fz    | Ap(mm) |
| 1.5      | 10  | 21510                              | 1280 | 101 | 0.030 | 0.054  | 20340                                 | 1100 | 96  | 0.027 | 0.042  |
| 1.5      | 12  | 21510                              | 1280 | 101 | 0.030 | 0.054  | 20340                                 | 1100 | 96  | 0.027 | 0.042  |
| 1.5      | 14  | 21510                              | 1280 | 101 | 0.030 | 0.034  | 20340                                 | 1100 | 96  | 0.027 | 0.026  |
| 1.5      | 16  | 19120                              | 1010 | 90  | 0.026 | 0.034  | 18080                                 | 865  | 85  | 0.024 | 0.026  |
| 1.5      | 18  | 19120                              | 1010 | 90  | 0.026 | 0.034  | 18080                                 | 865  | 85  | 0.024 | 0.026  |
| 1.5      | 20  | 19120                              | 1010 | 90  | 0.026 | 0.02   | 18080                                 | 865  | 85  | 0.024 | 0.016  |
| 1.5      | 22  | 19120                              | 1010 | 90  | 0.026 | 0.02   | 18080                                 | 865  | 85  | 0.024 | 0.016  |
| 1.5      | 26  | 14340                              | 665  | 68  | 0.023 | 0.014  | 13560                                 | 570  | 64  | 0.021 | 0.011  |
| 1.5      | 30  | 14340                              | 665  | 68  | 0.023 | 0.014  | 13560                                 | 570  | 64  | 0.021 | 0.011  |
| 1.5      | 35  | 7170                               | 285  | 34  | 0.020 | 0.010  | 6780                                  | 245  | 32  | 0.018 | 0.008  |
| 1.5      | 40  | 7170                               | 285  | 34  | 0.020 | 0.010  | 6780                                  | 245  | 32  | 0.018 | 0.008  |
| 1.6      | 4   | 22200                              | 1555 | 112 | 0.035 | 0.101  | 21000                                 | 1300 | 106 | 0.031 | 0.078  |
| 1.6      | 6   | 22200                              | 1555 | 112 | 0.035 | 0.101  | 21000                                 | 1300 | 106 | 0.031 | 0.078  |
| 1.6      | 8   | 22200                              | 1555 | 112 | 0.035 | 0.101  | 21000                                 | 1300 | 106 | 0.031 | 0.078  |
| 1.6      | 10  | 19980                              | 1260 | 100 | 0.032 | 0.058  | 18900                                 | 1055 | 95  | 0.028 | 0.045  |
| 1.6      | 12  | 19980                              | 1260 | 100 | 0.032 | 0.058  | 18900                                 | 1055 | 95  | 0.028 | 0.045  |
| 1.6      | 16  | 19980                              | 1260 | 100 | 0.032 | 0.036  | 18900                                 | 1055 | 95  | 0.028 | 0.028  |
| 1.6      | 20  | 17760                              | 995  | 89  | 0.028 | 0.036  | 16800                                 | 830  | 84  | 0.025 | 0.028  |
| 1.8      | 4   | 22200                              | 1780 | 126 | 0.040 | 0.113  | 21000                                 | 1470 | 119 | 0.035 | 0.088  |
| 1.8      | 6   | 22200                              | 1780 | 126 | 0.040 | 0.113  | 21000                                 | 1470 | 119 | 0.035 | 0.088  |
| 1.8      | 8   | 22200                              | 1780 | 126 | 0.040 | 0.113  | 21000                                 | 1470 | 119 | 0.035 | 0.088  |
| 1.8      | 10  | 19980                              | 1440 | 113 | 0.036 | 0.065  | 18900                                 | 1190 | 107 | 0.031 | 0.050  |
| 1.8      | 12  | 19980                              | 1440 | 113 | 0.036 | 0.065  | 18900                                 | 1190 | 107 | 0.031 | 0.050  |
| 1.8      | 16  | 19980                              | 1440 | 113 | 0.036 | 0.041  | 18900                                 | 1190 | 107 | 0.031 | 0.032  |
| 1.8      | 20  | 17760                              | 1140 | 100 | 0.032 | 0.041  | 16800                                 | 940  | 95  | 0.028 | 0.032  |
| 2.0      | 6   | 18000                              | 1795 | 113 | 0.050 | 0.180  | 17000                                 | 1525 | 107 | 0.045 | 0.140  |
| 2.0      | 8   | 18000                              | 1795 | 113 | 0.050 | 0.126  | 17000                                 | 1525 | 107 | 0.045 | 0.098  |
| 2.0      | 10  | 18000                              | 1795 | 113 | 0.050 | 0.126  | 17000                                 | 1525 | 107 | 0.045 | 0.098  |
| 2.0      | 12  | 16200                              | 1455 | 102 | 0.045 | 0.072  | 15300                                 | 1235 | 96  | 0.040 | 0.056  |
| 2.0      | 14  | 16200                              | 1455 | 102 | 0.045 | 0.072  | 15300                                 | 1235 | 96  | 0.040 | 0.056  |
| 2.0      | 16  | 16200                              | 1455 | 102 | 0.045 | 0.072  | 15300                                 | 1235 | 96  | 0.040 | 0.056  |
| 2.0      | 18  | 16200                              | 1455 | 102 | 0.045 | 0.045  | 15300                                 | 1235 | 96  | 0.040 | 0.035  |
| 2.0      | 20  | 16200                              | 1455 | 102 | 0.045 | 0.045  | 15300                                 | 1235 | 96  | 0.040 | 0.035  |
| 2.0      | 22  | 14400                              | 1150 | 90  | 0.040 | 0.045  | 13600                                 | 975  | 85  | 0.036 | 0.035  |
| 2.0      | 26  | 14400                              | 1150 | 90  | 0.040 | 0.045  | 13600                                 | 975  | 85  | 0.036 | 0.035  |
| 2.0      | 30  | 14400                              | 1150 | 90  | 0.040 | 0.027  | 13600                                 | 975  | 85  | 0.036 | 0.021  |
| 2.0      | 35  | 10800                              | 755  | 68  | 0.035 | 0.018  | 10200                                 | 640  | 64  | 0.031 | 0.014  |
| 2.0      | 40  | 10800                              | 755  | 68  | 0.035 | 0.018  | 10200                                 | 640  | 64  | 0.031 | 0.014  |
| 2.0      | 45  | 5400                               | 325  | 34  | 0.030 | 0.018  | 5100                                  | 275  | 32  | 0.027 | 0.014  |
| 2.0      | 50  | 5400                               | 325  | 34  | 0.030 | 0.018  | 5100                                  | 275  | 32  | 0.027 | 0.014  |
| 2.0      | 60  | 5400                               | 325  | 34  | 0.030 | 0.018  | 5100                                  | 275  | 32  | 0.027 | 0.014  |
| 2.5      | 8   | 15800                              | 1925 | 124 | 0.061 | 0.158  | 14900                                 | 1605 | 117 | 0.054 | 0.123  |
| 2.5      | 10  | 15800                              | 1925 | 124 | 0.061 | 0.158  | 14900                                 | 1605 | 117 | 0.054 | 0.123  |
| 2.5      | 12  | 15800                              | 1925 | 124 | 0.061 | 0.158  | 14900                                 | 1605 | 117 | 0.054 | 0.123  |
| 2.5      | 16  | 14220                              | 1560 | 112 | 0.055 | 0.090  | 13410                                 | 1300 | 105 | 0.048 | 0.070  |
| 2.5      | 20  | 14220                              | 1560 | 112 | 0.055 | 0.090  | 13410                                 | 1300 | 105 | 0.048 | 0.070  |
| 2.5      | 22  | 14220                              | 1560 | 112 | 0.055 | 0.056  | 13410                                 | 1300 | 105 | 0.048 | 0.044  |
| 2.5      | 26  | 12640                              | 1230 | 99  | 0.049 | 0.056  | 11920                                 | 1025 | 94  | 0.043 | 0.044  |
| 2.5      | 30  | 12640                              | 1230 | 99  | 0.049 | 0.056  | 11920                                 | 1025 | 94  | 0.043 | 0.044  |
| 2.5      | 35  | 12640                              | 1230 | 99  | 0.049 | 0.034  | 11920                                 | 1025 | 94  | 0.043 | 0.026  |
| 2.5      | 40  | 9480                               | 810  | 74  | 0.043 | 0.034  | 8940                                  | 675  | 70  | 0.038 | 0.026  |
| 2.5      | 45  | 9480                               | 810  | 74  | 0.043 | 0.023  | 8940                                  | 675  | 70  | 0.038 | 0.018  |
| 2.5      | 50  | 9480                               | 810  | 74  | 0.043 | 0.023  | 8940                                  | 675  | 70  | 0.038 | 0.018  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |     |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|-----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |     |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |     |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |     |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc  | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 1.5      | 10  | 18000                        | 870  | 85  | 0.024 | 0.030  | 21510     | 1280 | 101 | 0.030 | 0.054  |
| 1.5      | 12  | 18000                        | 870  | 85  | 0.024 | 0.030  | 21510     | 1280 | 101 | 0.030 | 0.054  |
| 1.5      | 14  | 18000                        | 870  | 85  | 0.024 | 0.019  | 21510     | 1280 | 101 | 0.030 | 0.034  |
| 1.5      | 16  | 16000                        | 690  | 75  | 0.022 | 0.019  | 19120     | 1010 | 90  | 0.026 | 0.034  |
| 1.5      | 18  | 16000                        | 690  | 75  | 0.022 | 0.019  | 19120     | 1010 | 90  | 0.026 | 0.034  |
| 1.5      | 20  | 16000                        | 690  | 75  | 0.022 | 0.011  | 19120     | 1010 | 90  | 0.026 | 0.02   |
| 1.5      | 22  | 16000                        | 690  | 75  | 0.022 | 0.011  | 19120     | 1010 | 90  | 0.026 | 0.02   |
| 1.5      | 26  | 12000                        | 450  | 57  | 0.019 | 0.008  | 14340     | 665  | 68  | 0.023 | 0.014  |
| 1.5      | 30  | 12000                        | 450  | 57  | 0.019 | 0.008  | 14340     | 665  | 68  | 0.023 | 0.014  |
| 1.5      | 35  | 6000                         | 195  | 28  | 0.016 | 0.005  | 7170      | 285  | 34  | 0.020 | 0.010  |
| 1.5      | 40  | 6000                         | 195  | 28  | 0.016 | 0.005  | 7170      | 285  | 34  | 0.020 | 0.010  |
| 1.6      | 4   | 18500                        | 1110 | 93  | 0.030 | 0.056  | 22200     | 1555 | 112 | 0.035 | 0.101  |
| 1.6      | 6   | 18500                        | 1110 | 93  | 0.030 | 0.056  | 22200     | 1555 | 112 | 0.035 | 0.101  |
| 1.6      | 8   | 18500                        | 1110 | 93  | 0.030 | 0.056  | 22200     | 1555 | 112 | 0.035 | 0.101  |
| 1.6      | 10  | 16650                        | 900  | 84  | 0.027 | 0.032  | 19980     | 1260 | 100 | 0.032 | 0.058  |
| 1.6      | 12  | 16650                        | 900  | 84  | 0.027 | 0.032  | 19980     | 1260 | 100 | 0.032 | 0.058  |
| 1.6      | 16  | 16650                        | 900  | 84  | 0.027 | 0.020  | 19980     | 1260 | 100 | 0.032 | 0.036  |
| 1.6      | 20  | 14800                        | 710  | 74  | 0.024 | 0.020  | 17760     | 995  | 89  | 0.028 | 0.036  |
| 1.8      | 4   | 18500                        | 1225 | 105 | 0.033 | 0.063  | 22200     | 1780 | 126 | 0.040 | 0.113  |
| 1.8      | 6   | 18500                        | 1225 | 105 | 0.033 | 0.063  | 22200     | 1780 | 126 | 0.040 | 0.113  |
| 1.8      | 8   | 18500                        | 1225 | 105 | 0.033 | 0.063  | 22200     | 1780 | 126 | 0.040 | 0.113  |
| 1.8      | 10  | 16650                        | 990  | 94  | 0.030 | 0.036  | 19980     | 1440 | 113 | 0.036 | 0.065  |
| 1.8      | 12  | 16650                        | 990  | 94  | 0.030 | 0.036  | 19980     | 1440 | 113 | 0.036 | 0.065  |
| 1.8      | 16  | 16650                        | 990  | 94  | 0.030 | 0.023  | 19980     | 1440 | 113 | 0.036 | 0.041  |
| 1.8      | 20  | 14800                        | 785  | 84  | 0.027 | 0.023  | 17760     | 1140 | 100 | 0.032 | 0.041  |
| 2.0      | 6   | 15000                        | 1285 | 94  | 0.043 | 0.100  | 18000     | 1795 | 113 | 0.050 | 0.180  |
| 2.0      | 8   | 15000                        | 1285 | 94  | 0.043 | 0.070  | 18000     | 1795 | 113 | 0.050 | 0.126  |
| 2.0      | 10  | 15000                        | 1285 | 94  | 0.043 | 0.070  | 18000     | 1795 | 113 | 0.050 | 0.126  |
| 2.0      | 12  | 13500                        | 1040 | 85  | 0.039 | 0.040  | 16200     | 1455 | 102 | 0.045 | 0.072  |
| 2.0      | 14  | 13500                        | 1040 | 85  | 0.039 | 0.040  | 16200     | 1455 | 102 | 0.045 | 0.072  |
| 2.0      | 16  | 13500                        | 1040 | 85  | 0.039 | 0.040  | 16200     | 1455 | 102 | 0.045 | 0.072  |
| 2.0      | 18  | 13500                        | 1040 | 85  | 0.039 | 0.025  | 16200     | 1455 | 102 | 0.045 | 0.045  |
| 2.0      | 20  | 13500                        | 1040 | 85  | 0.039 | 0.025  | 16200     | 1455 | 102 | 0.045 | 0.045  |
| 2.0      | 22  | 12000                        | 820  | 75  | 0.034 | 0.025  | 14400     | 1150 | 90  | 0.040 | 0.045  |
| 2.0      | 26  | 12000                        | 820  | 75  | 0.034 | 0.025  | 14400     | 1150 | 90  | 0.040 | 0.045  |
| 2.0      | 30  | 12000                        | 820  | 75  | 0.034 | 0.015  | 14400     | 1150 | 90  | 0.040 | 0.027  |
| 2.0      | 35  | 9000                         | 540  | 57  | 0.030 | 0.010  | 10800     | 755  | 68  | 0.035 | 0.018  |
| 2.0      | 40  | 9000                         | 540  | 57  | 0.030 | 0.010  | 10800     | 755  | 68  | 0.035 | 0.018  |
| 2.0      | 45  | 4500                         | 230  | 28  | 0.026 | 0.010  | 5400      | 325  | 34  | 0.030 | 0.018  |
| 2.0      | 50  | 4500                         | 230  | 28  | 0.026 | 0.010  | 5400      | 325  | 34  | 0.030 | 0.018  |
| 2.0      | 60  | 4500                         | 230  | 28  | 0.026 | 0.010  | 5400      | 325  | 34  | 0.030 | 0.018  |
| 2.5      | 8   | 13200                        | 1305 | 104 | 0.049 | 0.088  | 15800     | 1925 | 124 | 0.061 | 0.158  |
| 2.5      | 10  | 13200                        | 1305 | 104 | 0.049 | 0.088  | 15800     | 1925 | 124 | 0.061 | 0.158  |
| 2.5      | 12  | 13200                        | 1305 | 104 | 0.049 | 0.088  | 15800     | 1925 | 124 | 0.061 | 0.158  |
| 2.5      | 16  | 11880                        | 1055 | 93  | 0.044 | 0.050  | 14220     | 1560 | 112 | 0.055 | 0.090  |
| 2.5      | 20  | 11880                        | 1055 | 93  | 0.044 | 0.050  | 14220     | 1560 | 112 | 0.055 | 0.090  |
| 2.5      | 22  | 11880                        | 1055 | 93  | 0.044 | 0.031  | 14220     | 1560 | 112 | 0.055 | 0.056  |
| 2.5      | 26  | 10560                        | 835  | 83  | 0.040 | 0.031  | 12640     | 1230 | 99  | 0.049 | 0.056  |
| 2.5      | 30  | 10560                        | 835  | 83  | 0.040 | 0.031  | 12640     | 1230 | 99  | 0.049 | 0.056  |
| 2.5      | 35  | 10560                        | 835  | 83  | 0.040 | 0.019  | 12640     | 1230 | 99  | 0.049 | 0.034  |
| 2.5      | 40  | 7920                         | 550  | 62  | 0.035 | 0.019  | 9480      | 810  | 74  | 0.043 | 0.034  |
| 2.5      | 45  | 7920                         | 550  | 62  | 0.035 | 0.013  | 9480      | 810  | 74  | 0.043 | 0.023  |
| 2.5      | 50  | 7920                         | 550  | 62  | 0.035 | 0.013  | 9480      | 810  | 74  | 0.043 | 0.023  |

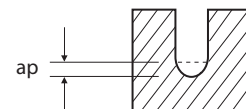
Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |     |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|-----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |     |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc  | Fz    | Ap(mm) |
| 3.0      | 6   | 13700                              | 2050 | 129 | 0.075 | 0.270  | 12900                                 | 1730 | 122 | 0.067 | 0.210  |
| 3.0      | 8   | 13700                              | 2050 | 129 | 0.075 | 0.270  | 12900                                 | 1730 | 122 | 0.067 | 0.210  |
| 3.0      | 10  | 13700                              | 2050 | 129 | 0.075 | 0.189  | 12900                                 | 1730 | 122 | 0.067 | 0.147  |
| 3.0      | 12  | 13700                              | 2050 | 129 | 0.075 | 0.189  | 12900                                 | 1730 | 122 | 0.067 | 0.147  |
| 3.0      | 14  | 13700                              | 2050 | 129 | 0.075 | 0.189  | 12900                                 | 1730 | 122 | 0.067 | 0.147  |
| 3.0      | 16  | 12330                              | 1660 | 116 | 0.067 | 0.108  | 11610                                 | 1400 | 109 | 0.060 | 0.084  |
| 3.0      | 18  | 12330                              | 1660 | 116 | 0.067 | 0.108  | 11610                                 | 1400 | 109 | 0.060 | 0.084  |
| 3.0      | 20  | 12330                              | 1660 | 116 | 0.067 | 0.108  | 11610                                 | 1400 | 109 | 0.060 | 0.084  |
| 3.0      | 22  | 12330                              | 1660 | 116 | 0.067 | 0.108  | 11610                                 | 1400 | 109 | 0.060 | 0.084  |
| 3.0      | 26  | 12330                              | 1660 | 116 | 0.067 | 0.068  | 11610                                 | 1400 | 109 | 0.060 | 0.053  |
| 3.0      | 30  | 12330                              | 1660 | 116 | 0.067 | 0.068  | 11610                                 | 1400 | 109 | 0.060 | 0.053  |
| 3.0      | 35  | 10960                              | 1310 | 103 | 0.060 | 0.068  | 10320                                 | 1105 | 97  | 0.054 | 0.053  |
| 3.0      | 40  | 10960                              | 1310 | 103 | 0.060 | 0.041  | 10320                                 | 1105 | 97  | 0.054 | 0.032  |
| 3.0      | 45  | 10960                              | 1310 | 103 | 0.060 | 0.041  | 10320                                 | 1105 | 97  | 0.054 | 0.032  |
| 3.0      | 50  | 8220                               | 860  | 77  | 0.052 | 0.027  | 7740                                  | 725  | 73  | 0.047 | 0.021  |
| 3.0      | 60  | 8220                               | 860  | 77  | 0.052 | 0.027  | 7740                                  | 725  | 73  | 0.047 | 0.021  |
| 4.0      | 8   | 9800                               | 1965 | 123 | 0.100 | 0.360  | 9300                                  | 1670 | 117 | 0.090 | 0.280  |
| 4.0      | 10  | 9800                               | 1965 | 123 | 0.100 | 0.360  | 9300                                  | 1670 | 117 | 0.090 | 0.280  |
| 4.0      | 12  | 9800                               | 1965 | 123 | 0.100 | 0.360  | 9300                                  | 1670 | 117 | 0.090 | 0.280  |
| 4.0      | 14  | 9800                               | 1965 | 123 | 0.100 | 0.252  | 9300                                  | 1670 | 117 | 0.090 | 0.196  |
| 4.0      | 16  | 9800                               | 1965 | 123 | 0.100 | 0.252  | 9300                                  | 1670 | 117 | 0.090 | 0.196  |
| 4.0      | 18  | 9800                               | 1965 | 123 | 0.100 | 0.252  | 9300                                  | 1670 | 117 | 0.090 | 0.196  |
| 4.0      | 20  | 9800                               | 1965 | 123 | 0.100 | 0.252  | 9300                                  | 1670 | 117 | 0.090 | 0.196  |
| 4.0      | 22  | 8820                               | 1590 | 111 | 0.090 | 0.144  | 8370                                  | 1355 | 105 | 0.081 | 0.112  |
| 4.0      | 26  | 8820                               | 1590 | 111 | 0.090 | 0.144  | 8370                                  | 1355 | 105 | 0.081 | 0.112  |
| 4.0      | 30  | 8820                               | 1590 | 111 | 0.090 | 0.144  | 8370                                  | 1355 | 105 | 0.081 | 0.112  |
| 4.0      | 35  | 8820                               | 1590 | 111 | 0.090 | 0.090  | 8370                                  | 1355 | 105 | 0.081 | 0.070  |
| 4.0      | 40  | 8820                               | 1590 | 111 | 0.090 | 0.090  | 8370                                  | 1355 | 105 | 0.081 | 0.070  |
| 4.0      | 45  | 7840                               | 1260 | 99  | 0.080 | 0.090  | 7440                                  | 1070 | 93  | 0.072 | 0.070  |
| 4.0      | 50  | 7840                               | 1260 | 99  | 0.080 | 0.090  | 7440                                  | 1070 | 93  | 0.072 | 0.070  |
| 4.0      | 60  | 7840                               | 1260 | 99  | 0.080 | 0.054  | 7440                                  | 1070 | 93  | 0.072 | 0.042  |
| 5.0      | 15  | 7700                               | 1845 | 121 | 0.120 | 0.315  | 7300                                  | 1455 | 115 | 0.100 | 0.245  |
| 5.0      | 20  | 7700                               | 1845 | 121 | 0.120 | 0.315  | 7300                                  | 1455 | 115 | 0.100 | 0.245  |
| 5.0      | 26  | 6930                               | 1495 | 109 | 0.108 | 0.180  | 6570                                  | 1180 | 103 | 0.090 | 0.140  |
| 5.0      | 30  | 6930                               | 1495 | 109 | 0.108 | 0.180  | 6570                                  | 1180 | 103 | 0.090 | 0.140  |
| 5.0      | 35  | 6930                               | 1495 | 109 | 0.108 | 0.180  | 6570                                  | 1180 | 103 | 0.090 | 0.140  |
| 5.0      | 40  | 6930                               | 1495 | 109 | 0.108 | 0.180  | 6570                                  | 1180 | 103 | 0.090 | 0.140  |
| 5.0      | 50  | 6930                               | 1495 | 109 | 0.108 | 0.113  | 6570                                  | 1180 | 103 | 0.090 | 0.088  |
| 5.0      | 60  | 6160                               | 1180 | 97  | 0.096 | 0.113  | 5840                                  | 930  | 92  | 0.080 | 0.088  |
| 6.0      | 20  | 6500                               | 1900 | 123 | 0.146 | 0.378  | 6200                                  | 1600 | 117 | 0.129 | 0.294  |
| 6.0      | 30  | 6500                               | 1900 | 123 | 0.146 | 0.378  | 6200                                  | 1600 | 117 | 0.129 | 0.294  |
| 8.0      | 25  | 4850                               | 1800 | 122 | 0.186 | 0.504  | 4600                                  | 1500 | 116 | 0.163 | 0.392  |
| 8.0      | 30  | 4850                               | 1800 | 122 | 0.186 | 0.504  | 4600                                  | 1500 | 116 | 0.163 | 0.392  |
| 10.0     | 30  | 3850                               | 1650 | 121 | 0.214 | 0.900  | 3680                                  | 1400 | 116 | 0.190 | 0.700  |
| 10.0     | 40  | 3850                               | 1650 | 121 | 0.214 | 0.630  | 3680                                  | 1400 | 116 | 0.190 | 0.490  |
| 12.0     | 32  | 3200                               | 1520 | 121 | 0.238 | 1.080  | 3050                                  | 1300 | 115 | 0.213 | 0.840  |
| 12.0     | 45  | 3200                               | 1520 | 121 | 0.238 | 0.756  | 3050                                  | 1300 | 115 | 0.213 | 0.588  |

(Depth of Cut pre one pass)

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK BALL NOSE

SEM846 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

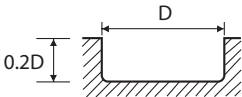
| MATERIAL |     | P                            |      |     |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|-----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |     |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |     |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |     |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc  | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 3.0      | 6   | 11400                        | 1435 | 107 | 0.063 | 0.150  | 13700     | 2050 | 129 | 0.075 | 0.270  |
| 3.0      | 8   | 11400                        | 1435 | 107 | 0.063 | 0.150  | 13700     | 2050 | 129 | 0.075 | 0.270  |
| 3.0      | 10  | 11400                        | 1435 | 107 | 0.063 | 0.105  | 13700     | 2050 | 129 | 0.075 | 0.189  |
| 3.0      | 12  | 11400                        | 1435 | 107 | 0.063 | 0.105  | 13700     | 2050 | 129 | 0.075 | 0.189  |
| 3.0      | 14  | 11400                        | 1435 | 107 | 0.063 | 0.105  | 13700     | 2050 | 129 | 0.075 | 0.189  |
| 3.0      | 16  | 10260                        | 1160 | 97  | 0.057 | 0.060  | 12330     | 1660 | 116 | 0.067 | 0.108  |
| 3.0      | 18  | 10260                        | 1160 | 97  | 0.057 | 0.060  | 12330     | 1660 | 116 | 0.067 | 0.108  |
| 3.0      | 20  | 10260                        | 1160 | 97  | 0.057 | 0.060  | 12330     | 1660 | 116 | 0.067 | 0.108  |
| 3.0      | 22  | 10260                        | 1160 | 97  | 0.057 | 0.060  | 12330     | 1660 | 116 | 0.067 | 0.108  |
| 3.0      | 26  | 10260                        | 1160 | 97  | 0.057 | 0.038  | 12330     | 1660 | 116 | 0.067 | 0.068  |
| 3.0      | 30  | 10260                        | 1160 | 97  | 0.057 | 0.038  | 12330     | 1660 | 116 | 0.067 | 0.068  |
| 3.0      | 35  | 9120                         | 920  | 86  | 0.050 | 0.038  | 10960     | 1310 | 103 | 0.060 | 0.068  |
| 3.0      | 40  | 9120                         | 920  | 86  | 0.050 | 0.023  | 10960     | 1310 | 103 | 0.060 | 0.041  |
| 3.0      | 45  | 9120                         | 920  | 86  | 0.050 | 0.023  | 10960     | 1310 | 103 | 0.060 | 0.041  |
| 3.0      | 50  | 6840                         | 605  | 64  | 0.044 | 0.015  | 8220      | 860  | 77  | 0.052 | 0.027  |
| 3.0      | 60  | 6840                         | 605  | 64  | 0.044 | 0.015  | 8220      | 860  | 77  | 0.052 | 0.027  |
| 4.0      | 8   | 8200                         | 1395 | 103 | 0.085 | 0.200  | 9800      | 1965 | 123 | 0.100 | 0.360  |
| 4.0      | 10  | 8200                         | 1395 | 103 | 0.085 | 0.200  | 9800      | 1965 | 123 | 0.100 | 0.360  |
| 4.0      | 12  | 8200                         | 1395 | 103 | 0.085 | 0.200  | 9800      | 1965 | 123 | 0.100 | 0.360  |
| 4.0      | 14  | 8200                         | 1395 | 103 | 0.085 | 0.140  | 9800      | 1965 | 123 | 0.100 | 0.252  |
| 4.0      | 16  | 8200                         | 1395 | 103 | 0.085 | 0.140  | 9800      | 1965 | 123 | 0.100 | 0.252  |
| 4.0      | 18  | 8200                         | 1395 | 103 | 0.085 | 0.140  | 9800      | 1965 | 123 | 0.100 | 0.252  |
| 4.0      | 20  | 8200                         | 1395 | 103 | 0.085 | 0.140  | 9800      | 1965 | 123 | 0.100 | 0.252  |
| 4.0      | 22  | 7380                         | 1130 | 93  | 0.077 | 0.080  | 8820      | 1590 | 111 | 0.090 | 0.144  |
| 4.0      | 26  | 7380                         | 1130 | 93  | 0.077 | 0.080  | 8820      | 1590 | 111 | 0.090 | 0.144  |
| 4.0      | 30  | 7380                         | 1130 | 93  | 0.077 | 0.080  | 8820      | 1590 | 111 | 0.090 | 0.144  |
| 4.0      | 35  | 7380                         | 1130 | 93  | 0.077 | 0.050  | 8820      | 1590 | 111 | 0.090 | 0.090  |
| 4.0      | 40  | 7380                         | 1130 | 93  | 0.077 | 0.050  | 8820      | 1590 | 111 | 0.090 | 0.090  |
| 4.0      | 45  | 6560                         | 895  | 82  | 0.068 | 0.050  | 7840      | 1260 | 99  | 0.080 | 0.090  |
| 4.0      | 50  | 6560                         | 895  | 82  | 0.068 | 0.050  | 7840      | 1260 | 99  | 0.080 | 0.090  |
| 4.0      | 60  | 6560                         | 895  | 82  | 0.068 | 0.030  | 7840      | 1260 | 99  | 0.080 | 0.054  |
| 5.0      | 15  | 6400                         | 1285 | 101 | 0.100 | 0.175  | 7700      | 1845 | 121 | 0.120 | 0.315  |
| 5.0      | 20  | 6400                         | 1285 | 101 | 0.100 | 0.175  | 7700      | 1845 | 121 | 0.120 | 0.315  |
| 5.0      | 26  | 5760                         | 1040 | 90  | 0.090 | 0.100  | 6930      | 1495 | 109 | 0.108 | 0.180  |
| 5.0      | 30  | 5760                         | 1040 | 90  | 0.090 | 0.100  | 6930      | 1495 | 109 | 0.108 | 0.180  |
| 5.0      | 35  | 5760                         | 1040 | 90  | 0.090 | 0.100  | 6930      | 1495 | 109 | 0.108 | 0.180  |
| 5.0      | 40  | 5760                         | 1040 | 90  | 0.090 | 0.100  | 6930      | 1495 | 109 | 0.108 | 0.180  |
| 5.0      | 50  | 5760                         | 1040 | 90  | 0.090 | 0.063  | 6930      | 1495 | 109 | 0.108 | 0.113  |
| 5.0      | 60  | 5120                         | 820  | 80  | 0.080 | 0.063  | 6160      | 1180 | 97  | 0.096 | 0.113  |
| 6.0      | 20  | 5500                         | 1330 | 104 | 0.121 | 0.210  | 6500      | 1900 | 123 | 0.146 | 0.378  |
| 6.0      | 30  | 5500                         | 1330 | 104 | 0.121 | 0.210  | 6500      | 1900 | 123 | 0.146 | 0.378  |
| 8.0      | 25  | 4000                         | 1280 | 101 | 0.160 | 0.280  | 4850      | 1800 | 122 | 0.186 | 0.504  |
| 8.0      | 30  | 4000                         | 1280 | 101 | 0.160 | 0.280  | 4850      | 1800 | 122 | 0.186 | 0.504  |
| 10.0     | 30  | 3200                         | 1200 | 101 | 0.188 | 0.500  | 3850      | 1650 | 121 | 0.214 | 0.900  |
| 10.0     | 40  | 3200                         | 1200 | 101 | 0.188 | 0.350  | 3850      | 1650 | 121 | 0.214 | 0.630  |
| 12.0     | 32  | 2650                         | 1100 | 100 | 0.208 | 0.600  | 3200      | 1520 | 121 | 0.238 | 1.080  |
| 12.0     | 45  | 2650                         | 1100 | 100 | 0.208 | 0.420  | 3200      | 1520 | 121 | 0.238 | 0      |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS

SEMD99 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

| MATERIAL | P                                  |      |     |       |                                       |      |     |       |
|----------|------------------------------------|------|-----|-------|---------------------------------------|------|-----|-------|
|          | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |
| HARDNESS | ~ HRC 35                           |      |     |       | HRC 35 ~ HRC 45                       |      |     |       |
| STRENGTH | ~ 1100N/mm <sup>2</sup>            |      |     |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |
| DIAMETER | RPM                                | FEED | Vc  | Fz    | RPM                                   | FEED | Vc  | Fz    |
| 0.2      | 44000                              | 145  | 28  | 0.002 | 28800                                 | 60   | 18  | 0.001 |
| 0.3      | 41000                              | 170  | 39  | 0.002 | 27000                                 | 70   | 25  | 0.001 |
| 0.4      | 41000                              | 170  | 52  | 0.002 | 27000                                 | 70   | 34  | 0.001 |
| 0.5      | 36000                              | 190  | 57  | 0.003 | 23400                                 | 80   | 37  | 0.002 |
| 0.6      | 30000                              | 210  | 57  | 0.004 | 19800                                 | 90   | 37  | 0.002 |
| 0.7      | 30000                              | 210  | 66  | 0.004 | 19800                                 | 90   | 44  | 0.002 |
| 0.8      | 30000                              | 210  | 75  | 0.004 | 19800                                 | 90   | 50  | 0.002 |
| 0.9      | 30000                              | 225  | 85  | 0.004 | 18900                                 | 90   | 53  | 0.002 |
| 1.0      | 27600                              | 240  | 87  | 0.004 | 18000                                 | 100  | 57  | 0.003 |
| 1.2      | 24800                              | 245  | 93  | 0.005 | 15750                                 | 105  | 59  | 0.003 |
| 1.5      | 22000                              | 250  | 104 | 0.006 | 13500                                 | 110  | 64  | 0.004 |
| 2.0      | 18000                              | 260  | 113 | 0.007 | 11560                                 | 120  | 73  | 0.005 |
| 2.5      | 15000                              | 270  | 118 | 0.009 | 9500                                  | 130  | 75  | 0.007 |
| 3.0      | 13240                              | 280  | 125 | 0.011 | 8560                                  | 140  | 81  | 0.008 |
| 3.5      | 11980                              | 310  | 132 | 0.013 | 7690                                  | 155  | 85  | 0.010 |
| 4.0      | 10720                              | 340  | 135 | 0.016 | 6820                                  | 170  | 86  | 0.012 |
| 4.5      | 9940                               | 380  | 141 | 0.019 | 6310                                  | 185  | 89  | 0.015 |
| 5.0      | 9160                               | 420  | 144 | 0.023 | 5800                                  | 200  | 91  | 0.017 |
| 5.5      | 8530                               | 460  | 147 | 0.027 | 5420                                  | 225  | 94  | 0.021 |
| 6.0      | 7900                               | 500  | 149 | 0.032 | 5040                                  | 250  | 95  | 0.025 |
| 7.0      | 6950                               | 520  | 153 | 0.037 | 4420                                  | 250  | 97  | 0.028 |
| 8.0      | 6000                               | 540  | 151 | 0.045 | 3800                                  | 250  | 96  | 0.033 |
| 10.0     | 5040                               | 540  | 158 | 0.054 | 3280                                  | 250  | 103 | 0.038 |
| 11.0     | 4580                               | 480  | 158 | 0.052 | 3030                                  | 240  | 105 | 0.040 |
| 12.0     | 4120                               | 420  | 155 | 0.051 | 2780                                  | 230  | 105 | 0.041 |
| 14.0     | 3610                               | 390  | 159 | 0.054 | 2440                                  | 200  | 107 | 0.041 |
| 16.0     | 3100                               | 360  | 156 | 0.058 | 2100                                  | 170  | 106 | 0.040 |
| 20.0     | 2520                               | 280  | 158 | 0.056 | 1640                                  | 120  | 103 | 0.037 |

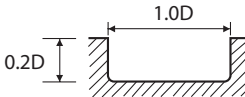


Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE CORNER RADIUS

SEMD99 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

| MATERIAL | P                            |      |    |       | K         |      |     |       |
|----------|------------------------------|------|----|-------|-----------|------|-----|-------|
|          | HARDENED STEELS              |      |    |       | CAST IRON |      |     |       |
| HARDNESS | HRC 45 ~ HRC 55              |      |    |       |           |      |     |       |
| STRENGTH | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |           |      |     |       |
| DIAMETER | RPM                          | FEED | Vc | Fz    | RPM       | FEED | Vc  | Fz    |
| 0.2      | 17600                        | 40   | 11 | 0.001 | 44000     | 145  | 28  | 0.002 |
| 0.3      | 16500                        | 45   | 16 | 0.001 | 41000     | 170  | 39  | 0.002 |
| 0.4      | 16500                        | 45   | 21 | 0.001 | 41000     | 170  | 52  | 0.002 |
| 0.5      | 14300                        | 50   | 22 | 0.002 | 36000     | 190  | 57  | 0.003 |
| 0.6      | 12100                        | 55   | 23 | 0.002 | 30000     | 210  | 57  | 0.004 |
| 0.7      | 12100                        | 55   | 27 | 0.002 | 30000     | 210  | 66  | 0.004 |
| 0.8      | 12100                        | 55   | 30 | 0.002 | 30000     | 210  | 75  | 0.004 |
| 0.9      | 11550                        | 55   | 33 | 0.002 | 30000     | 225  | 85  | 0.004 |
| 1.0      | 11000                        | 60   | 35 | 0.003 | 27600     | 240  | 87  | 0.004 |
| 1.2      | 9750                         | 60   | 37 | 0.003 | 24800     | 245  | 93  | 0.005 |
| 1.5      | 8500                         | 60   | 40 | 0.004 | 22000     | 250  | 104 | 0.006 |
| 2.0      | 7200                         | 70   | 45 | 0.005 | 18000     | 260  | 113 | 0.007 |
| 2.5      | 6100                         | 70   | 48 | 0.006 | 15000     | 270  | 118 | 0.009 |
| 3.0      | 5280                         | 70   | 50 | 0.007 | 13240     | 280  | 125 | 0.011 |
| 3.5      | 4790                         | 75   | 53 | 0.008 | 11980     | 310  | 132 | 0.013 |
| 4.0      | 4300                         | 80   | 54 | 0.009 | 10720     | 340  | 135 | 0.016 |
| 4.5      | 4300                         | 90   | 61 | 0.010 | 9940      | 380  | 141 | 0.019 |
| 5.0      | 3800                         | 100  | 60 | 0.013 | 9160      | 420  | 144 | 0.023 |
| 5.5      | 3540                         | 110  | 61 | 0.016 | 8530      | 460  | 147 | 0.027 |
| 6.0      | 3280                         | 120  | 62 | 0.018 | 7900      | 500  | 149 | 0.032 |
| 7.0      | 2900                         | 120  | 64 | 0.021 | 6950      | 520  | 153 | 0.037 |
| 8.0      | 2520                         | 120  | 63 | 0.024 | 6000      | 540  | 151 | 0.045 |
| 10.0     | 2020                         | 120  | 63 | 0.030 | 5040      | 540  | 158 | 0.054 |
| 11.0     | 1850                         | 110  | 64 | 0.030 | 4580      | 480  | 158 | 0.052 |
| 12.0     | 1680                         | 100  | 63 | 0.030 | 4120      | 420  | 155 | 0.051 |
| 14.0     | 1480                         | 90   | 65 | 0.030 | 3610      | 390  | 159 | 0.054 |
| 16.0     | 1280                         | 80   | 64 | 0.031 | 3100      | 360  | 156 | 0.058 |
| 20.0     | 1000                         | 60   | 63 | 0.030 | 2520      | 280  | 158 | 0.056 |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

SEME61 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 0.2      | 0.5 | 50000                              | 170  | 31  | 0.002 | 0.040  | 34500                                 | 75   | 22 | 0.001 | 0.030  |
| 0.2      | 1   | 50000                              | 170  | 31  | 0.002 | 0.028  | 34500                                 | 75   | 22 | 0.001 | 0.021  |
| 0.2      | 1.5 | 45000                              | 140  | 28  | 0.002 | 0.016  | 31050                                 | 60   | 20 | 0.001 | 0.012  |
| 0.2      | 2   | 45000                              | 140  | 28  | 0.002 | 0.010  | 31050                                 | 60   | 20 | 0.001 | 0.008  |
| 0.3      | 1   | 50000                              | 200  | 47  | 0.002 | 0.042  | 32000                                 | 85   | 30 | 0.001 | 0.032  |
| 0.3      | 2   | 45000                              | 160  | 42  | 0.002 | 0.024  | 28800                                 | 70   | 27 | 0.001 | 0.018  |
| 0.3      | 3   | 45000                              | 160  | 42  | 0.002 | 0.015  | 28800                                 | 70   | 27 | 0.001 | 0.011  |
| 0.4      | 1   | 50000                              | 200  | 63  | 0.002 | 0.080  | 32000                                 | 85   | 40 | 0.001 | 0.060  |
| 0.4      | 1.5 | 50000                              | 200  | 63  | 0.002 | 0.056  | 32000                                 | 85   | 40 | 0.001 | 0.042  |
| 0.4      | 2   | 50000                              | 200  | 63  | 0.002 | 0.056  | 32000                                 | 85   | 40 | 0.001 | 0.042  |
| 0.4      | 2.5 | 45000                              | 160  | 57  | 0.002 | 0.032  | 28800                                 | 70   | 36 | 0.001 | 0.024  |
| 0.4      | 3   | 45000                              | 160  | 57  | 0.002 | 0.032  | 28800                                 | 70   | 36 | 0.001 | 0.024  |
| 0.4      | 4   | 45000                              | 160  | 57  | 0.002 | 0.020  | 28800                                 | 70   | 36 | 0.001 | 0.015  |
| 0.5      | 1   | 43000                              | 220  | 68  | 0.003 | 0.100  | 28000                                 | 95   | 44 | 0.002 | 0.075  |
| 0.5      | 1.5 | 43000                              | 220  | 68  | 0.003 | 0.100  | 28000                                 | 95   | 44 | 0.002 | 0.075  |
| 0.5      | 2   | 43000                              | 220  | 68  | 0.003 | 0.070  | 28000                                 | 95   | 44 | 0.002 | 0.053  |
| 0.5      | 2.5 | 43000                              | 220  | 68  | 0.003 | 0.070  | 28000                                 | 95   | 44 | 0.002 | 0.053  |
| 0.5      | 3   | 38700                              | 180  | 61  | 0.002 | 0.040  | 25200                                 | 75   | 40 | 0.001 | 0.030  |
| 0.5      | 4   | 38700                              | 180  | 61  | 0.002 | 0.040  | 25200                                 | 75   | 40 | 0.001 | 0.030  |
| 0.5      | 5   | 38700                              | 180  | 61  | 0.002 | 0.025  | 25200                                 | 75   | 40 | 0.001 | 0.019  |
| 0.5      | 6   | 34400                              | 140  | 54  | 0.002 | 0.025  | 22400                                 | 60   | 35 | 0.001 | 0.019  |
| 0.6      | 2   | 36400                              | 250  | 69  | 0.003 | 0.084  | 24000                                 | 110  | 45 | 0.002 | 0.063  |
| 0.6      | 3   | 36400                              | 250  | 69  | 0.003 | 0.084  | 24000                                 | 110  | 45 | 0.002 | 0.063  |
| 0.6      | 4   | 32760                              | 205  | 62  | 0.003 | 0.048  | 21600                                 | 90   | 41 | 0.002 | 0.036  |
| 0.6      | 6   | 32760                              | 205  | 62  | 0.003 | 0.030  | 21600                                 | 90   | 41 | 0.002 | 0.023  |
| 0.6      | 8   | 29120                              | 160  | 55  | 0.003 | 0.018  | 19200                                 | 70   | 36 | 0.002 | 0.014  |
| 0.6      | 10  | 21840                              | 105  | 41  | 0.002 | 0.012  | 14400                                 | 45   | 27 | 0.002 | 0.009  |
| 0.7      | 2   | 36400                              | 250  | 80  | 0.003 | 0.140  | 24000                                 | 110  | 53 | 0.002 | 0.105  |
| 0.7      | 4   | 32760                              | 205  | 72  | 0.003 | 0.056  | 21600                                 | 90   | 48 | 0.002 | 0.042  |
| 0.7      | 6   | 32760                              | 205  | 72  | 0.003 | 0.035  | 21600                                 | 90   | 48 | 0.002 | 0.026  |
| 0.7      | 8   | 29120                              | 160  | 64  | 0.003 | 0.035  | 19200                                 | 70   | 42 | 0.002 | 0.026  |
| 0.7      | 10  | 29120                              | 160  | 64  | 0.003 | 0.021  | 19200                                 | 70   | 42 | 0.002 | 0.016  |
| 0.8      | 2   | 36400                              | 250  | 91  | 0.003 | 0.160  | 24000                                 | 110  | 60 | 0.002 | 0.120  |
| 0.8      | 3   | 36400                              | 250  | 91  | 0.003 | 0.112  | 24000                                 | 110  | 60 | 0.002 | 0.084  |
| 0.8      | 4   | 36400                              | 250  | 91  | 0.003 | 0.112  | 24000                                 | 110  | 60 | 0.002 | 0.084  |
| 0.8      | 6   | 32760                              | 205  | 82  | 0.003 | 0.064  | 21600                                 | 90   | 54 | 0.002 | 0.048  |
| 0.8      | 8   | 32760                              | 205  | 82  | 0.003 | 0.040  | 21600                                 | 90   | 54 | 0.002 | 0.030  |
| 0.8      | 10  | 29120                              | 160  | 73  | 0.003 | 0.040  | 19200                                 | 70   | 48 | 0.002 | 0.030  |
| 1.0      | 3   | 33100                              | 280  | 104 | 0.004 | 0.200  | 21600                                 | 120  | 68 | 0.003 | 0.150  |
| 1.0      | 4   | 33100                              | 280  | 104 | 0.004 | 0.140  | 21600                                 | 120  | 68 | 0.003 | 0.105  |
| 1.0      | 6   | 29790                              | 225  | 94  | 0.004 | 0.080  | 19440                                 | 95   | 61 | 0.002 | 0.060  |
| 1.0      | 8   | 29790                              | 225  | 94  | 0.004 | 0.080  | 19440                                 | 95   | 61 | 0.002 | 0.060  |
| 1.0      | 10  | 29790                              | 225  | 94  | 0.004 | 0.050  | 19440                                 | 95   | 61 | 0.002 | 0.038  |
| 1.0      | 12  | 26480                              | 180  | 83  | 0.003 | 0.050  | 17280                                 | 75   | 54 | 0.002 | 0.038  |
| 1.0      | 14  | 26480                              | 180  | 83  | 0.003 | 0.030  | 17280                                 | 75   | 54 | 0.002 | 0.023  |
| 1.0      | 16  | 19860                              | 120  | 62  | 0.003 | 0.030  | 12960                                 | 50   | 41 | 0.002 | 0.023  |
| 1.0      | 20  | 19860                              | 120  | 62  | 0.003 | 0.020  | 12960                                 | 50   | 41 | 0.002 | 0.015  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

SEME61 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 0.2      | 0.5 | 21150                        | 45   | 13 | 0.001 | 0.024  | 50000     | 170  | 31  | 0.002 | 0.040  |
| 0.2      | 1   | 21150                        | 45   | 13 | 0.001 | 0.017  | 50000     | 170  | 31  | 0.002 | 0.028  |
| 0.2      | 1.5 | 19040                        | 35   | 12 | 0.001 | 0.010  | 45000     | 140  | 28  | 0.002 | 0.016  |
| 0.2      | 2   | 19040                        | 35   | 12 | 0.001 | 0.006  | 45000     | 140  | 28  | 0.002 | 0.010  |
| 0.3      | 1   | 20000                        | 50   | 19 | 0.001 | 0.025  | 50000     | 200  | 47  | 0.002 | 0.042  |
| 0.3      | 2   | 18000                        | 40   | 17 | 0.001 | 0.014  | 45000     | 160  | 42  | 0.002 | 0.024  |
| 0.3      | 3   | 18000                        | 40   | 17 | 0.001 | 0.009  | 45000     | 160  | 42  | 0.002 | 0.015  |
| 0.4      | 1   | 20000                        | 50   | 25 | 0.001 | 0.048  | 50000     | 200  | 63  | 0.002 | 0.080  |
| 0.4      | 1.5 | 20000                        | 50   | 25 | 0.001 | 0.034  | 50000     | 200  | 63  | 0.002 | 0.056  |
| 0.4      | 2   | 20000                        | 50   | 25 | 0.001 | 0.034  | 50000     | 200  | 63  | 0.002 | 0.056  |
| 0.4      | 2.5 | 18000                        | 40   | 23 | 0.001 | 0.019  | 45000     | 160  | 57  | 0.002 | 0.032  |
| 0.4      | 3   | 18000                        | 40   | 23 | 0.001 | 0.019  | 45000     | 160  | 57  | 0.002 | 0.032  |
| 0.4      | 4   | 18000                        | 40   | 23 | 0.001 | 0.012  | 45000     | 160  | 57  | 0.002 | 0.020  |
| 0.5      | 1   | 17100                        | 60   | 27 | 0.002 | 0.060  | 43000     | 220  | 68  | 0.003 | 0.100  |
| 0.5      | 1.5 | 17100                        | 60   | 27 | 0.002 | 0.060  | 43000     | 220  | 68  | 0.003 | 0.100  |
| 0.5      | 2   | 17100                        | 60   | 27 | 0.002 | 0.042  | 43000     | 220  | 68  | 0.003 | 0.070  |
| 0.5      | 2.5 | 17100                        | 60   | 27 | 0.002 | 0.042  | 43000     | 220  | 68  | 0.003 | 0.070  |
| 0.5      | 3   | 15390                        | 50   | 24 | 0.002 | 0.024  | 38700     | 180  | 61  | 0.002 | 0.040  |
| 0.5      | 4   | 15390                        | 50   | 24 | 0.002 | 0.024  | 38700     | 180  | 61  | 0.002 | 0.040  |
| 0.5      | 5   | 15390                        | 50   | 24 | 0.002 | 0.015  | 38700     | 180  | 61  | 0.002 | 0.025  |
| 0.5      | 6   | 13680                        | 40   | 21 | 0.001 | 0.015  | 34400     | 140  | 54  | 0.002 | 0.025  |
| 0.6      | 2   | 14500                        | 65   | 27 | 0.002 | 0.050  | 36400     | 250  | 69  | 0.003 | 0.084  |
| 0.6      | 3   | 14500                        | 65   | 27 | 0.002 | 0.050  | 36400     | 250  | 69  | 0.003 | 0.084  |
| 0.6      | 4   | 13050                        | 55   | 25 | 0.002 | 0.029  | 32760     | 205  | 62  | 0.003 | 0.048  |
| 0.6      | 6   | 13050                        | 55   | 25 | 0.002 | 0.018  | 32760     | 205  | 62  | 0.003 | 0.030  |
| 0.6      | 8   | 11600                        | 40   | 22 | 0.002 | 0.011  | 29120     | 160  | 55  | 0.003 | 0.018  |
| 0.6      | 10  | 8700                         | 25   | 16 | 0.001 | 0.007  | 21840     | 105  | 41  | 0.002 | 0.012  |
| 0.7      | 2   | 14500                        | 65   | 32 | 0.002 | 0.084  | 36400     | 250  | 80  | 0.003 | 0.140  |
| 0.7      | 4   | 13050                        | 55   | 29 | 0.002 | 0.034  | 32760     | 205  | 72  | 0.003 | 0.056  |
| 0.7      | 6   | 13050                        | 55   | 29 | 0.002 | 0.021  | 32760     | 205  | 72  | 0.003 | 0.035  |
| 0.7      | 8   | 11600                        | 40   | 26 | 0.002 | 0.021  | 29120     | 160  | 64  | 0.003 | 0.035  |
| 0.7      | 10  | 11600                        | 40   | 26 | 0.002 | 0.013  | 29120     | 160  | 64  | 0.003 | 0.021  |
| 0.8      | 2   | 14500                        | 65   | 36 | 0.002 | 0.096  | 36400     | 250  | 91  | 0.003 | 0.160  |
| 0.8      | 3   | 14500                        | 65   | 36 | 0.002 | 0.067  | 36400     | 250  | 91  | 0.003 | 0.112  |
| 0.8      | 4   | 14500                        | 65   | 36 | 0.002 | 0.067  | 36400     | 250  | 91  | 0.003 | 0.112  |
| 0.8      | 6   | 13050                        | 55   | 33 | 0.002 | 0.038  | 32760     | 205  | 82  | 0.003 | 0.064  |
| 0.8      | 8   | 13050                        | 55   | 33 | 0.002 | 0.024  | 32760     | 205  | 82  | 0.003 | 0.040  |
| 0.8      | 10  | 11600                        | 40   | 29 | 0.002 | 0.024  | 29120     | 160  | 73  | 0.003 | 0.040  |
| 1.0      | 3   | 13200                        | 70   | 41 | 0.003 | 0.120  | 33100     | 280  | 104 | 0.004 | 0.200  |
| 1.0      | 4   | 13200                        | 70   | 41 | 0.003 | 0.084  | 33100     | 280  | 104 | 0.004 | 0.140  |
| 1.0      | 6   | 11880                        | 55   | 37 | 0.002 | 0.048  | 29790     | 225  | 94  | 0.004 | 0.080  |
| 1.0      | 8   | 11880                        | 55   | 37 | 0.002 | 0.048  | 29790     | 225  | 94  | 0.004 | 0.080  |
| 1.0      | 10  | 11880                        | 55   | 37 | 0.002 | 0.030  | 29790     | 225  | 94  | 0.004 | 0.050  |
| 1.0      | 12  | 10560                        | 45   | 33 | 0.002 | 0.030  | 26480     | 180  | 83  | 0.003 | 0.050  |
| 1.0      | 14  | 10560                        | 45   | 33 | 0.002 | 0.018  | 26480     | 180  | 83  | 0.003 | 0.030  |
| 1.0      | 16  | 7920                         | 30   | 25 | 0.002 | 0.018  | 19860     | 120  | 62  | 0.003 | 0.030  |
| 1.0      | 20  | 7920                         | 30   | 25 | 0.002 | 0.012  | 19860     | 120  | 62  | 0.003 | 0.020  |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

SEME61 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |     |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|-----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |     |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc  | Fz    | Ap(mm) |
| 1.2      | 3   | 29750                              | 290  | 112 | 0.005 | 0.240  | 18900                                 | 125  | 71  | 0.003 | 0.180  |
| 1.2      | 4   | 29750                              | 290  | 112 | 0.005 | 0.168  | 18900                                 | 125  | 71  | 0.003 | 0.126  |
| 1.2      | 6   | 29750                              | 290  | 112 | 0.005 | 0.168  | 18900                                 | 125  | 71  | 0.003 | 0.126  |
| 1.2      | 8   | 26780                              | 235  | 101 | 0.004 | 0.096  | 17010                                 | 100  | 64  | 0.003 | 0.072  |
| 1.2      | 10  | 26780                              | 235  | 101 | 0.004 | 0.060  | 17010                                 | 100  | 64  | 0.003 | 0.045  |
| 1.2      | 12  | 26780                              | 235  | 101 | 0.004 | 0.060  | 17010                                 | 100  | 64  | 0.003 | 0.045  |
| 1.2      | 16  | 23800                              | 185  | 90  | 0.004 | 0.036  | 15120                                 | 80   | 57  | 0.003 | 0.027  |
| 1.2      | 20  | 17850                              | 120  | 67  | 0.003 | 0.024  | 11340                                 | 55   | 43  | 0.002 | 0.018  |
| 1.5      | 4   | 26400                              | 300  | 124 | 0.006 | 0.300  | 16200                                 | 130  | 76  | 0.004 | 0.225  |
| 1.5      | 6   | 26400                              | 300  | 124 | 0.006 | 0.210  | 16200                                 | 130  | 76  | 0.004 | 0.158  |
| 1.5      | 8   | 23760                              | 245  | 112 | 0.005 | 0.120  | 14580                                 | 105  | 69  | 0.004 | 0.090  |
| 1.5      | 10  | 23760                              | 245  | 112 | 0.005 | 0.120  | 14580                                 | 105  | 69  | 0.004 | 0.090  |
| 1.5      | 12  | 23760                              | 245  | 112 | 0.005 | 0.120  | 14580                                 | 105  | 69  | 0.004 | 0.090  |
| 1.5      | 14  | 23760                              | 245  | 112 | 0.005 | 0.075  | 14580                                 | 105  | 69  | 0.004 | 0.056  |
| 1.5      | 16  | 21120                              | 190  | 100 | 0.004 | 0.075  | 12960                                 | 85   | 61  | 0.003 | 0.056  |
| 1.5      | 20  | 21120                              | 190  | 100 | 0.004 | 0.045  | 12960                                 | 85   | 61  | 0.003 | 0.034  |
| 1.5      | 22  | 21120                              | 190  | 100 | 0.004 | 0.045  | 12960                                 | 85   | 61  | 0.003 | 0.034  |
| 1.5      | 26  | 15840                              | 125  | 75  | 0.004 | 0.030  | 9720                                  | 55   | 46  | 0.003 | 0.023  |
| 2.0      | 6   | 21600                              | 310  | 136 | 0.007 | 0.400  | 13800                                 | 140  | 87  | 0.005 | 0.300  |
| 2.0      | 8   | 21600                              | 310  | 136 | 0.007 | 0.280  | 13800                                 | 140  | 87  | 0.005 | 0.210  |
| 2.0      | 10  | 21600                              | 310  | 136 | 0.007 | 0.280  | 13800                                 | 140  | 87  | 0.005 | 0.210  |
| 2.0      | 12  | 19440                              | 250  | 122 | 0.006 | 0.160  | 12420                                 | 115  | 78  | 0.005 | 0.120  |
| 2.0      | 14  | 19440                              | 250  | 122 | 0.006 | 0.160  | 12420                                 | 115  | 78  | 0.005 | 0.120  |
| 2.0      | 16  | 19440                              | 250  | 122 | 0.006 | 0.160  | 12420                                 | 115  | 78  | 0.005 | 0.120  |
| 2.0      | 20  | 19440                              | 250  | 122 | 0.006 | 0.100  | 12420                                 | 115  | 78  | 0.005 | 0.075  |
| 2.0      | 22  | 17280                              | 200  | 109 | 0.006 | 0.100  | 11040                                 | 90   | 69  | 0.004 | 0.075  |
| 2.0      | 26  | 17280                              | 200  | 109 | 0.006 | 0.100  | 11040                                 | 90   | 69  | 0.004 | 0.075  |
| 2.0      | 30  | 17280                              | 200  | 109 | 0.006 | 0.060  | 11040                                 | 90   | 69  | 0.004 | 0.045  |
| 2.5      | 8   | 18000                              | 320  | 141 | 0.009 | 0.350  | 11400                                 | 150  | 90  | 0.007 | 0.263  |
| 2.5      | 10  | 18000                              | 320  | 141 | 0.009 | 0.350  | 11400                                 | 150  | 90  | 0.007 | 0.263  |
| 2.5      | 12  | 18000                              | 320  | 141 | 0.009 | 0.350  | 11400                                 | 150  | 90  | 0.007 | 0.263  |
| 2.5      | 14  | 16200                              | 260  | 127 | 0.008 | 0.200  | 10260                                 | 120  | 81  | 0.006 | 0.150  |
| 2.5      | 16  | 16200                              | 260  | 127 | 0.008 | 0.200  | 10260                                 | 120  | 81  | 0.006 | 0.150  |
| 2.5      | 20  | 16200                              | 260  | 127 | 0.008 | 0.200  | 10260                                 | 120  | 81  | 0.006 | 0.150  |
| 2.5      | 26  | 14400                              | 205  | 113 | 0.007 | 0.125  | 9120                                  | 95   | 72  | 0.005 | 0.094  |
| 2.5      | 30  | 14400                              | 205  | 113 | 0.007 | 0.125  | 9120                                  | 95   | 72  | 0.005 | 0.094  |
| 3.0      | 8   | 15900                              | 330  | 150 | 0.010 | 0.600  | 10300                                 | 160  | 97  | 0.008 | 0.450  |
| 3.0      | 10  | 15900                              | 330  | 150 | 0.010 | 0.420  | 10300                                 | 160  | 97  | 0.008 | 0.315  |
| 3.0      | 12  | 15900                              | 330  | 150 | 0.010 | 0.420  | 10300                                 | 160  | 97  | 0.008 | 0.315  |
| 3.0      | 14  | 15900                              | 330  | 150 | 0.010 | 0.420  | 10300                                 | 160  | 97  | 0.008 | 0.315  |
| 3.0      | 16  | 14310                              | 265  | 135 | 0.009 | 0.240  | 9270                                  | 130  | 87  | 0.007 | 0.180  |
| 3.0      | 20  | 14310                              | 265  | 135 | 0.009 | 0.240  | 9270                                  | 130  | 87  | 0.007 | 0.180  |
| 3.0      | 26  | 14310                              | 265  | 135 | 0.009 | 0.150  | 9270                                  | 130  | 87  | 0.007 | 0.113  |
| 3.0      | 30  | 14310                              | 265  | 135 | 0.009 | 0.150  | 9270                                  | 130  | 87  | 0.007 | 0.113  |
| 3.0      | 35  | 12720                              | 210  | 120 | 0.008 | 0.150  | 8240                                  | 100  | 78  | 0.006 | 0.113  |
| 3.0      | 40  | 12720                              | 210  | 120 | 0.008 | 0.090  | 8240                                  | 100  | 78  | 0.006 | 0.068  |
| 4.0      | 10  | 12800                              | 400  | 161 | 0.016 | 0.800  | 8200                                  | 200  | 103 | 0.012 | 0.600  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

SEME61 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 1.2      | 3   | 11700                        | 70   | 44 | 0.003 | 0.144  | 29750     | 290  | 112 | 0.005 | 0.240  |
| 1.2      | 4   | 11700                        | 70   | 44 | 0.003 | 0.101  | 29750     | 290  | 112 | 0.005 | 0.168  |
| 1.2      | 6   | 11700                        | 70   | 44 | 0.003 | 0.101  | 29750     | 290  | 112 | 0.005 | 0.168  |
| 1.2      | 8   | 10530                        | 55   | 40 | 0.003 | 0.058  | 26780     | 235  | 101 | 0.004 | 0.096  |
| 1.2      | 10  | 10530                        | 55   | 40 | 0.003 | 0.036  | 26780     | 235  | 101 | 0.004 | 0.060  |
| 1.2      | 12  | 10530                        | 55   | 40 | 0.003 | 0.036  | 26780     | 235  | 101 | 0.004 | 0.060  |
| 1.2      | 16  | 9360                         | 45   | 35 | 0.002 | 0.022  | 23800     | 185  | 90  | 0.004 | 0.036  |
| 1.2      | 20  | 7020                         | 30   | 26 | 0.002 | 0.014  | 17850     | 120  | 67  | 0.003 | 0.024  |
| 1.5      | 4   | 10200                        | 70   | 48 | 0.003 | 0.180  | 26400     | 300  | 124 | 0.006 | 0.300  |
| 1.5      | 6   | 10200                        | 70   | 48 | 0.003 | 0.126  | 26400     | 300  | 124 | 0.006 | 0.210  |
| 1.5      | 8   | 9180                         | 55   | 43 | 0.003 | 0.072  | 23760     | 245  | 112 | 0.005 | 0.120  |
| 1.5      | 10  | 9180                         | 55   | 43 | 0.003 | 0.072  | 23760     | 245  | 112 | 0.005 | 0.120  |
| 1.5      | 12  | 9180                         | 55   | 43 | 0.003 | 0.072  | 23760     | 245  | 112 | 0.005 | 0.120  |
| 1.5      | 14  | 9180                         | 55   | 43 | 0.003 | 0.045  | 23760     | 245  | 112 | 0.005 | 0.075  |
| 1.5      | 16  | 8160                         | 45   | 38 | 0.003 | 0.045  | 21120     | 190  | 100 | 0.004 | 0.075  |
| 1.5      | 20  | 8160                         | 45   | 38 | 0.003 | 0.027  | 21120     | 190  | 100 | 0.004 | 0.045  |
| 1.5      | 22  | 8160                         | 45   | 38 | 0.003 | 0.027  | 21120     | 190  | 100 | 0.004 | 0.045  |
| 1.5      | 26  | 6120                         | 30   | 29 | 0.002 | 0.018  | 15840     | 125  | 75  | 0.004 | 0.030  |
| 2.0      | 6   | 8640                         | 80   | 54 | 0.005 | 0.240  | 21600     | 310  | 136 | 0.007 | 0.400  |
| 2.0      | 8   | 8640                         | 80   | 54 | 0.005 | 0.168  | 21600     | 310  | 136 | 0.007 | 0.280  |
| 2.0      | 10  | 8640                         | 80   | 54 | 0.005 | 0.168  | 21600     | 310  | 136 | 0.007 | 0.280  |
| 2.0      | 12  | 7780                         | 65   | 49 | 0.004 | 0.096  | 19440     | 250  | 122 | 0.006 | 0.160  |
| 2.0      | 14  | 7780                         | 65   | 49 | 0.004 | 0.096  | 19440     | 250  | 122 | 0.006 | 0.160  |
| 2.0      | 16  | 7780                         | 65   | 49 | 0.004 | 0.096  | 19440     | 250  | 122 | 0.006 | 0.160  |
| 2.0      | 20  | 7780                         | 65   | 49 | 0.004 | 0.060  | 19440     | 250  | 122 | 0.006 | 0.100  |
| 2.0      | 22  | 6910                         | 50   | 43 | 0.004 | 0.060  | 17280     | 200  | 109 | 0.006 | 0.100  |
| 2.0      | 26  | 6910                         | 50   | 43 | 0.004 | 0.060  | 17280     | 200  | 109 | 0.006 | 0.100  |
| 2.0      | 30  | 6910                         | 50   | 43 | 0.004 | 0.036  | 17280     | 200  | 109 | 0.006 | 0.060  |
| 2.5      | 8   | 7320                         | 80   | 57 | 0.005 | 0.210  | 18000     | 320  | 141 | 0.009 | 0.350  |
| 2.5      | 10  | 7320                         | 80   | 57 | 0.005 | 0.210  | 18000     | 320  | 141 | 0.009 | 0.350  |
| 2.5      | 12  | 7320                         | 80   | 57 | 0.005 | 0.210  | 18000     | 320  | 141 | 0.009 | 0.350  |
| 2.5      | 14  | 6590                         | 65   | 52 | 0.005 | 0.120  | 16200     | 260  | 127 | 0.008 | 0.200  |
| 2.5      | 16  | 6590                         | 65   | 52 | 0.005 | 0.120  | 16200     | 260  | 127 | 0.008 | 0.200  |
| 2.5      | 20  | 6590                         | 65   | 52 | 0.005 | 0.120  | 16200     | 260  | 127 | 0.008 | 0.200  |
| 2.5      | 26  | 5860                         | 50   | 46 | 0.004 | 0.075  | 14400     | 205  | 113 | 0.007 | 0.125  |
| 2.5      | 30  | 5860                         | 50   | 46 | 0.004 | 0.075  | 14400     | 205  | 113 | 0.007 | 0.125  |
| 3.0      | 8   | 6300                         | 80   | 59 | 0.006 | 0.360  | 15900     | 330  | 150 | 0.010 | 0.600  |
| 3.0      | 10  | 6300                         | 80   | 59 | 0.006 | 0.252  | 15900     | 330  | 150 | 0.010 | 0.420  |
| 3.0      | 12  | 6300                         | 80   | 59 | 0.006 | 0.252  | 15900     | 330  | 150 | 0.010 | 0.420  |
| 3.0      | 14  | 6300                         | 80   | 59 | 0.006 | 0.252  | 15900     | 330  | 150 | 0.010 | 0.420  |
| 3.0      | 16  | 5670                         | 65   | 53 | 0.006 | 0.144  | 14310     | 265  | 135 | 0.009 | 0.240  |
| 3.0      | 20  | 5670                         | 65   | 53 | 0.006 | 0.144  | 14310     | 265  | 135 | 0.009 | 0.240  |
| 3.0      | 26  | 5670                         | 65   | 53 | 0.006 | 0.090  | 14310     | 265  | 135 | 0.009 | 0.150  |
| 3.0      | 30  | 5670                         | 65   | 53 | 0.006 | 0.090  | 14310     | 265  | 135 | 0.009 | 0.150  |
| 3.0      | 35  | 5040                         | 50   | 48 | 0.005 | 0.090  | 12720     | 210  | 120 | 0.008 | 0.150  |
| 3.0      | 40  | 5040                         | 50   | 48 | 0.005 | 0.054  | 12720     | 210  | 120 | 0.008 | 0.090  |
| 4.0      | 10  | 5150                         | 95   | 65 | 0.009 | 0.480  | 12800     | 400  | 161 | 0.016 | 0.800  |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

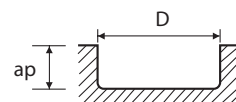
## SEME61 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |     |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|-----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |     |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc  | Fz    | Ap(mm) |
| 4.0      | 12  | 12800                              | 400  | 161 | 0.016 | 0.800  | 8200                                  | 200  | 103 | 0.012 | 0.600  |
| 4.0      | 14  | 12800                              | 400  | 161 | 0.016 | 0.560  | 8200                                  | 200  | 103 | 0.012 | 0.420  |
| 4.0      | 16  | 12800                              | 400  | 161 | 0.016 | 0.560  | 8200                                  | 200  | 103 | 0.012 | 0.420  |
| 4.0      | 20  | 12800                              | 400  | 161 | 0.016 | 0.560  | 8200                                  | 200  | 103 | 0.012 | 0.420  |
| 4.0      | 26  | 11520                              | 325  | 145 | 0.014 | 0.320  | 7380                                  | 160  | 93  | 0.011 | 0.240  |
| 4.0      | 30  | 11520                              | 325  | 145 | 0.014 | 0.320  | 7380                                  | 160  | 93  | 0.011 | 0.240  |
| 4.0      | 35  | 11520                              | 325  | 145 | 0.014 | 0.200  | 7380                                  | 160  | 93  | 0.011 | 0.150  |
| 4.0      | 40  | 11520                              | 325  | 145 | 0.014 | 0.200  | 7380                                  | 160  | 93  | 0.011 | 0.150  |
| 4.0      | 45  | 10240                              | 255  | 129 | 0.012 | 0.200  | 6560                                  | 130  | 82  | 0.010 | 0.150  |
| 4.0      | 50  | 10240                              | 255  | 129 | 0.012 | 0.200  | 6560                                  | 130  | 82  | 0.010 | 0.150  |
| 5.0      | 15  | 11000                              | 500  | 173 | 0.023 | 1.000  | 7000                                  | 240  | 110 | 0.017 | 0.750  |
| 6.0      | 20  | 9500                               | 600  | 179 | 0.032 | 0.840  | 6000                                  | 300  | 113 | 0.025 | 0.630  |
| 6.0      | 30  | 9500                               | 600  | 179 | 0.032 | 0.840  | 6000                                  | 300  | 113 | 0.025 | 0.630  |
| 8.0      | 25  | 7200                               | 640  | 181 | 0.044 | 1.120  | 4550                                  | 300  | 114 | 0.033 | 0.840  |
| 8.0      | 35  | 7200                               | 640  | 181 | 0.044 | 1.120  | 4550                                  | 300  | 114 | 0.033 | 0.840  |
| 10.0     | 30  | 6000                               | 640  | 188 | 0.053 | 2.000  | 4000                                  | 300  | 126 | 0.038 | 1.500  |
| 10.0     | 40  | 6000                               | 640  | 188 | 0.053 | 1.400  | 4000                                  | 300  | 126 | 0.038 | 1.050  |
| 12.0     | 32  | 5000                               | 500  | 188 | 0.050 | 2.400  | 3340                                  | 270  | 126 | 0.040 | 1.800  |
| 12.0     | 45  | 5000                               | 500  | 188 | 0.050 | 1.680  | 3340                                  | 270  | 126 | 0.040 | 1.260  |
| 16.0     | 35  | 3720                               | 450  | 187 | 0.060 | 3.200  | 2520                                  | 210  | 127 | 0.042 | 2.400  |
| 16.0     | 50  | 3720                               | 450  | 187 | 0.060 | 2.240  | 2520                                  | 210  | 127 | 0.042 | 1.680  |
| 20.0     | 40  | 3000                               | 330  | 188 | 0.055 | 4.000  | 1950                                  | 140  | 123 | 0.036 | 3.000  |
| 20.0     | 55  | 3000                               | 330  | 188 | 0.055 | 4.000  | 1950                                  | 140  | 123 | 0.036 | 3.000  |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK CORNER RADIUS

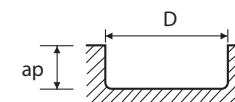
## SEME61 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 4.0      | 12  | 5150                         | 95   | 65 | 0.009 | 0.480  | 12800     | 400  | 161 | 0.016 | 0.800  |
| 4.0      | 14  | 5150                         | 95   | 65 | 0.009 | 0.336  | 12800     | 400  | 161 | 0.016 | 0.560  |
| 4.0      | 16  | 5150                         | 95   | 65 | 0.009 | 0.336  | 12800     | 400  | 161 | 0.016 | 0.560  |
| 4.0      | 20  | 5150                         | 95   | 65 | 0.009 | 0.336  | 12800     | 400  | 161 | 0.016 | 0.560  |
| 4.0      | 26  | 4640                         | 75   | 58 | 0.008 | 0.192  | 11520     | 325  | 145 | 0.014 | 0.320  |
| 4.0      | 30  | 4640                         | 75   | 58 | 0.008 | 0.192  | 11520     | 325  | 145 | 0.014 | 0.320  |
| 4.0      | 35  | 4640                         | 75   | 58 | 0.008 | 0.120  | 11520     | 325  | 145 | 0.014 | 0.200  |
| 4.0      | 40  | 4640                         | 75   | 58 | 0.008 | 0.120  | 11520     | 325  | 145 | 0.014 | 0.200  |
| 4.0      | 45  | 4120                         | 60   | 52 | 0.007 | 0.120  | 10240     | 255  | 129 | 0.012 | 0.200  |
| 4.0      | 50  | 4120                         | 60   | 52 | 0.007 | 0.120  | 10240     | 255  | 129 | 0.012 | 0.200  |
| 5.0      | 15  | 4560                         | 120  | 72 | 0.013 | 0.600  | 11000     | 500  | 173 | 0.023 | 1.000  |
| 6.0      | 20  | 3930                         | 140  | 74 | 0.018 | 0.504  | 9500      | 600  | 179 | 0.032 | 0.840  |
| 6.0      | 30  | 3930                         | 140  | 74 | 0.018 | 0.504  | 9500      | 600  | 179 | 0.032 | 0.840  |
| 8.0      | 25  | 3020                         | 140  | 76 | 0.023 | 0.672  | 7200      | 640  | 181 | 0.044 | 1.120  |
| 8.0      | 35  | 3020                         | 140  | 76 | 0.023 | 0.672  | 7200      | 640  | 181 | 0.044 | 1.120  |
| 10.0     | 30  | 2420                         | 140  | 76 | 0.029 | 1.200  | 6000      | 640  | 188 | 0.053 | 2.000  |
| 10.0     | 40  | 2420                         | 140  | 76 | 0.029 | 0.840  | 6000      | 640  | 188 | 0.053 | 1.400  |
| 12.0     | 32  | 2000                         | 120  | 75 | 0.030 | 1.440  | 5000      | 500  | 188 | 0.050 | 2.400  |
| 12.0     | 45  | 2000                         | 120  | 75 | 0.030 | 1.008  | 5000      | 500  | 188 | 0.050 | 1.680  |
| 16.0     | 35  | 1540                         | 95   | 77 | 0.031 | 1.920  | 3720      | 450  | 187 | 0.060 | 3.200  |
| 16.0     | 50  | 1540                         | 95   | 77 | 0.031 | 1.344  | 3720      | 450  | 187 | 0.060 | 2.240  |
| 20.0     | 40  | 1200                         | 70   | 75 | 0.029 | 2.400  | 3000      | 330  | 188 | 0.055 | 4.000  |
| 20.0     | 55  | 1200                         | 70   | 75 | 0.029 | 2.400  | 3000      | 330  | 188 | 0.055 | 4.000  |

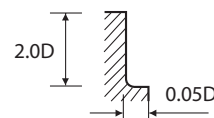


Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS

## SEME01 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

| MATERIAL | P                                  |      |     |       |                                       |      |     |       |
|----------|------------------------------------|------|-----|-------|---------------------------------------|------|-----|-------|
|          | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |
| HARDNESS | ~ HRC 35                           |      |     |       | HRC 35 ~ HRC 45                       |      |     |       |
| STRENGTH | ~ 1100N/mm <sup>2</sup>            |      |     |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |
| DIAMETER | RPM                                | FEED | Vc  | Fz    | RPM                                   | FEED | Vc  | Fz    |
| 1.0      | 27600                              | 300  | 87  | 0.003 | 18000                                 | 220  | 57  | 0.003 |
| 1.2      | 24800                              | 305  | 93  | 0.003 | 15750                                 | 225  | 59  | 0.004 |
| 1.5      | 22000                              | 310  | 104 | 0.004 | 13500                                 | 230  | 64  | 0.004 |
| 2.0      | 18000                              | 320  | 113 | 0.004 | 11560                                 | 240  | 73  | 0.005 |
| 2.5      | 15000                              | 330  | 118 | 0.006 | 9500                                  | 250  | 75  | 0.007 |
| 3.0      | 13240                              | 340  | 125 | 0.006 | 8560                                  | 260  | 81  | 0.008 |
| 3.5      | 11980                              | 380  | 132 | 0.008 | 7690                                  | 280  | 85  | 0.009 |
| 4.0      | 10720                              | 420  | 135 | 0.010 | 6820                                  | 300  | 86  | 0.011 |
| 4.5      | 9940                               | 425  | 141 | 0.011 | 6310                                  | 330  | 89  | 0.013 |
| 5.0      | 9160                               | 430  | 144 | 0.012 | 5800                                  | 360  | 91  | 0.016 |
| 5.5      | 8530                               | 430  | 147 | 0.013 | 5420                                  | 360  | 94  | 0.017 |
| 6.0      | 7900                               | 430  | 149 | 0.014 | 5040                                  | 360  | 95  | 0.018 |
| 7.0      | 6950                               | 445  | 153 | 0.016 | 4420                                  | 360  | 97  | 0.020 |
| 8.0      | 6000                               | 460  | 151 | 0.019 | 3800                                  | 360  | 96  | 0.024 |
| 10.0     | 5040                               | 460  | 158 | 0.023 | 3280                                  | 360  | 103 | 0.027 |
| 11.0     | 4580                               | 410  | 158 | 0.022 | 3030                                  | 340  | 105 | 0.028 |
| 12.0     | 4120                               | 360  | 155 | 0.022 | 2780                                  | 320  | 105 | 0.029 |
| 14.0     | 3610                               | 320  | 159 | 0.022 | 2440                                  | 275  | 107 | 0.028 |
| 16.0     | 3100                               | 280  | 156 | 0.023 | 2100                                  | 230  | 106 | 0.027 |
| 20.0     | 2520                               | 230  | 158 | 0.023 | 1640                                  | 180  | 103 | 0.027 |



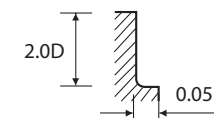
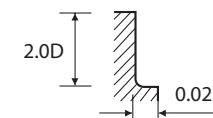
\* 1.5XD Axial cutting depth should be for DIA over 16mm

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE CORNER RADIUS

## SEME01 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

| MATERIAL | P                            |      |    |       | K         |      |     |       |
|----------|------------------------------|------|----|-------|-----------|------|-----|-------|
|          | HARDENED STEELS              |      |    |       | CAST IRON |      |     |       |
| HARDNESS | HRC 45 ~ HRC 55              |      |    |       |           |      |     |       |
| STRENGTH | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |           |      |     |       |
| DIAMETER | RPM                          | FEED | Vc | Fz    | RPM       | FEED | Vc  | Fz    |
| 1.0      | 11000                        | 120  | 35 | 0.003 | 27600     | 300  | 87  | 0.003 |
| 1.2      | 9750                         | 120  | 37 | 0.003 | 24800     | 305  | 93  | 0.003 |
| 1.5      | 8500                         | 120  | 40 | 0.004 | 22000     | 310  | 104 | 0.004 |
| 2.0      | 7200                         | 130  | 45 | 0.005 | 18000     | 320  | 113 | 0.004 |
| 2.5      | 6100                         | 130  | 48 | 0.005 | 15000     | 330  | 118 | 0.006 |
| 3.0      | 5280                         | 130  | 50 | 0.006 | 13240     | 340  | 125 | 0.006 |
| 3.5      | 4790                         | 135  | 53 | 0.007 | 11980     | 380  | 132 | 0.008 |
| 4.0      | 4300                         | 140  | 54 | 0.008 | 10720     | 420  | 135 | 0.010 |
| 4.5      | 4050                         | 155  | 57 | 0.010 | 9940      | 425  | 141 | 0.011 |
| 5.0      | 3800                         | 170  | 60 | 0.011 | 9160      | 430  | 144 | 0.012 |
| 5.5      | 3540                         | 170  | 61 | 0.012 | 8530      | 430  | 147 | 0.013 |
| 6.0      | 3280                         | 170  | 62 | 0.013 | 7900      | 430  | 149 | 0.014 |
| 7.0      | 2900                         | 170  | 64 | 0.015 | 6950      | 445  | 153 | 0.016 |
| 8.0      | 2520                         | 170  | 63 | 0.017 | 6000      | 460  | 151 | 0.019 |
| 10.0     | 2020                         | 170  | 63 | 0.021 | 5040      | 460  | 158 | 0.023 |
| 11.0     | 1850                         | 155  | 64 | 0.021 | 4580      | 410  | 158 | 0.022 |
| 12.0     | 1680                         | 140  | 63 | 0.021 | 4120      | 360  | 155 | 0.022 |
| 14.0     | 1480                         | 125  | 65 | 0.021 | 3610      | 320  | 159 | 0.022 |
| 16.0     | 1280                         | 115  | 64 | 0.022 | 3100      | 280  | 156 | 0.023 |
| 20.0     | 1000                         | 90   | 63 | 0.023 | 2520      | 230  | 158 | 0.023 |



\* 1.5XD Axial cutting depth should be for DIA over 16mm



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

SEME64 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 1.0      | 4   | 33100                              | 360  | 104 | 0.003 | 0.021  | 21600                                 | 260  | 68 | 0.003 | 0.016  |
| 1.0      | 6   | 29790                              | 290  | 94  | 0.002 | 0.012  | 19440                                 | 210  | 61 | 0.003 | 0.009  |
| 1.0      | 8   | 29790                              | 290  | 94  | 0.002 | 0.012  | 19440                                 | 210  | 61 | 0.003 | 0.009  |
| 1.0      | 10  | 29790                              | 290  | 94  | 0.002 | 0.008  | 19440                                 | 210  | 61 | 0.003 | 0.006  |
| 1.0      | 12  | 26480                              | 230  | 83  | 0.002 | 0.008  | 17280                                 | 165  | 54 | 0.002 | 0.006  |
| 1.0      | 16  | 19860                              | 150  | 62  | 0.002 | 0.005  | 12960                                 | 110  | 41 | 0.002 | 0.003  |
| 1.0      | 20  | 19860                              | 150  | 62  | 0.002 | 0.003  | 12960                                 | 110  | 41 | 0.002 | 0.002  |
| 1.0      | 22  | 9930                               | 65   | 31  | 0.002 | 0.003  | 6480                                  | 45   | 20 | 0.002 | 0.002  |
| 1.0      | 26  | 9930                               | 65   | 31  | 0.002 | 0.003  | 6480                                  | 45   | 20 | 0.002 | 0.002  |
| 1.2      | 3   | 29750                              | 365  | 112 | 0.003 | 0.036  | 18900                                 | 265  | 71 | 0.004 | 0.027  |
| 1.2      | 4   | 29750                              | 365  | 112 | 0.003 | 0.025  | 18900                                 | 265  | 71 | 0.004 | 0.01 9 |
| 1.2      | 6   | 29750                              | 365  | 112 | 0.003 | 0.025  | 18900                                 | 265  | 71 | 0.004 | 0.019  |
| 1.2      | 8   | 26780                              | 295  | 101 | 0.003 | 0.014  | 17010                                 | 215  | 64 | 0.003 | 0.011  |
| 1.2      | 10  | 26780                              | 295  | 101 | 0.003 | 0.009  | 17010                                 | 215  | 64 | 0.003 | 0.007  |
| 1.2      | 12  | 26780                              | 295  | 101 | 0.003 | 0.009  | 17010                                 | 215  | 64 | 0.003 | 0.007  |
| 1.2      | 16  | 23800                              | 235  | 90  | 0.002 | 0.005  | 15120                                 | 170  | 57 | 0.003 | 0.004  |
| 1.2      | 20  | 17850                              | 155  | 67  | 0.002 | 0.004  | 11340                                 | 110  | 43 | 0.002 | 0.003  |
| 1.5      | 4   | 26400                              | 370  | 124 | 0.004 | 0.045  | 16200                                 | 270  | 76 | 0.004 | 0.034  |
| 1.5      | 6   | 26400                              | 370  | 124 | 0.004 | 0.032  | 16200                                 | 270  | 76 | 0.004 | 0.024  |
| 1.5      | 8   | 23760                              | 300  | 112 | 0.003 | 0.018  | 14580                                 | 220  | 69 | 0.004 | 0.014  |
| 1.5      | 10  | 23760                              | 300  | 112 | 0.003 | 0.018  | 14580                                 | 220  | 69 | 0.004 | 0.014  |
| 1.5      | 12  | 23760                              | 300  | 112 | 0.003 | 0.018  | 14580                                 | 220  | 69 | 0.004 | 0.014  |
| 1.5      | 14  | 23760                              | 300  | 112 | 0.003 | 0.011  | 14580                                 | 220  | 69 | 0.004 | 0.008  |
| 1.5      | 16  | 21120                              | 235  | 100 | 0.003 | 0.011  | 12960                                 | 175  | 61 | 0.003 | 0.008  |
| 1.5      | 20  | 21120                              | 235  | 100 | 0.003 | 0.007  | 12960                                 | 175  | 61 | 0.003 | 0.005  |
| 1.5      | 22  | 21120                              | 235  | 100 | 0.003 | 0.007  | 12960                                 | 175  | 61 | 0.003 | 0.005  |
| 1.5      | 26  | 15840                              | 155  | 75  | 0.002 | 0.005  | 9720                                  | 115  | 46 | 0.003 | 0.003  |
| 2.0      | 6   | 21600                              | 380  | 136 | 0.004 | 0.060  | 13800                                 | 280  | 87 | 0.005 | 0.045  |
| 2.0      | 8   | 21600                              | 380  | 136 | 0.004 | 0.042  | 13800                                 | 280  | 87 | 0.005 | 0.032  |
| 2.0      | 10  | 21600                              | 380  | 136 | 0.004 | 0.042  | 13800                                 | 280  | 87 | 0.005 | 0.032  |
| 2.0      | 12  | 19440                              | 310  | 122 | 0.004 | 0.024  | 12420                                 | 225  | 78 | 0.005 | 0.018  |
| 2.0      | 14  | 19440                              | 310  | 122 | 0.004 | 0.024  | 12420                                 | 225  | 78 | 0.005 | 0.018  |
| 2.0      | 16  | 19440                              | 310  | 122 | 0.004 | 0.024  | 12420                                 | 225  | 78 | 0.005 | 0.018  |
| 2.0      | 20  | 19440                              | 310  | 122 | 0.004 | 0.015  | 12420                                 | 225  | 78 | 0.005 | 0.011  |
| 2.0      | 22  | 17280                              | 245  | 109 | 0.004 | 0.015  | 11040                                 | 180  | 69 | 0.004 | 0.011  |
| 2.0      | 26  | 17280                              | 245  | 109 | 0.004 | 0.015  | 11040                                 | 180  | 69 | 0.004 | 0.011  |
| 2.0      | 30  | 17280                              | 245  | 109 | 0.004 | 0.009  | 11040                                 | 180  | 69 | 0.004 | 0.007  |
| 2.5      | 8   | 18000                              | 390  | 141 | 0.005 | 0.053  | 11400                                 | 300  | 90 | 0.007 | 0.039  |
| 2.5      | 10  | 18000                              | 390  | 141 | 0.005 | 0.053  | 11400                                 | 300  | 90 | 0.007 | 0.039  |
| 2.5      | 12  | 18000                              | 390  | 141 | 0.005 | 0.053  | 11400                                 | 300  | 90 | 0.007 | 0.039  |
| 2.5      | 14  | 16200                              | 315  | 127 | 0.005 | 0.030  | 10260                                 | 245  | 81 | 0.006 | 0.023  |
| 2.5      | 16  | 16200                              | 315  | 127 | 0.005 | 0.030  | 10260                                 | 245  | 81 | 0.006 | 0.023  |
| 2.5      | 20  | 16200                              | 315  | 127 | 0.005 | 0.030  | 10260                                 | 245  | 81 | 0.006 | 0.023  |
| 2.5      | 26  | 14400                              | 250  | 113 | 0.004 | 0.019  | 9120                                  | 190  | 72 | 0.005 | 0.014  |
| 2.5      | 30  | 14400                              | 250  | 113 | 0.004 | 0.019  | 9120                                  | 190  | 72 | 0.005 | 0.014  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

SEME64 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 1.0      | 4   | 13200                        | 140  | 41 | 0.003 | 0.013  | 33100     | 360  | 104 | 0.003 | 0.021  |
| 1.0      | 6   | 11880                        | 115  | 37 | 0.002 | 0.007  | 29790     | 290  | 94  | 0.002 | 0.012  |
| 1.0      | 8   | 11880                        | 115  | 37 | 0.002 | 0.007  | 29790     | 290  | 94  | 0.002 | 0.012  |
| 1.0      | 10  | 11880                        | 115  | 37 | 0.002 | 0.005  | 29790     | 290  | 94  | 0.002 | 0.008  |
| 1.0      | 12  | 10560                        | 90   | 33 | 0.002 | 0.005  | 26480     | 230  | 83  | 0.002 | 0.008  |
| 1.0      | 16  | 7920                         | 60   | 25 | 0.002 | 0.003  | 19860     | 150  | 62  | 0.002 | 0.005  |
| 1.0      | 20  | 7920                         | 60   | 25 | 0.002 | 0.002  | 19860     | 150  | 62  | 0.002 | 0.003  |
| 1.0      | 22  | 3960                         | 25   | 12 | 0.002 | 0.002  | 9930      | 65   | 31  | 0.002 | 0.003  |
| 1.0      | 26  | 3960                         | 25   | 12 | 0.002 | 0.002  | 9930      | 65   | 31  | 0.002 | 0.003  |
| 1.2      | 3   | 11700                        | 140  | 44 | 0.003 | 0.022  | 29750     | 365  | 112 | 0.003 | 0.036  |
| 1.2      | 4   | 11700                        | 140  | 44 | 0.003 | 0.015  | 29750     | 365  | 112 | 0.003 | 0.025  |
| 1.2      | 6   | 11700                        | 140  | 44 | 0.003 | 0.015  | 29750     | 365  | 112 | 0.003 | 0.025  |
| 1.2      | 8   | 10530                        | 115  | 40 | 0.003 | 0.009  | 26780     | 295  | 101 | 0.003 | 0.014  |
| 1.2      | 10  | 10530                        | 115  | 40 | 0.003 | 0.005  | 26780     | 295  | 101 | 0.003 | 0.009  |
| 1.2      | 12  | 10530                        | 115  | 40 | 0.003 | 0.005  | 26780     | 295  | 101 | 0.003 | 0.009  |
| 1.2      | 16  | 9360                         | 90   | 35 | 0.002 | 0.003  | 23800     | 235  | 90  | 0.002 | 0.005  |
| 1.2      | 20  | 7020                         | 60   | 26 | 0.002 | 0.002  | 17850     | 155  | 67  | 0.002 | 0.004  |
| 1.5      | 4   | 10200                        | 140  | 48 | 0.003 | 0.027  | 26400     | 370  | 124 | 0.004 | 0.045  |
| 1.5      | 6   | 10200                        | 140  | 48 | 0.003 | 0.019  | 26400     | 370  | 124 | 0.004 | 0.032  |
| 1.5      | 8   | 9180                         | 115  | 43 | 0.003 | 0.011  | 23760     | 300  | 112 | 0.003 | 0.018  |
| 1.5      | 10  | 9180                         | 115  | 43 | 0.003 | 0.011  | 23760     | 300  | 112 | 0.003 | 0.018  |
| 1.5      | 12  | 9180                         | 115  | 43 | 0.003 | 0.011  | 23760     | 300  | 112 | 0.003 | 0.018  |
| 1.5      | 14  | 9180                         | 115  | 43 | 0.003 | 0.007  | 23760     | 300  | 112 | 0.003 | 0.011  |
| 1.5      | 16  | 8160                         | 90   | 38 | 0.003 | 0.007  | 21120     | 235  | 100 | 0.003 | 0.011  |
| 1.5      | 20  | 8160                         | 90   | 38 | 0.003 | 0.004  | 21120     | 235  | 100 | 0.003 | 0.007  |
| 1.5      | 22  | 8160                         | 90   | 38 | 0.003 | 0.004  | 21120     | 235  | 100 | 0.003 | 0.007  |
| 1.5      | 26  | 6120                         | 60   | 29 | 0.002 | 0.003  | 15840     | 155  | 75  | 0.002 | 0.005  |
| 2.0      | 6   | 8640                         | 150  | 54 | 0.004 | 0.036  | 21600     | 380  | 136 | 0.004 | 0.060  |
| 2.0      | 8   | 8640                         | 150  | 54 | 0.004 | 0.025  | 21600     | 380  | 136 | 0.004 | 0.042  |
| 2.0      | 10  | 8640                         | 150  | 54 | 0.004 | 0.025  | 21600     | 380  | 136 | 0.004 | 0.042  |
| 2.0      | 12  | 7780                         | 120  | 49 | 0.004 | 0.014  | 19440     | 310  | 122 | 0.004 | 0.024  |
| 2.0      | 14  | 7780                         | 120  | 49 | 0.004 | 0.014  | 19440     | 310  | 122 | 0.004 | 0.024  |
| 2.0      | 16  | 7780                         | 120  | 49 | 0.004 | 0.014  | 19440     | 310  | 122 | 0.004 | 0.024  |
| 2.0      | 20  | 7780                         | 120  | 49 | 0.004 | 0.009  | 19440     | 310  | 122 | 0.004 | 0.015  |
| 2.0      | 22  | 6910                         | 95   | 43 | 0.003 | 0.009  | 17280     | 245  | 109 | 0.004 | 0.015  |
| 2.0      | 26  | 6910                         | 95   | 43 | 0.003 | 0.009  | 17280     | 245  | 109 | 0.004 | 0.015  |
| 2.0      | 30  | 6910                         | 95   | 43 | 0.003 | 0.005  | 17280     | 245  | 109 | 0.004 | 0.009  |
| 2.5      | 8   | 7320                         | 150  | 57 | 0.005 | 0.032  | 18000     | 390  | 141 | 0.005 | 0.053  |
| 2.5      | 10  | 7320                         | 150  | 57 | 0.005 | 0.032  | 18000     | 390  | 141 | 0.005 | 0.053  |
| 2.5      | 12  | 7320                         | 150  | 57 | 0.005 | 0.032  | 18000     | 390  | 141 | 0.005 | 0.053  |
| 2.5      | 14  | 6590                         | 120  | 52 | 0.005 | 0.018  | 16200     | 315  | 127 | 0.005 | 0.030  |
| 2.5      | 16  | 6590                         | 120  | 52 | 0.005 | 0.018  | 16200     | 315  | 127 | 0.005 | 0.030  |
| 2.5      | 20  | 6590                         | 120  | 52 | 0.005 | 0.018  | 16200     | 315  | 127 | 0.005 | 0.030  |
| 2.5      | 26  | 5860                         | 95   | 46 | 0.004 | 0.011  | 14400     | 250  | 113 | 0.004 | 0.019  |
| 2.5      | 30  | 5860                         | 95   | 46 | 0.004 | 0.011  | 14400     | 250  | 113 | 0.004 | 0.019  |

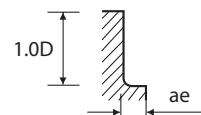


Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

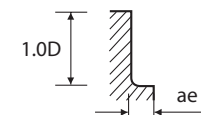
| MATERIAL |     | P                                  |      |     |       |        |                                       |      |     |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|-----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |     |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc  | Fz    | Ap(mm) |
| 3.0      | 8   | 15900                              | 400  | 150 | 0.006 | 0.090  | 10300                                 | 310  | 97  | 0.008 | 0.068  |
| 3.0      | 10  | 15900                              | 400  | 150 | 0.006 | 0.063  | 10300                                 | 310  | 97  | 0.008 | 0.047  |
| 3.0      | 12  | 15900                              | 400  | 150 | 0.006 | 0.063  | 10300                                 | 310  | 97  | 0.008 | 0.047  |
| 3.0      | 14  | 15900                              | 400  | 150 | 0.006 | 0.063  | 10300                                 | 310  | 97  | 0.008 | 0.047  |
| 3.0      | 16  | 14310                              | 325  | 135 | 0.006 | 0.036  | 9270                                  | 250  | 87  | 0.007 | 0.027  |
| 3.0      | 20  | 14310                              | 325  | 135 | 0.006 | 0.036  | 9270                                  | 250  | 87  | 0.007 | 0.027  |
| 3.0      | 26  | 14310                              | 325  | 135 | 0.006 | 0.023  | 9270                                  | 250  | 87  | 0.007 | 0.017  |
| 3.0      | 30  | 14310                              | 325  | 135 | 0.006 | 0.023  | 9270                                  | 250  | 87  | 0.007 | 0.017  |
| 3.0      | 35  | 12720                              | 255  | 120 | 0.005 | 0.023  | 8240                                  | 200  | 78  | 0.006 | 0.017  |
| 3.0      | 40  | 12720                              | 255  | 120 | 0.005 | 0.014  | 8240                                  | 200  | 78  | 0.006 | 0.010  |
| 4.0      | 10  | 12800                              | 500  | 161 | 0.010 | 0.120  | 8200                                  | 360  | 103 | 0.011 | 0.090  |
| 4.0      | 12  | 12800                              | 500  | 161 | 0.010 | 0.120  | 8200                                  | 360  | 103 | 0.011 | 0.090  |
| 4.0      | 14  | 12800                              | 500  | 161 | 0.010 | 0.084  | 8200                                  | 360  | 103 | 0.011 | 0.063  |
| 4.0      | 16  | 12800                              | 500  | 161 | 0.010 | 0.084  | 8200                                  | 360  | 103 | 0.011 | 0.063  |
| 4.0      | 20  | 12800                              | 500  | 161 | 0.010 | 0.084  | 8200                                  | 360  | 103 | 0.011 | 0.063  |
| 4.0      | 26  | 11520                              | 405  | 145 | 0.009 | 0.048  | 7380                                  | 290  | 93  | 0.010 | 0.036  |
| 4.0      | 30  | 11520                              | 405  | 145 | 0.009 | 0.048  | 7380                                  | 290  | 93  | 0.010 | 0.036  |
| 4.0      | 35  | 11520                              | 405  | 145 | 0.009 | 0.030  | 7380                                  | 290  | 93  | 0.010 | 0.023  |
| 4.0      | 40  | 11520                              | 405  | 145 | 0.009 | 0.030  | 7380                                  | 290  | 93  | 0.010 | 0.023  |
| 4.0      | 45  | 10240                              | 320  | 129 | 0.008 | 0.030  | 6560                                  | 230  | 82  | 0.009 | 0.023  |
| 4.0      | 50  | 10240                              | 320  | 129 | 0.008 | 0.030  | 6560                                  | 230  | 82  | 0.009 | 0.023  |
| 5.0      | 15  | 11000                              | 510  | 173 | 0.012 | 0.150  | 7000                                  | 430  | 110 | 0.015 | 0.113  |
| 6.0      | 20  | 9500                               | 510  | 179 | 0.013 | 0.126  | 6000                                  | 430  | 113 | 0.018 | 0.095  |
| 6.0      | 30  | 9500                               | 510  | 179 | 0.013 | 0.126  | 6000                                  | 430  | 113 | 0.018 | 0.095  |
| 8.0      | 25  | 7200                               | 550  | 181 | 0.019 | 0.168  | 4550                                  | 430  | 114 | 0.024 | 0.126  |
| 8.0      | 35  | 7200                               | 550  | 181 | 0.019 | 0.168  | 4550                                  | 430  | 114 | 0.024 | 0.126  |
| 10.0     | 30  | 6000                               | 550  | 188 | 0.023 | 0.300  | 4000                                  | 430  | 126 | 0.027 | 0.225  |
| 10.0     | 40  | 6000                               | 550  | 188 | 0.023 | 0.210  | 4000                                  | 430  | 126 | 0.027 | 0.158  |
| 12.0     | 32  | 5000                               | 430  | 188 | 0.022 | 0.360  | 3340                                  | 380  | 126 | 0.028 | 0.270  |
| 12.0     | 45  | 5000                               | 430  | 188 | 0.022 | 0.252  | 3340                                  | 380  | 126 | 0.028 | 0.189  |
| 16.0     | 35  | 3720                               | 330  | 187 | 0.022 | 0.480  | 2520                                  | 280  | 127 | 0.028 | 0.360  |
| 16.0     | 50  | 3720                               | 330  | 187 | 0.022 | 0.336  | 2520                                  | 280  | 127 | 0.028 | 0.252  |
| 20.0     | 40  | 3000                               | 270  | 188 | 0.023 | 0.600  | 1950                                  | 210  | 123 | 0.027 | 0.450  |
| 20.0     | 55  | 3000                               | 270  | 188 | 0.023 | 0.600  | 1950                                  | 210  | 123 | 0.027 | 0.450  |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK CORNER RADIUS

## SEME64 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 3.0      | 8   | 6300                         | 150  | 59 | 0.006 | 0.054  | 15900     | 400  | 150 | 0.006 | 0.090  |
| 3.0      | 10  | 6300                         | 150  | 59 | 0.006 | 0.038  | 15900     | 400  | 150 | 0.006 | 0.063  |
| 3.0      | 12  | 6300                         | 150  | 59 | 0.006 | 0.038  | 15900     | 400  | 150 | 0.006 | 0.063  |
| 3.0      | 14  | 6300                         | 150  | 59 | 0.006 | 0.038  | 15900     | 400  | 150 | 0.006 | 0.063  |
| 3.0      | 16  | 5670                         | 120  | 53 | 0.005 | 0.022  | 14310     | 325  | 135 | 0.006 | 0.036  |
| 3.0      | 20  | 5670                         | 120  | 53 | 0.005 | 0.022  | 14310     | 325  | 135 | 0.006 | 0.036  |
| 3.0      | 26  | 5670                         | 120  | 53 | 0.005 | 0.014  | 14310     | 325  | 135 | 0.006 | 0.023  |
| 3.0      | 30  | 5670                         | 120  | 53 | 0.005 | 0.014  | 14310     | 325  | 135 | 0.006 | 0.023  |
| 3.0      | 35  | 5040                         | 95   | 48 | 0.005 | 0.014  | 12720     | 255  | 120 | 0.005 | 0.023  |
| 3.0      | 40  | 5040                         | 95   | 48 | 0.005 | 0.008  | 12720     | 255  | 120 | 0.005 | 0.014  |
| 4.0      | 10  | 5150                         | 160  | 65 | 0.008 | 0.072  | 12800     | 500  | 161 | 0.010 | 0.120  |
| 4.0      | 12  | 5150                         | 160  | 65 | 0.008 | 0.072  | 12800     | 500  | 161 | 0.010 | 0.120  |
| 4.0      | 14  | 5150                         | 160  | 65 | 0.008 | 0.050  | 12800     | 500  | 161 | 0.010 | 0.084  |
| 4.0      | 16  | 5150                         | 160  | 65 | 0.008 | 0.050  | 12800     | 500  | 161 | 0.010 | 0.084  |
| 4.0      | 20  | 5150                         | 160  | 65 | 0.008 | 0.050  | 12800     | 500  | 161 | 0.010 | 0.084  |
| 4.0      | 26  | 4640                         | 130  | 58 | 0.007 | 0.029  | 11520     | 405  | 145 | 0.009 | 0.048  |
| 4.0      | 30  | 4640                         | 130  | 58 | 0.007 | 0.029  | 11520     | 405  | 145 | 0.009 | 0.048  |
| 4.0      | 35  | 4640                         | 130  | 58 | 0.007 | 0.018  | 11520     | 405  | 145 | 0.009 | 0.030  |
| 4.0      | 40  | 4640                         | 130  | 58 | 0.007 | 0.018  | 11520     | 405  | 145 | 0.009 | 0.030  |
| 4.0      | 45  | 4120                         | 100  | 52 | 0.006 | 0.018  | 10240     | 320  | 129 | 0.008 | 0.030  |
| 4.0      | 50  | 4120                         | 100  | 52 | 0.006 | 0.018  | 10240     | 320  | 129 | 0.008 | 0.030  |
| 5.0      | 15  | 4560                         | 200  | 72 | 0.011 | 0.090  | 11000     | 510  | 173 | 0.012 | 0.150  |
| 6.0      | 20  | 3930                         | 200  | 74 | 0.013 | 0.076  | 9500      | 510  | 179 | 0.013 | 0.126  |
| 6.0      | 30  | 3930                         | 200  | 74 | 0.013 | 0.076  | 9500      | 510  | 179 | 0.013 | 0.126  |
| 8.0      | 25  | 3020                         | 200  | 76 | 0.017 | 0.101  | 7200      | 550  | 181 | 0.019 | 0.168  |
| 8.0      | 35  | 3020                         | 200  | 76 | 0.017 | 0.101  | 7200      | 550  | 181 | 0.019 | 0.168  |
| 10.0     | 30  | 2420                         | 200  | 76 | 0.021 | 0.180  | 6000      | 550  | 188 | 0.023 | 0.300  |
| 10.0     | 40  | 2420                         | 200  | 76 | 0.021 | 0.126  | 6000      | 550  | 188 | 0.023 | 0.210  |
| 12.0     | 32  | 2000                         | 160  | 75 | 0.020 | 0.216  | 5000      | 430  | 188 | 0.022 | 0.360  |
| 12.0     | 45  | 2000                         | 160  | 75 | 0.020 | 0.151  | 5000      | 430  | 188 | 0.022 | 0.252  |
| 16.0     | 35  | 1540                         | 135  | 77 | 0.022 | 0.288  | 3720      | 330  | 187 | 0.022 | 0.480  |
| 16.0     | 50  | 1540                         | 135  | 77 | 0.022 | 0.202  | 3720      | 330  | 187 | 0.022 | 0.336  |
| 20.0     | 40  | 1200                         | 100  | 75 | 0.021 | 0.360  | 3000      | 270  | 188 | 0.023 | 0.600  |
| 20.0     | 55  | 1200                         | 100  | 75 | 0.021 | 0.360  | 3000      | 270  | 188 | 0.023 | 0.600  |

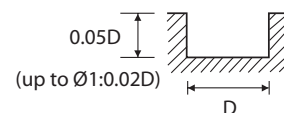
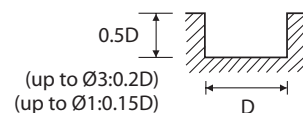


Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE

## SEME35 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

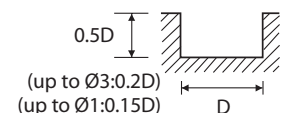
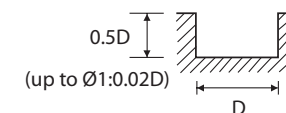
| MATERIAL | P                                  |      |     |       |                                       |      |    |       |                              |      |    |       |
|----------|------------------------------------|------|-----|-------|---------------------------------------|------|----|-------|------------------------------|------|----|-------|
|          | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       | HARDENED STEELS              |      |    |       |
| HARDNESS | ~ HRC 35                           |      |     |       | HRC 35 ~ HRC 45                       |      |    |       | HRC 45 ~ HRC 55              |      |    |       |
| STRENGTH | ~ 1100N/mm <sup>2</sup>            |      |     |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |
| DIAMETER | RPM                                | FEED | Vc  | Fz    | RPM                                   | FEED | Vc | Fz    | RPM                          | FEED | Vc | Fz    |
| 0.1      | 42000                              | 80   | 13  | 0.001 | 25200                                 | 47   | 8  | 0.001 | 16800                        | 16   | 5  | 0.000 |
| 0.2      | 42000                              | 85   | 26  | 0.001 | 25200                                 | 50   | 16 | 0.001 | 16800                        | 17   | 11 | 0.001 |
| 0.3      | 39000                              | 90   | 37  | 0.001 | 23400                                 | 54   | 22 | 0.001 | 15600                        | 18   | 15 | 0.001 |
| 0.4      | 39000                              | 95   | 49  | 0.001 | 23400                                 | 57   | 29 | 0.001 | 15600                        | 19   | 20 | 0.001 |
| 0.5      | 36000                              | 110  | 57  | 0.002 | 21600                                 | 66   | 34 | 0.002 | 14400                        | 22   | 23 | 0.001 |
| 0.6      | 32000                              | 125  | 60  | 0.002 | 19200                                 | 76   | 36 | 0.002 | 12800                        | 25   | 24 | 0.001 |
| 0.7      | 28000                              | 140  | 62  | 0.003 | 16800                                 | 85   | 37 | 0.003 | 11200                        | 28   | 25 | 0.001 |
| 0.8      | 25000                              | 155  | 63  | 0.003 | 15000                                 | 95   | 38 | 0.003 | 10000                        | 32   | 25 | 0.002 |
| 0.9      | 23500                              | 165  | 66  | 0.004 | 14100                                 | 98   | 40 | 0.003 | 9400                         | 33   | 27 | 0.002 |
| 1.0      | 21500                              | 170  | 68  | 0.004 | 12900                                 | 101  | 41 | 0.004 | 8600                         | 34   | 27 | 0.002 |
| 1.2      | 18000                              | 175  | 68  | 0.005 | 10800                                 | 104  | 41 | 0.005 | 7200                         | 35   | 27 | 0.002 |
| 1.5      | 15000                              | 180  | 71  | 0.006 | 9000                                  | 107  | 42 | 0.006 | 6000                         | 36   | 28 | 0.003 |
| 2.0      | 11560                              | 200  | 73  | 0.009 | 7560                                  | 125  | 48 | 0.008 | 5040                         | 37   | 32 | 0.004 |
| 2.5      | 10240                              | 210  | 80  | 0.010 | 6560                                  | 135  | 52 | 0.010 | 4200                         | 39   | 33 | 0.005 |
| 3.0      | 8920                               | 220  | 84  | 0.012 | 5560                                  | 145  | 52 | 0.013 | 3360                         | 42   | 32 | 0.006 |
| 3.5      | 8240                               | 270  | 91  | 0.016 | 5090                                  | 170  | 56 | 0.017 | 3150                         | 42   | 35 | 0.007 |
| 4.0      | 7560                               | 315  | 95  | 0.021 | 4620                                  | 190  | 58 | 0.021 | 2940                         | 42   | 37 | 0.007 |
| 4.5      | 6930                               | 325  | 98  | 0.023 | 4200                                  | 195  | 59 | 0.023 | 2630                         | 47   | 37 | 0.009 |
| 5.0      | 6300                               | 335  | 99  | 0.027 | 3780                                  | 200  | 59 | 0.026 | 2320                         | 53   | 36 | 0.011 |
| 5.5      | 5930                               | 350  | 102 | 0.030 | 3570                                  | 215  | 62 | 0.030 | 2160                         | 55   | 37 | 0.013 |
| 6.0      | 5560                               | 370  | 105 | 0.033 | 3360                                  | 230  | 63 | 0.034 | 2000                         | 58   | 38 | 0.015 |
| 6.5      | 5220                               | 375  | 107 | 0.036 | 3150                                  | 225  | 64 | 0.036 | 1920                         | 63   | 39 | 0.016 |
| 7.0      | 4880                               | 385  | 107 | 0.039 | 2940                                  | 220  | 65 | 0.037 | 1840                         | 68   | 40 | 0.018 |
| 7.5      | 4540                               | 390  | 107 | 0.043 | 2730                                  | 215  | 64 | 0.039 | 1760                         | 74   | 41 | 0.021 |
| 8.0      | 4200                               | 400  | 106 | 0.048 | 2520                                  | 210  | 63 | 0.042 | 1680                         | 79   | 42 | 0.024 |
| 8.5      | 3965                               | 385  | 106 | 0.049 | 2390                                  | 200  | 64 | 0.042 | 1600                         | 74   | 43 | 0.023 |
| 9.0      | 3730                               | 375  | 105 | 0.050 | 2260                                  | 190  | 64 | 0.042 | 1520                         | 68   | 43 | 0.022 |
| 9.5      | 3495                               | 355  | 104 | 0.051 | 2130                                  | 180  | 64 | 0.042 | 1440                         | 63   | 43 | 0.022 |
| 10.0     | 3260                               | 345  | 102 | 0.053 | 2000                                  | 170  | 63 | 0.043 | 1360                         | 63   | 43 | 0.023 |
| 10.5     | 3130                               | 330  | 103 | 0.053 | 1920                                  | 160  | 63 | 0.042 | 1310                         | 61   | 43 | 0.023 |
| 11.0     | 3000                               | 320  | 104 | 0.053 | 1840                                  | 150  | 64 | 0.041 | 1260                         | 58   | 44 | 0.023 |
| 11.5     | 2870                               | 305  | 104 | 0.053 | 1760                                  | 140  | 64 | 0.040 | 1210                         | 58   | 44 | 0.024 |
| 12.0     | 2740                               | 295  | 103 | 0.054 | 1680                                  | 135  | 63 | 0.040 | 1160                         | 58   | 44 | 0.025 |
| 13.0     | 2605                               | 280  | 106 | 0.054 | 1600                                  | 130  | 65 | 0.041 | 1095                         | 55   | 45 | 0.025 |
| 14.0     | 2470                               | 265  | 109 | 0.054 | 1520                                  | 125  | 67 | 0.041 | 1030                         | 49   | 45 | 0.024 |
| 15.0     | 2335                               | 245  | 110 | 0.052 | 1440                                  | 120  | 68 | 0.042 | 965                          | 45   | 45 | 0.023 |
| 16.0     | 2200                               | 230  | 111 | 0.052 | 1360                                  | 115  | 68 | 0.042 | 900                          | 42   | 45 | 0.023 |
| 17.0     | 2070                               | 215  | 111 | 0.052 | 1285                                  | 105  | 69 | 0.041 | 845                          | 39   | 45 | 0.023 |
| 18.0     | 1940                               | 205  | 110 | 0.053 | 1210                                  | 100  | 68 | 0.041 | 790                          | 37   | 45 | 0.023 |
| 19.0     | 1810                               | 190  | 108 | 0.052 | 1135                                  | 90   | 68 | 0.040 | 735                          | 34   | 44 | 0.023 |
| 20.0     | 1680                               | 180  | 106 | 0.054 | 1060                                  | 84   | 67 | 0.040 | 680                          | 32   | 43 | 0.024 |
| 21.0     | 1615                               | 170  | 107 | 0.053 | 1015                                  | 82   | 67 | 0.040 | 650                          | 29   | 43 | 0.022 |
| 22.0     | 1550                               | 165  | 107 | 0.053 | 970                                   | 80   | 67 | 0.041 | 620                          | 27   | 43 | 0.022 |
| 23.0     | 1480                               | 150  | 107 | 0.051 | 925                                   | 78   | 67 | 0.042 | 600                          | 25   | 43 | 0.021 |
| 24.0     | 1425                               | 140  | 107 | 0.049 | 885                                   | 76   | 67 | 0.043 | 570                          | 23   | 43 | 0.020 |
| 25.0     | 1360                               | 135  | 107 | 0.050 | 840                                   | 74   | 66 | 0.044 | 540                          | 21   | 42 | 0.019 |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE

## SEME35 SERIES

RPM = rev./min.      Vc = m/min.  
FEED = mm/min.      Fz = mm/tooth

| MATERIAL | M                |      |    |       | K         |      |     |       |
|----------|------------------|------|----|-------|-----------|------|-----|-------|
|          | STAINLESS STEELS |      |    |       | CAST IRON |      |     |       |
| HARDNESS |                  |      |    |       |           |      |     |       |
| STRENGTH |                  |      |    |       |           |      |     |       |
| DIAMETER | RPM              | FEED | Vc | Fz    | RPM       | FEED | Vc  | Fz    |
| 0.1      | 21000            | 40   | 7  | 0.001 | 42000     | 80   | 13  | 0.001 |
| 0.2      | 21000            | 39   | 13 | 0.001 | 42000     | 85   | 26  | 0.001 |
| 0.3      | 19500            | 45   | 18 | 0.001 | 39000     | 90   | 37  | 0.001 |
| 0.4      | 19500            | 47   | 25 | 0.001 | 39000     | 95   | 49  | 0.001 |
| 0.5      | 18000            | 55   | 28 | 0.002 | 36000     | 110  | 57  | 0.002 |
| 0.6      | 16000            | 63   | 30 | 0.002 | 32000     | 125  | 60  | 0.002 |
| 0.7      | 14000            | 70   | 31 | 0.003 | 28000     | 140  | 62  | 0.003 |
| 0.8      | 12500            | 79   | 31 | 0.003 | 25000     | 155  | 63  | 0.003 |
| 0.9      | 11750            | 81   | 33 | 0.003 | 23500     | 165  | 66  | 0.004 |
| 1.0      | 10750            | 84   | 34 | 0.004 | 21500     | 170  | 68  | 0.004 |
| 1.2      | 9000             | 87   | 34 | 0.005 | 18000     | 175  | 68  | 0.005 |
| 1.5      | 7500             | 89   | 35 | 0.006 | 15000     | 180  | 71  | 0.006 |
| 2.0      | 6300             | 95   | 40 | 0.008 | 11560     | 200  | 73  | 0.009 |
| 2.5      | 5460             | 110  | 43 | 0.010 | 10240     | 210  | 80  | 0.010 |
| 3.0      | 4620             | 125  | 44 | 0.014 | 8920      | 220  | 84  | 0.012 |
| 3.5      | 4250             | 140  | 47 | 0.016 | 8240      | 270  | 91  | 0.016 |
| 4.0      | 3880             | 160  | 49 | 0.021 | 7560      | 315  | 95  | 0.021 |
| 4.5      | 3520             | 165  | 50 | 0.023 | 6930      | 325  | 98  | 0.023 |
| 5.0      | 3160             | 170  | 50 | 0.027 | 6300      | 335  | 99  | 0.027 |
| 5.5      | 3000             | 180  | 52 | 0.030 | 5930      | 350  | 102 | 0.030 |
| 6.0      | 2840             | 190  | 54 | 0.033 | 5560      | 370  | 105 | 0.033 |
| 6.5      | 2655             | 190  | 54 | 0.036 | 5220      | 375  | 107 | 0.036 |
| 7.0      | 2470             | 190  | 54 | 0.038 | 4880      | 385  | 107 | 0.039 |
| 7.5      | 2285             | 190  | 54 | 0.042 | 4540      | 390  | 107 | 0.043 |
| 8.0      | 2100             | 190  | 53 | 0.045 | 4200      | 400  | 106 | 0.048 |
| 8.5      | 1995             | 185  | 53 | 0.046 | 3965      | 385  | 106 | 0.049 |
| 9.0      | 1890             | 180  | 53 | 0.048 | 3730      | 375  | 105 | 0.050 |
| 9.5      | 1785             | 175  | 53 | 0.049 | 3495      | 355  | 104 | 0.051 |
| 10.0     | 1680             | 170  | 53 | 0.051 | 3260      | 345  | 102 | 0.053 |
| 10.5     | 1600             | 160  | 53 | 0.050 | 3130      | 330  | 103 | 0.053 |
| 11.0     | 1520             | 150  | 53 | 0.049 | 3000      | 320  | 104 | 0.053 |
| 11.5     | 1440             | 140  | 52 | 0.049 | 2870      | 305  | 104 | 0.053 |
| 12.0     | 1360             | 135  | 51 | 0.050 | 2740      | 295  | 103 | 0.054 |
| 13.0     | 1285             | 130  | 52 | 0.051 | 2605      | 280  | 106 | 0.054 |
| 14.0     | 1210             | 125  | 53 | 0.052 | 2470      | 265  | 109 | 0.054 |
| 15.0     | 1135             | 120  | 53 | 0.053 | 2335      | 245  | 110 | 0.052 |
| 16.0     | 1060             | 115  | 53 | 0.054 | 2200      | 230  | 111 | 0.052 |
| 17.0     | 1005             | 105  | 54 | 0.052 | 2070      | 215  | 111 | 0.052 |
| 18.0     | 950              | 100  | 54 | 0.053 | 1940      | 205  | 110 | 0.053 |
| 19.0     | 895              | 90   | 53 | 0.050 | 1810      | 190  | 108 | 0.052 |
| 20.0     | 840              | 84   | 53 | 0.050 | 1680      | 180  | 106 | 0.054 |
| 21.0     | 800              | 80   | 53 | 0.050 | 1615      | 170  | 107 | 0.053 |
| 22.0     | 775              | 76   | 54 | 0.049 | 1550      | 165  | 107 | 0.053 |
| 23.0     | 745              | 71   | 54 | 0.048 | 1480      | 150  | 107 | 0.051 |
| 24.0     | 715              | 67   | 54 | 0.047 | 1425      | 140  | 107 | 0.049 |
| 25.0     | 680              | 63   | 53 | 0.046 | 1360      | 135  | 107 | 0.050 |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

| DIA. = Diameter<br>LOC = Length of Cut |     |                                    |      |    |       | RPM = rev./min.<br>FEED = mm/min.     |      | Vc = m/min.<br>Fz = mm/tooth |       |
|----------------------------------------|-----|------------------------------------|------|----|-------|---------------------------------------|------|------------------------------|-------|
| MATERIAL                               |     | P                                  |      |    |       |                                       |      |                              |       |
|                                        |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |                              |       |
| HARDNESS                               |     | ~ H Rc 35                          |      |    |       | H Rc 35 ~ H Rc 45                     |      |                              |       |
| STRENGTH                               |     | ~ 1100N/mm <sup>2</sup>            |      |    |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |                              |       |
| DIA.                                   | LOC | RPM                                | FEED | Vc | Fz    | RPM                                   | FEED | Vc                           | Fz    |
| 1.0                                    | 3   | 16000                              | 70   | 50 | 0.002 | 12800                                 | 60   | 40                           | 0.002 |
| 1.0                                    | 4   | 16000                              | 70   | 50 | 0.002 | 12800                                 | 60   | 40                           | 0.002 |
| 1.0                                    | 5   | 16000                              | 70   | 50 | 0.002 | 12800                                 | 60   | 40                           | 0.002 |
| 1.0                                    | 6   | 14400                              | 55   | 45 | 0.002 | 11520                                 | 50   | 36                           | 0.002 |
| 1.0                                    | 7   | 14400                              | 55   | 45 | 0.002 | 11520                                 | 50   | 36                           | 0.002 |
| 1.0                                    | 8   | 14400                              | 50   | 45 | 0.002 | 11520                                 | 45   | 36                           | 0.002 |
| 1.0                                    | 10  | 14400                              | 50   | 45 | 0.002 | 11520                                 | 45   | 36                           | 0.002 |
| 1.0                                    | 12  | 12800                              | 40   | 40 | 0.002 | 10240                                 | 35   | 32                           | 0.002 |
| 1.2                                    | 4   | 13500                              | 75   | 51 | 0.003 | 10800                                 | 65   | 41                           | 0.003 |
| 1.2                                    | 6   | 13500                              | 75   | 51 | 0.003 | 10800                                 | 65   | 41                           | 0.003 |
| 1.2                                    | 8   | 12150                              | 60   | 46 | 0.002 | 9720                                  | 50   | 37                           | 0.003 |
| 1.2                                    | 10  | 12150                              | 55   | 46 | 0.002 | 9720                                  | 45   | 37                           | 0.002 |
| 1.2                                    | 12  | 12150                              | 55   | 46 | 0.002 | 9720                                  | 45   | 37                           | 0.002 |
| 1.5                                    | 6   | 11200                              | 80   | 53 | 0.004 | 8960                                  | 70   | 42                           | 0.004 |
| 1.5                                    | 8   | 10080                              | 70   | 48 | 0.003 | 8060                                  | 60   | 38                           | 0.004 |
| 1.5                                    | 10  | 10080                              | 65   | 48 | 0.003 | 8060                                  | 55   | 38                           | 0.003 |
| 1.5                                    | 12  | 10080                              | 60   | 48 | 0.003 | 8060                                  | 50   | 38                           | 0.003 |
| 1.5                                    | 14  | 10080                              | 60   | 48 | 0.003 | 8060                                  | 50   | 38                           | 0.003 |
| 1.5                                    | 16  | 8960                               | 45   | 42 | 0.003 | 7170                                  | 40   | 34                           | 0.003 |
| 2.0                                    | 8   | 9070                               | 85   | 57 | 0.005 | 7260                                  | 70   | 46                           | 0.005 |
| 2.0                                    | 10  | 9070                               | 85   | 57 | 0.005 | 7260                                  | 70   | 46                           | 0.005 |
| 2.0                                    | 12  | 8160                               | 70   | 51 | 0.004 | 6530                                  | 60   | 41                           | 0.005 |
| 2.0                                    | 14  | 8160                               | 70   | 51 | 0.004 | 6530                                  | 60   | 41                           | 0.005 |
| 2.0                                    | 16  | 8160                               | 60   | 51 | 0.004 | 6530                                  | 50   | 41                           | 0.004 |
| 2.5                                    | 10  | 7700                               | 95   | 60 | 0.006 | 6200                                  | 80   | 49                           | 0.006 |
| 2.5                                    | 12  | 7700                               | 95   | 60 | 0.006 | 6200                                  | 80   | 49                           | 0.006 |
| 2.5                                    | 16  | 6930                               | 75   | 54 | 0.005 | 5580                                  | 65   | 44                           | 0.006 |
| 2.5                                    | 20  | 6930                               | 70   | 54 | 0.005 | 5580                                  | 55   | 44                           | 0.005 |
| 2.5                                    | 26  | 6160                               | 55   | 48 | 0.004 | 4960                                  | 45   | 39                           | 0.005 |
| 3.0                                    | 10  | 6350                               | 100  | 60 | 0.008 | 5150                                  | 85   | 49                           | 0.008 |
| 3.0                                    | 12  | 6350                               | 100  | 60 | 0.008 | 5150                                  | 85   | 49                           | 0.008 |
| 3.0                                    | 14  | 6350                               | 100  | 60 | 0.008 | 5150                                  | 85   | 49                           | 0.008 |
| 3.0                                    | 16  | 5720                               | 90   | 54 | 0.008 | 4640                                  | 75   | 44                           | 0.008 |
| 3.0                                    | 20  | 5720                               | 80   | 54 | 0.007 | 4640                                  | 70   | 44                           | 0.008 |
| 3.0                                    | 26  | 5720                               | 70   | 54 | 0.006 | 4640                                  | 60   | 44                           | 0.006 |
| 3.0                                    | 30  | 5720                               | 70   | 54 | 0.006 | 4640                                  | 60   | 44                           | 0.006 |
| 4.0                                    | 12  | 5150                               | 120  | 65 | 0.012 | 4100                                  | 100  | 52                           | 0.012 |
| 4.0                                    | 16  | 5150                               | 120  | 65 | 0.012 | 4100                                  | 100  | 52                           | 0.012 |
| 4.0                                    | 20  | 5150                               | 120  | 65 | 0.012 | 4100                                  | 100  | 52                           | 0.012 |
| 4.0                                    | 26  | 4640                               | 95   | 58 | 0.010 | 3690                                  | 85   | 46                           | 0.012 |
| 4.0                                    | 30  | 4640                               | 95   | 58 | 0.010 | 3690                                  | 85   | 46                           | 0.012 |
| 5.0                                    | 20  | 4400                               | 150  | 69 | 0.017 | 3480                                  | 125  | 55                           | 0.018 |
| 5.0                                    | 25  | 4400                               | 150  | 69 | 0.017 | 3480                                  | 125  | 55                           | 0.018 |
| 5.0                                    | 30  | 3960                               | 120  | 62 | 0.015 | 3130                                  | 100  | 49                           | 0.016 |
| 5.0                                    | 35  | 3960                               | 120  | 62 | 0.015 | 3130                                  | 100  | 49                           | 0.016 |
| 5.0                                    | 40  | 3960                               | 110  | 62 | 0.014 | 3130                                  | 90   | 49                           | 0.014 |
| 6.0                                    | 15  | 3800                               | 180  | 72 | 0.024 | 3050                                  | 150  | 57                           | 0.025 |
| 6.0                                    | 20  | 3800                               | 180  | 72 | 0.024 | 3050                                  | 150  | 57                           | 0.025 |
| 6.0                                    | 25  | 3800                               | 180  | 72 | 0.024 | 3050                                  | 150  | 57                           | 0.025 |
| 6.0                                    | 30  | 3800                               | 155  | 72 | 0.020 | 3050                                  | 130  | 57                           | 0.021 |
| 6.0                                    | 35  | 3420                               | 140  | 64 | 0.020 | 2750                                  | 115  | 52                           | 0.021 |
| 6.0                                    | 40  | 3420                               | 120  | 64 | 0.018 | 2750                                  | 100  | 52                           | 0.018 |
| 6.0                                    | 45  | 3420                               | 120  | 64 | 0.018 | 2750                                  | 100  | 52                           | 0.018 |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

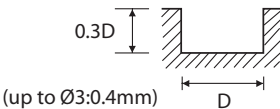
SEME70 SERIES

| DIA. = Diameter<br>LOC = Length of Cut |     |                              |      |    |       | RPM = rev./min.<br>FEED = mm/min. |      | Vc = m/min.<br>Fz = mm/tooth |       |
|----------------------------------------|-----|------------------------------|------|----|-------|-----------------------------------|------|------------------------------|-------|
| MATERIAL                               |     | P                            |      |    |       | K                                 |      |                              |       |
|                                        |     | HARDENED STEELS              |      |    |       | CAST IRON                         |      |                              |       |
| HARDNESS                               |     | HRc 45 ~ HRc 55              |      |    |       |                                   |      |                              |       |
| STRENGTH                               |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |                                   |      |                              |       |
| DIA.                                   | LOC | RPM                          | FEED | Vc | Fz    | RPM                               | FEED | Vc                           | Fz    |
| 1.0                                    | 3   | 8000                         | 30   | 25 | 0.002 | 16000                             | 70   | 50                           | 0.002 |
| 1.0                                    | 4   | 8000                         | 30   | 25 | 0.002 | 16000                             | 70   | 50                           | 0.002 |
| 1.0                                    | 5   | 8000                         | 30   | 25 | 0.002 | 16000                             | 70   | 50                           | 0.002 |
| 1.0                                    | 6   | 7200                         | 25   | 23 | 0.002 | 14400                             | 55   | 45                           | 0.002 |
| 1.0                                    | 7   | 7200                         | 25   | 23 | 0.002 | 14400                             | 55   | 45                           | 0.002 |
| 1.0                                    | 8   | 7200                         | 20   | 23 | 0.001 | 14400                             | 50   | 45                           | 0.002 |
| 1.0                                    | 10  | 7200                         | 20   | 23 | 0.001 | 14400                             | 50   | 45                           | 0.002 |
| 1.0                                    | 12  | 6400                         | 15   | 20 | 0.001 | 12800                             | 40   | 40                           | 0.002 |
| 1.2                                    | 4   | 6750                         | 30   | 25 | 0.002 | 13500                             | 75   | 51                           | 0.003 |
| 1.2                                    | 6   | 6750                         | 30   | 25 | 0.002 | 13500                             | 75   | 51                           | 0.003 |
| 1.2                                    | 8   | 6080                         | 25   | 23 | 0.002 | 12150                             | 60   | 46                           | 0.002 |
| 1.2                                    | 10  | 6080                         | 20   | 23 | 0.002 | 12150                             | 55   | 46                           | 0.002 |
| 1.2                                    | 12  | 6080                         | 20   | 23 | 0.002 | 12150                             | 55   | 46                           | 0.002 |
| 1.5                                    | 6   | 5600                         | 30   | 26 | 0.003 | 11200                             | 80   | 53                           | 0.004 |
| 1.5                                    | 8   | 5040                         | 30   | 24 | 0.003 | 10080                             | 70   | 48                           | 0.003 |
| 1.5                                    | 10  | 5040                         | 25   | 24 | 0.002 | 10080                             | 65   | 48                           | 0.003 |
| 1.5                                    | 12  | 5040                         | 25   | 24 | 0.002 | 10080                             | 60   | 48                           | 0.003 |
| 1.5                                    | 14  | 5040                         | 25   | 24 | 0.002 | 10080                             | 60   | 48                           | 0.003 |
| 1.5                                    | 16  | 4480                         | 20   | 21 | 0.002 | 8960                              | 45   | 42                           | 0.003 |
| 2.0                                    | 8   | 4540                         | 35   | 29 | 0.004 | 9070                              | 85   | 57                           | 0.005 |
| 2.0                                    | 10  | 4540                         | 35   | 29 | 0.004 | 9070                              | 85   | 57                           | 0.005 |
| 2.0                                    | 12  | 4090                         | 30   | 26 | 0.004 | 8160                              | 70   | 51                           | 0.004 |
| 2.0                                    | 14  | 4090                         | 30   | 26 | 0.004 | 8160                              | 70   | 51                           | 0.004 |
| 2.0                                    | 16  | 4090                         | 25   | 26 | 0.003 | 8160                              | 60   | 51                           | 0.004 |
| 2.5                                    | 10  | 3850                         | 40   | 30 | 0.005 | 7700                              | 95   | 60                           | 0.006 |
| 2.5                                    | 12  | 3850                         | 40   | 30 | 0.005 | 7700                              | 95   | 60                           | 0.006 |
| 2.5                                    | 16  | 3470                         | 30   | 27 | 0.004 | 6930                              | 75   | 54                           | 0.005 |
| 2.5                                    | 20  | 3470                         | 30   | 27 | 0.004 | 6930                              | 70   | 54                           | 0.005 |
| 2.5                                    | 26  | 3080                         | 20   | 24 | 0.003 | 6160                              | 55   | 48                           | 0.004 |
| 3.0                                    | 10  | 3170                         | 40   | 30 | 0.006 | 6350                              | 100  | 60                           | 0.008 |
| 3.0                                    | 12  | 3170                         | 40   | 30 | 0.006 | 6350                              | 100  | 60                           | 0.008 |
| 3.0                                    | 14  | 3170                         | 40   | 30 | 0.006 | 6350                              | 100  | 60                           | 0.008 |
| 3.0                                    | 16  | 2850                         | 40   | 27 | 0.007 | 5720                              | 90   | 54                           | 0.008 |
| 3.0                                    | 20  | 2850                         | 35   | 27 | 0.006 | 5720                              | 80   | 54                           | 0.007 |
| 3.0                                    | 26  | 2850                         | 30   | 27 | 0.005 | 5720                              | 70   | 54                           | 0.006 |
| 3.0                                    | 30  | 2850                         | 30   | 27 | 0.005 | 5720                              | 70   | 54                           | 0.006 |
| 4.0                                    | 12  | 2580                         | 50   | 32 | 0.010 | 5150                              | 120  | 65                           | 0.012 |
| 4.0                                    | 16  | 2580                         | 50   | 32 | 0.010 | 5150                              | 120  | 65                           | 0.012 |
| 4.0                                    | 20  | 2580                         | 50   | 32 | 0.010 | 5150                              | 120  | 65                           | 0.012 |
| 4.0                                    | 26  | 2320                         | 40   | 29 | 0.009 | 4640                              | 95   | 58                           | 0.010 |
| 4.0                                    | 30  | 2320                         | 40   | 29 | 0.009 | 4640                              | 95   | 58                           | 0.010 |
| 5.0                                    | 20  | 2280                         | 55   | 36 | 0.012 | 4400                              | 150  | 69                           | 0.017 |
| 5.0                                    | 25  | 2280                         | 55   | 36 | 0.012 | 4400                              | 150  | 69                           | 0.017 |
| 5.0                                    | 30  | 2050                         | 45   | 32 | 0.011 | 3960                              | 120  | 62                           | 0.015 |
| 5.0                                    | 35  | 2050                         | 45   | 32 | 0.011 | 3960                              | 120  | 62                           | 0.015 |
| 5.0                                    | 40  | 2050                         | 40   | 32 | 0.010 | 3960                              | 110  | 62                           | 0.014 |
| 6.0                                    | 15  | 1970                         | 70   | 37 | 0.018 | 3800                              | 180  | 72                           | 0.024 |
| 6.0                                    | 20  | 1970                         | 70   | 37 | 0.018 | 3800                              | 180  | 72                           | 0.024 |
| 6.0                                    | 25  | 1970                         | 70   | 37 | 0.018 | 3800                              | 180  | 72                           | 0.024 |
| 6.0                                    | 30  | 1970                         | 60   | 37 | 0.015 | 3800                              | 155  | 72                           | 0.020 |
| 6.0                                    | 35  | 1770                         | 55   | 33 | 0.016 | 3420                              | 140  | 64                           | 0.020 |
| 6.0                                    | 40  | 1770                         | 50   | 33 | 0.014 | 3420                              | 120  | 64                           | 0.018 |
| 6.0                                    | 45  | 1770                         | 50   | 33 | 0.014 | 3420                              | 120  | 64                           | 0.018 |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

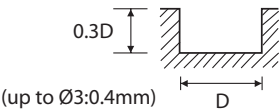
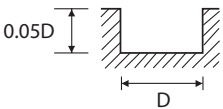
| MATERIAL |     | P                                  |      |    |       |                                       |      |    |       |
|----------|-----|------------------------------------|------|----|-------|---------------------------------------|------|----|-------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |
|          |     | ~ HRC 35                           |      |    |       | HRC 35 ~ HRC 45                       |      |    |       |
| HARDNESS |     | ~ 1100N/mm <sup>2</sup>            |      |    |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |
| STRENGTH |     |                                    |      |    |       |                                       |      |    |       |
| DIA.     | LOC | RPM                                | FEED | Vc | Fz    | RPM                                   | FEED | Vc | Fz    |
| 8.0      | 25  | 2880                               | 190  | 72 | 0.033 | 2280                                  | 150  | 57 | 0.033 |
| 8.0      | 30  | 2880                               | 190  | 72 | 0.033 | 2280                                  | 150  | 57 | 0.033 |
| 8.0      | 35  | 2880                               | 190  | 72 | 0.033 | 2280                                  | 150  | 57 | 0.033 |
| 8.0      | 40  | 2880                               | 160  | 72 | 0.028 | 2280                                  | 125  | 57 | 0.027 |
| 8.0      | 45  | 2590                               | 145  | 65 | 0.028 | 2050                                  | 115  | 52 | 0.028 |
| 8.0      | 50  | 2590                               | 130  | 65 | 0.025 | 2050                                  | 100  | 52 | 0.024 |
| 10.0     | 30  | 2450                               | 190  | 77 | 0.039 | 2000                                  | 150  | 63 | 0.038 |
| 10.0     | 35  | 2450                               | 190  | 77 | 0.039 | 2000                                  | 150  | 63 | 0.038 |
| 10.0     | 40  | 2450                               | 190  | 77 | 0.039 | 2000                                  | 150  | 63 | 0.038 |
| 10.0     | 45  | 2450                               | 160  | 77 | 0.033 | 2000                                  | 125  | 63 | 0.031 |
| 10.0     | 50  | 2450                               | 160  | 77 | 0.033 | 2000                                  | 125  | 63 | 0.031 |
| 10.0     | 55  | 2210                               | 145  | 69 | 0.033 | 1800                                  | 115  | 57 | 0.032 |
| 10.0     | 60  | 2210                               | 130  | 69 | 0.029 | 1800                                  | 100  | 57 | 0.028 |
| 12.0     | 35  | 2000                               | 150  | 75 | 0.038 | 1670                                  | 135  | 63 | 0.040 |
| 12.0     | 40  | 2000                               | 150  | 75 | 0.038 | 1670                                  | 135  | 63 | 0.040 |
| 12.0     | 45  | 2000                               | 130  | 75 | 0.033 | 1670                                  | 115  | 63 | 0.034 |
| 12.0     | 50  | 2000                               | 130  | 75 | 0.033 | 1670                                  | 115  | 63 | 0.034 |
| 12.0     | 55  | 2000                               | 130  | 75 | 0.033 | 1670                                  | 115  | 63 | 0.034 |
| 12.0     | 60  | 2000                               | 110  | 75 | 0.028 | 1670                                  | 100  | 63 | 0.030 |
| 12.0     | 65  | 1800                               | 100  | 68 | 0.028 | 1500                                  | 90   | 57 | 0.030 |
| 12.0     | 70  | 1800                               | 100  | 68 | 0.028 | 1500                                  | 90   | 57 | 0.030 |
| 14.0     | 50  | 1850                               | 125  | 81 | 0.034 | 1480                                  | 100  | 65 | 0.034 |
| 14.0     | 60  | 1850                               | 125  | 81 | 0.034 | 1480                                  | 100  | 65 | 0.034 |
| 16.0     | 40  | 1700                               | 140  | 85 | 0.041 | 1280                                  | 105  | 64 | 0.041 |
| 16.0     | 50  | 1700                               | 140  | 85 | 0.041 | 1280                                  | 105  | 64 | 0.041 |
| 16.0     | 60  | 1700                               | 120  | 85 | 0.035 | 1280                                  | 90   | 64 | 0.035 |
| 16.0     | 70  | 1700                               | 120  | 85 | 0.035 | 1280                                  | 90   | 64 | 0.035 |
| 16.0     | 80  | 1700                               | 105  | 85 | 0.031 | 1280                                  | 80   | 64 | 0.031 |
| 16.0     | 90  | 1530                               | 95   | 77 | 0.031 | 1150                                  | 70   | 58 | 0.030 |
| 16.0     | 110 | 1530                               | 95   | 77 | 0.031 | 1150                                  | 70   | 58 | 0.030 |
| 16.0     | 120 | 1530                               | 95   | 77 | 0.031 | 1150                                  | 70   | 58 | 0.030 |
| 18.0     | 50  | 1450                               | 120  | 82 | 0.041 | 1120                                  | 90   | 63 | 0.040 |
| 18.0     | 70  | 1450                               | 100  | 82 | 0.034 | 1120                                  | 75   | 63 | 0.033 |
| 18.0     | 100 | 1310                               | 80   | 74 | 0.031 | 1000                                  | 60   | 57 | 0.030 |
| 20.0     | 50  | 1220                               | 100  | 77 | 0.041 | 950                                   | 75   | 60 | 0.039 |
| 20.0     | 60  | 1220                               | 100  | 77 | 0.041 | 950                                   | 75   | 60 | 0.039 |
| 20.0     | 70  | 1220                               | 85   | 77 | 0.035 | 950                                   | 65   | 60 | 0.034 |
| 20.0     | 80  | 1220                               | 85   | 77 | 0.035 | 950                                   | 65   | 60 | 0.034 |
| 20.0     | 90  | 1220                               | 75   | 77 | 0.031 | 950                                   | 55   | 60 | 0.029 |
| 20.0     | 110 | 1100                               | 70   | 69 | 0.032 | 860                                   | 50   | 54 | 0.029 |
| 20.0     | 120 | 1100                               | 70   | 69 | 0.032 | 860                                   | 50   | 54 | 0.029 |
| 22.0     | 75  | 1100                               | 75   | 76 | 0.034 | 840                                   | 55   | 58 | 0.033 |
| 22.0     | 110 | 1100                               | 70   | 76 | 0.032 | 840                                   | 50   | 58 | 0.030 |
| 25.0     | 70  | 980                                | 80   | 77 | 0.041 | 750                                   | 60   | 59 | 0.040 |
| 25.0     | 90  | 980                                | 70   | 77 | 0.036 | 750                                   | 50   | 59 | 0.033 |
| 25.0     | 110 | 980                                | 70   | 77 | 0.036 | 750                                   | 50   | 59 | 0.033 |
| 25.0     | 120 | 980                                | 60   | 77 | 0.031 | 750                                   | 45   | 59 | 0.030 |



Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG LENGTH

SEME70 SERIES

| MATERIAL |     | P                            |      |    |       | K         |      |    |       |
|----------|-----|------------------------------|------|----|-------|-----------|------|----|-------|
|          |     | HARDENED STEELS              |      |    |       | CAST IRON |      |    |       |
|          |     | HRC 45 ~ HRC 55              |      |    |       |           |      |    |       |
| HARDNESS |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |           |      |    |       |
| STRENGTH |     |                              |      |    |       |           |      |    |       |
| DIA.     | LOC | RPM                          | FEED | Vc | Fz    | RPM       | FEED | Vc | Fz    |
| 8.0      | 25  | 1510                         | 70   | 38 | 0.023 | 2880      | 190  | 72 | 0.033 |
| 8.0      | 30  | 1510                         | 70   | 38 | 0.023 | 2880      | 190  | 72 | 0.033 |
| 8.0      | 35  | 1510                         | 70   | 38 | 0.023 | 2880      | 190  | 72 | 0.033 |
| 8.0      | 40  | 1510                         | 60   | 38 | 0.020 | 2880      | 160  | 72 | 0.028 |
| 8.0      | 45  | 1360                         | 55   | 34 | 0.020 | 2590      | 145  | 65 | 0.028 |
| 8.0      | 50  | 1360                         | 50   | 34 | 0.018 | 2590      | 130  | 65 | 0.025 |
| 10.0     | 30  | 1210                         | 70   | 38 | 0.029 | 2450      | 190  | 77 | 0.039 |
| 10.0     | 35  | 1210                         | 70   | 38 | 0.029 | 2450      | 190  | 77 | 0.039 |
| 10.0     | 40  | 1210                         | 70   | 38 | 0.029 | 2450      | 190  | 77 | 0.039 |
| 10.0     | 45  | 1210                         | 60   | 38 | 0.025 | 2450      | 160  | 77 | 0.033 |
| 10.0     | 50  | 1210                         | 60   | 38 | 0.025 | 2450      | 160  | 77 | 0.033 |
| 10.0     | 55  | 1090                         | 55   | 34 | 0.025 | 2210      | 145  | 69 | 0.033 |
| 10.0     | 60  | 1090                         | 50   | 34 | 0.023 | 2210      | 130  | 69 | 0.029 |
| 12.0     | 35  | 1010                         | 55   | 38 | 0.027 | 2000      | 150  | 75 | 0.038 |
| 12.0     | 40  | 1010                         | 55   | 38 | 0.027 | 2000      | 150  | 75 | 0.038 |
| 12.0     | 45  | 1010                         | 45   | 38 | 0.022 | 2000      | 130  | 75 | 0.033 |
| 12.0     | 50  | 1010                         | 45   | 38 | 0.022 | 2000      | 130  | 75 | 0.033 |
| 12.0     | 55  | 1010                         | 45   | 38 | 0.022 | 2000      | 130  | 75 | 0.033 |
| 12.0     | 60  | 1010                         | 40   | 38 | 0.020 | 2000      | 110  | 75 | 0.028 |
| 12.0     | 65  | 910                          | 35   | 34 | 0.019 | 1800      | 100  | 68 | 0.028 |
| 12.0     | 70  | 910                          | 35   | 34 | 0.019 | 1800      | 100  | 68 | 0.028 |
| 14.0     | 50  | 910                          | 45   | 40 | 0.025 | 1850      | 125  | 81 | 0.034 |
| 14.0     | 60  | 910                          | 45   | 40 | 0.025 | 1850      | 125  | 81 | 0.034 |
| 16.0     | 40  | 800                          | 50   | 40 | 0.031 | 1700      | 140  | 85 | 0.041 |
| 16.0     | 50  | 800                          | 50   | 40 | 0.031 | 1700      | 140  | 85 | 0.041 |
| 16.0     | 60  | 800                          | 40   | 40 | 0.025 | 1700      | 120  | 85 | 0.035 |
| 16.0     | 70  | 800                          | 40   | 40 | 0.025 | 1700      | 120  | 85 | 0.035 |
| 16.0     | 80  | 800                          | 35   | 40 | 0.022 | 1700      | 105  | 85 | 0.031 |
| 16.0     | 90  | 720                          | 30   | 36 | 0.021 | 1530      | 95   | 77 | 0.031 |
| 16.0     | 110 | 720                          | 30   | 36 | 0.021 | 1530      | 95   | 77 | 0.031 |
| 16.0     | 120 | 720                          | 30   | 36 | 0.021 | 1530      | 95   | 77 | 0.031 |
| 18.0     | 50  | 700                          | 40   | 40 | 0.029 | 1450      | 120  | 82 | 0.041 |
| 18.0     | 70  | 700                          | 35   | 40 | 0.025 | 1450      | 100  | 82 | 0.034 |
| 18.0     | 100 | 630                          | 30   | 36 | 0.024 | 1310      | 80   | 74 | 0.031 |
| 20.0     | 50  | 600                          | 35   | 38 | 0.029 | 1220      | 100  | 77 | 0.041 |
| 20.0     | 60  | 600                          | 35   | 38 | 0.029 | 1220      | 100  | 77 | 0.041 |
| 20.0     | 70  | 600                          | 30   | 38 | 0.025 | 1220      | 85   | 77 | 0.035 |
| 20.0     | 80  | 600                          | 30   | 38 | 0.025 | 1220      | 85   | 77 | 0.035 |
| 20.0     | 90  | 600                          | 25   | 38 | 0.021 | 1220      | 75   | 77 | 0.031 |
| 20.0     | 110 | 540                          | 25   | 34 | 0.023 | 1100      | 70   | 69 | 0.032 |
| 20.0     | 120 | 540                          | 25   | 34 | 0.023 | 1100      | 70   | 69 | 0.032 |
| 22.0     | 75  | 550                          | 30   | 38 | 0.027 | 1100      | 75   | 76 | 0.034 |
| 22.0     | 110 | 550                          | 25   | 38 | 0.023 | 1100      | 70   | 76 | 0.032 |
| 25.0     | 70  | 480                          | 30   | 38 | 0.031 | 980       | 80   | 77 | 0.041 |
| 25.0     | 90  | 480                          | 25   | 38 | 0.026 | 980       | 70   | 77 | 0.036 |
| 25.0     | 110 | 480                          | 25   | 38 | 0.026 | 980       | 70   | 77 | 0.036 |
| 25.0     | 120 | 480                          | 25   | 38 | 0.026 | 980       | 60   | 77 | 0.031 |







RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

SEM845 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |    |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |    |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |    |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 0.1      | 0.3 | 50000                              | 315  | 16 | 0.003 | 0.009  | 46200                                 | 230  | 15 | 0.002 | 0.007  |
| 0.1      | 0.5 | 50000                              | 315  | 16 | 0.003 | 0.006  | 46200                                 | 230  | 15 | 0.002 | 0.005  |
| 0.1      | 1   | 45000                              | 255  | 14 | 0.003 | 0.002  | 41580                                 | 185  | 13 | 0.002 | 0.002  |
| 0.2      | 0.5 | 38500                              | 380  | 24 | 0.005 | 0.018  | 36300                                 | 270  | 23 | 0.004 | 0.014  |
| 0.2      | 1   | 38500                              | 380  | 24 | 0.005 | 0.013  | 36300                                 | 270  | 23 | 0.004 | 0.010  |
| 0.2      | 1.5 | 34650                              | 310  | 22 | 0.004 | 0.007  | 32670                                 | 220  | 21 | 0.003 | 0.006  |
| 0.2      | 2   | 34650                              | 310  | 22 | 0.004 | 0.005  | 32670                                 | 220  | 21 | 0.003 | 0.004  |
| 0.3      | 1   | 34200                              | 390  | 32 | 0.006 | 0.019  | 32300                                 | 270  | 30 | 0.004 | 0.015  |
| 0.3      | 1.5 | 34200                              | 390  | 32 | 0.006 | 0.019  | 32300                                 | 270  | 30 | 0.004 | 0.015  |
| 0.3      | 2   | 30780                              | 315  | 29 | 0.005 | 0.011  | 29070                                 | 220  | 27 | 0.004 | 0.008  |
| 0.3      | 2.5 | 30780                              | 315  | 29 | 0.005 | 0.007  | 29070                                 | 220  | 27 | 0.004 | 0.005  |
| 0.3      | 3   | 30780                              | 315  | 29 | 0.005 | 0.007  | 29070                                 | 220  | 27 | 0.004 | 0.005  |
| 0.3      | 4   | 27360                              | 250  | 26 | 0.005 | 0.004  | 25840                                 | 175  | 24 | 0.003 | 0.003  |
| 0.3      | 5   | 20520                              | 165  | 19 | 0.004 | 0.003  | 19380                                 | 115  | 18 | 0.003 | 0.002  |
| 0.4      | 1   | 27400                              | 540  | 34 | 0.010 | 0.036  | 25800                                 | 380  | 32 | 0.007 | 0.028  |
| 0.4      | 1.5 | 27400                              | 540  | 34 | 0.010 | 0.025  | 25800                                 | 380  | 32 | 0.007 | 0.020  |
| 0.4      | 2   | 27400                              | 540  | 34 | 0.010 | 0.025  | 25800                                 | 380  | 32 | 0.007 | 0.020  |
| 0.4      | 2.5 | 24660                              | 435  | 31 | 0.009 | 0.014  | 23220                                 | 310  | 29 | 0.007 | 0.011  |
| 0.4      | 3   | 24660                              | 435  | 31 | 0.009 | 0.014  | 23220                                 | 310  | 29 | 0.007 | 0.011  |
| 0.4      | 4   | 24660                              | 435  | 31 | 0.009 | 0.009  | 23220                                 | 310  | 29 | 0.007 | 0.007  |
| 0.4      | 5   | 21920                              | 345  | 28 | 0.008 | 0.009  | 20640                                 | 245  | 26 | 0.006 | 0.007  |
| 0.4      | 6   | 21920                              | 345  | 28 | 0.008 | 0.005  | 20640                                 | 245  | 26 | 0.006 | 0.004  |
| 0.4      | 8   | 16440                              | 225  | 21 | 0.007 | 0.004  | 15480                                 | 160  | 19 | 0.005 | 0.003  |
| 0.4      | 10  | 8220                               | 95   | 10 | 0.006 | 0.004  | 7740                                  | 70   | 10 | 0.005 | 0.003  |
| 0.5      | 1   | 27400                              | 540  | 43 | 0.010 | 0.045  | 25800                                 | 425  | 41 | 0.008 | 0.035  |
| 0.5      | 1.5 | 27400                              | 540  | 43 | 0.010 | 0.045  | 25800                                 | 425  | 41 | 0.008 | 0.035  |
| 0.5      | 2   | 27400                              | 540  | 43 | 0.010 | 0.032  | 25800                                 | 425  | 41 | 0.008 | 0.025  |
| 0.5      | 2.5 | 27400                              | 540  | 43 | 0.010 | 0.032  | 25800                                 | 425  | 41 | 0.008 | 0.025  |
| 0.5      | 3   | 24660                              | 435  | 39 | 0.009 | 0.018  | 23220                                 | 345  | 36 | 0.007 | 0.014  |
| 0.5      | 4   | 24660                              | 435  | 39 | 0.009 | 0.018  | 23220                                 | 345  | 36 | 0.007 | 0.014  |
| 0.5      | 5   | 24660                              | 435  | 39 | 0.009 | 0.011  | 23220                                 | 345  | 36 | 0.007 | 0.009  |
| 0.5      | 6   | 21920                              | 345  | 34 | 0.008 | 0.011  | 20640                                 | 270  | 32 | 0.007 | 0.009  |
| 0.5      | 8   | 16440                              | 225  | 26 | 0.007 | 0.007  | 15480                                 | 180  | 24 | 0.006 | 0.005  |
| 0.5      | 10  | 16440                              | 225  | 26 | 0.007 | 0.005  | 15480                                 | 180  | 24 | 0.006 | 0.004  |
| 0.5      | 12  | 8220                               | 95   | 13 | 0.006 | 0.005  | 7740                                  | 75   | 12 | 0.005 | 0.004  |
| 0.5      | 14  | 8220                               | 95   | 13 | 0.006 | 0.005  | 7740                                  | 75   | 12 | 0.005 | 0.004  |
| 0.5      | 16  | 2740                               | 25   | 4  | 0.005 | 0.005  | 2580                                  | 20   | 4  | 0.004 | 0.004  |
| 0.6      | 2   | 27400                              | 775  | 52 | 0.014 | 0.038  | 25800                                 | 545  | 49 | 0.011 | 0.029  |
| 0.6      | 3   | 27400                              | 775  | 52 | 0.014 | 0.038  | 25800                                 | 545  | 49 | 0.011 | 0.029  |
| 0.6      | 4   | 24660                              | 630  | 46 | 0.013 | 0.022  | 23220                                 | 440  | 44 | 0.009 | 0.017  |
| 0.6      | 5   | 24660                              | 630  | 46 | 0.013 | 0.014  | 23220                                 | 440  | 44 | 0.009 | 0.011  |
| 0.6      | 6   | 24660                              | 630  | 46 | 0.013 | 0.014  | 23220                                 | 440  | 44 | 0.009 | 0.011  |
| 0.6      | 8   | 21920                              | 495  | 41 | 0.011 | 0.008  | 20640                                 | 350  | 39 | 0.008 | 0.006  |
| 0.6      | 10  | 16440                              | 325  | 31 | 0.010 | 0.005  | 15480                                 | 230  | 29 | 0.007 | 0.004  |
| 0.6      | 12  | 16440                              | 325  | 31 | 0.010 | 0.005  | 15480                                 | 230  | 29 | 0.007 | 0.004  |
| 0.6      | 14  | 8220                               | 140  | 15 | 0.009 | 0.005  | 7740                                  | 100  | 15 | 0.006 | 0.004  |
| 0.6      | 16  | 8220                               | 140  | 15 | 0.009 | 0.005  | 7740                                  | 100  | 15 | 0.006 | 0.004  |
| 0.7      | 2   | 27400                              | 775  | 60 | 0.014 | 0.063  | 25800                                 | 545  | 57 | 0.011 | 0.049  |
| 0.7      | 4   | 24660                              | 630  | 54 | 0.013 | 0.025  | 23220                                 | 440  | 51 | 0.009 | 0.020  |
| 0.7      | 6   | 24660                              | 630  | 54 | 0.013 | 0.016  | 23220                                 | 440  | 51 | 0.009 | 0.012  |
| 0.7      | 8   | 21920                              | 495  | 48 | 0.011 | 0.016  | 20640                                 | 350  | 45 | 0.008 | 0.012  |
| 0.7      | 10  | 21920                              | 495  | 48 | 0.011 | 0.009  | 20640                                 | 350  | 45 | 0.008 | 0.007  |
| 0.7      | 12  | 16440                              | 325  | 36 | 0.010 | 0.006  | 15480                                 | 230  | 34 | 0.007 | 0.005  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

SEM845 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |    |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |    |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |    |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |    |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc | Fz    | Ap(mm) |
| 0.1      | 0.3 | 40600                        | 170  | 13 | 0.002 | 0.005  | 50000     | 315  | 16 | 0.003 | 0.009  |
| 0.1      | 0.5 | 40600                        | 170  | 13 | 0.002 | 0.004  | 50000     | 315  | 16 | 0.003 | 0.006  |
| 0.1      | 1   | 36540                        | 140  | 11 | 0.002 | 0.001  | 45000     | 255  | 14 | 0.003 | 0.002  |
| 0.2      | 0.5 | 32100                        | 200  | 20 | 0.003 | 0.010  | 38500     | 380  | 24 | 0.005 | 0.018  |
| 0.2      | 1   | 32100                        | 200  | 20 | 0.003 | 0.007  | 38500     | 380  | 24 | 0.005 | 0.013  |
| 0.2      | 1.5 | 28890                        | 160  | 18 | 0.003 | 0.004  | 34650     | 310  | 22 | 0.004 | 0.007  |
| 0.2      | 2   | 28890                        | 160  | 18 | 0.003 | 0.003  | 34650     | 310  | 22 | 0.004 | 0.005  |
| 0.3      | 1   | 28500                        | 230  | 27 | 0.004 | 0.011  | 34200     | 390  | 32 | 0.006 | 0.019  |
| 0.3      | 1.5 | 28500                        | 230  | 27 | 0.004 | 0.011  | 34200     | 390  | 32 | 0.006 | 0.019  |
| 0.3      | 2   | 25650                        | 185  | 24 | 0.004 | 0.006  | 30780     | 315  | 29 | 0.005 | 0.011  |
| 0.3      | 2.5 | 25650                        | 185  | 24 | 0.004 | 0.004  | 30780     | 315  | 29 | 0.005 | 0.007  |
| 0.3      | 3   | 25650                        | 185  | 24 | 0.004 | 0.004  | 30780     | 315  | 29 | 0.005 | 0.007  |
| 0.3      | 4   | 22800                        | 145  | 21 | 0.003 | 0.002  | 27360     | 250  | 26 | 0.005 | 0.004  |
| 0.3      | 5   | 17100                        | 95   | 16 | 0.003 | 0.002  | 20520     | 165  | 19 | 0.004 | 0.003  |
| 0.4      | 1   | 22800                        | 280  | 29 | 0.006 | 0.02   | 27400     | 540  | 34 | 0.010 | 0.036  |
| 0.4      | 1.5 | 22800                        | 280  | 29 | 0.006 | 0.014  | 27400     | 540  | 34 | 0.010 | 0.025  |
| 0.4      | 2   | 22800                        | 280  | 29 | 0.006 | 0.014  | 27400     | 540  | 34 | 0.010 | 0.025  |
| 0.4      | 2.5 | 20520                        | 225  | 26 | 0.005 | 0.008  | 24660     | 435  | 31 | 0.009 | 0.014  |
| 0.4      | 3   | 20520                        | 225  | 26 | 0.005 | 0.008  | 24660     | 435  | 31 | 0.009 | 0.014  |
| 0.4      | 4   | 20520                        | 225  | 26 | 0.005 | 0.005  | 24660     | 435  | 31 | 0.009 | 0.009  |
| 0.4      | 5   | 18240                        | 180  | 23 | 0.005 | 0.005  | 21920     | 345  | 28 | 0.008 | 0.009  |
| 0.4      | 6   | 18240                        | 180  | 23 | 0.005 | 0.003  | 21920     | 345  | 28 | 0.008 | 0.005  |
| 0.4      | 8   | 13680                        | 120  | 17 | 0.004 | 0.002  | 16440     | 225  | 21 | 0.007 | 0.004  |
| 0.4      | 10  | 6840                         | 50   | 9  | 0.004 | 0.002  | 8220      | 95   | 10 | 0.006 | 0.004  |
| 0.5      | 1   | 22800                        | 285  | 36 | 0.006 | 0.025  | 27400     | 540  | 43 | 0.010 | 0.045  |
| 0.5      | 1.5 | 22800                        | 285  | 36 | 0.006 | 0.025  | 27400     | 540  | 43 | 0.010 | 0.045  |
| 0.5      | 2   | 22800                        | 285  | 36 | 0.006 | 0.018  | 27400     | 540  | 43 | 0.010 | 0.032  |
| 0.5      | 2.5 | 22800                        | 285  | 36 | 0.006 | 0.018  | 27400     | 540  | 43 | 0.010 | 0.032  |
| 0.5      | 3   | 20520                        | 230  | 32 | 0.006 | 0.010  | 24660     | 435  | 39 | 0.009 | 0.018  |
| 0.5      | 4   | 20520                        | 230  | 32 | 0.006 | 0.010  | 24660     | 435  | 39 | 0.009 | 0.018  |
| 0.5      | 5   | 20520                        | 230  | 32 | 0.006 | 0.006  | 24660     | 435  | 39 | 0.009 | 0.011  |
| 0.5      | 6   | 18240                        | 180  | 29 | 0.005 | 0.006  | 21920     | 345  | 34 | 0.008 | 0.011  |
| 0.5      | 8   | 13680                        | 120  | 21 | 0.004 | 0.004  | 16440     | 225  | 26 | 0.007 | 0.007  |
| 0.5      | 10  | 13680                        | 120  | 21 | 0.004 | 0.003  | 16440     | 225  | 26 | 0.007 | 0.005  |
| 0.5      | 12  | 6840                         | 50   | 11 | 0.004 | 0.003  | 8220      | 95   | 13 | 0.006 | 0.005  |
| 0.5      | 14  | 6840                         | 50   | 11 | 0.004 | 0.003  | 8220      | 95   | 13 | 0.006 | 0.005  |
| 0.5      | 16  | 2280                         | 15   | 4  | 0.003 | 0.003  | 2740      | 25   | 4  | 0.005 | 0.005  |
| 0.6      | 2   | 22800                        | 405  | 43 | 0.009 | 0.021  | 27400     | 775  | 52 | 0.014 | 0.038  |
| 0.6      | 3   | 22800                        | 405  | 43 | 0.009 | 0.021  | 27400     | 775  | 52 | 0.014 | 0.038  |
| 0.6      | 4   | 20520                        | 330  | 39 | 0.008 | 0.012  | 24660     | 630  | 46 | 0.013 | 0.022  |
| 0.6      | 5   | 20520                        | 330  | 39 | 0.008 | 0.008  | 24660     | 630  | 46 | 0.013 | 0.014  |
| 0.6      | 6   | 20520                        | 330  | 39 | 0.008 | 0.008  | 24660     | 630  | 46 | 0.013 | 0.014  |
| 0.6      | 8   | 18240                        | 260  | 34 | 0.007 | 0.005  | 21920     | 495  | 41 | 0.011 | 0.008  |
| 0.6      | 10  | 13680                        | 170  | 26 | 0.006 | 0.003  | 16440     | 325  | 31 | 0.010 | 0.005  |
| 0.6      | 12  | 13680                        | 170  | 26 | 0.006 | 0.003  | 16440     | 325  | 31 | 0.010 | 0.     |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

SEM845 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |    |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |    |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |    |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 0.8      | 2   | 27400                              | 775  | 69 | 0.014 | 0.072  | 25800                                 | 605  | 65 | 0.012 | 0.056  |
| 0.8      | 3   | 27400                              | 775  | 69 | 0.014 | 0.050  | 25800                                 | 605  | 65 | 0.012 | 0.039  |
| 0.8      | 4   | 27400                              | 775  | 69 | 0.014 | 0.050  | 25800                                 | 605  | 65 | 0.012 | 0.039  |
| 0.8      | 5   | 24660                              | 630  | 62 | 0.013 | 0.029  | 23220                                 | 490  | 58 | 0.011 | 0.022  |
| 0.8      | 6   | 24660                              | 630  | 62 | 0.013 | 0.029  | 23220                                 | 490  | 58 | 0.011 | 0.022  |
| 0.8      | 8   | 24660                              | 630  | 62 | 0.013 | 0.018  | 23220                                 | 490  | 58 | 0.011 | 0.014  |
| 0.8      | 10  | 21920                              | 495  | 55 | 0.011 | 0.018  | 20640                                 | 385  | 52 | 0.009 | 0.014  |
| 0.8      | 12  | 21920                              | 495  | 55 | 0.011 | 0.011  | 20640                                 | 385  | 52 | 0.009 | 0.008  |
| 0.8      | 14  | 16440                              | 325  | 41 | 0.010 | 0.007  | 15480                                 | 255  | 39 | 0.008 | 0.006  |
| 0.8      | 16  | 16440                              | 325  | 41 | 0.010 | 0.007  | 15480                                 | 255  | 39 | 0.008 | 0.006  |
| 0.8      | 20  | 8220                               | 140  | 21 | 0.009 | 0.007  | 7740                                  | 110  | 19 | 0.007 | 0.006  |
| 0.9      | 6   | 22140                              | 575  | 63 | 0.013 | 0.032  | 20970                                 | 440  | 59 | 0.010 | 0.025  |
| 0.9      | 8   | 22140                              | 575  | 63 | 0.013 | 0.020  | 20970                                 | 440  | 59 | 0.010 | 0.016  |
| 0.9      | 10  | 19680                              | 455  | 56 | 0.012 | 0.020  | 18640                                 | 350  | 53 | 0.009 | 0.016  |
| 1.0      | 2   | 24600                              | 1045 | 77 | 0.021 | 0.090  | 23300                                 | 890  | 73 | 0.019 | 0.070  |
| 1.0      | 3   | 24600                              | 1045 | 77 | 0.021 | 0.090  | 23300                                 | 890  | 73 | 0.019 | 0.070  |
| 1.0      | 4   | 24600                              | 1045 | 77 | 0.021 | 0.063  | 23300                                 | 890  | 73 | 0.019 | 0.049  |
| 1.0      | 5   | 24600                              | 1045 | 77 | 0.021 | 0.063  | 23300                                 | 890  | 73 | 0.019 | 0.049  |
| 1.0      | 6   | 22140                              | 845  | 70 | 0.019 | 0.036  | 20970                                 | 720  | 66 | 0.017 | 0.028  |
| 1.0      | 7   | 22140                              | 845  | 70 | 0.019 | 0.036  | 20970                                 | 720  | 66 | 0.017 | 0.028  |
| 1.0      | 8   | 22140                              | 845  | 70 | 0.019 | 0.036  | 20970                                 | 720  | 66 | 0.017 | 0.028  |
| 1.0      | 10  | 22140                              | 845  | 70 | 0.019 | 0.023  | 20970                                 | 720  | 66 | 0.017 | 0.018  |
| 1.0      | 12  | 19680                              | 670  | 62 | 0.017 | 0.023  | 18640                                 | 570  | 59 | 0.015 | 0.018  |
| 1.0      | 14  | 19680                              | 670  | 62 | 0.017 | 0.014  | 18640                                 | 570  | 59 | 0.015 | 0.011  |
| 1.0      | 16  | 14760                              | 440  | 46 | 0.015 | 0.014  | 13980                                 | 375  | 44 | 0.013 | 0.011  |
| 1.0      | 18  | 14760                              | 440  | 46 | 0.015 | 0.009  | 13980                                 | 375  | 44 | 0.013 | 0.007  |
| 1.0      | 20  | 14760                              | 440  | 46 | 0.015 | 0.009  | 13980                                 | 375  | 44 | 0.013 | 0.007  |
| 1.0      | 22  | 7380                               | 190  | 23 | 0.013 | 0.009  | 6990                                  | 160  | 22 | 0.011 | 0.007  |
| 1.0      | 26  | 7380                               | 190  | 23 | 0.013 | 0.009  | 6990                                  | 160  | 22 | 0.011 | 0.007  |
| 1.0      | 30  | 7380                               | 190  | 23 | 0.013 | 0.009  | 6990                                  | 160  | 22 | 0.011 | 0.007  |
| 1.0      | 40  | 2460                               | 50   | 8  | 0.010 | 0.009  | 2330                                  | 45   | 7  | 0.010 | 0.007  |
| 1.0      | 50  | 2460                               | 50   | 8  | 0.010 | 0.006  | 2330                                  | 45   | 7  | 0.010 | 0.005  |
| 1.2      | 4   | 21900                              | 930  | 83 | 0.021 | 0.076  | 20700                                 | 720  | 78 | 0.017 | 0.059  |
| 1.2      | 6   | 21900                              | 930  | 83 | 0.021 | 0.076  | 20700                                 | 720  | 78 | 0.017 | 0.059  |
| 1.2      | 8   | 19710                              | 755  | 74 | 0.019 | 0.043  | 18630                                 | 585  | 70 | 0.016 | 0.034  |
| 1.2      | 10  | 19710                              | 755  | 74 | 0.019 | 0.027  | 18630                                 | 585  | 70 | 0.016 | 0.021  |
| 1.2      | 12  | 19710                              | 755  | 74 | 0.019 | 0.027  | 18630                                 | 585  | 70 | 0.016 | 0.021  |
| 1.2      | 14  | 17520                              | 595  | 66 | 0.017 | 0.027  | 16560                                 | 460  | 62 | 0.014 | 0.021  |
| 1.2      | 16  | 17520                              | 595  | 66 | 0.017 | 0.016  | 16560                                 | 460  | 62 | 0.014 | 0.013  |
| 1.2      | 20  | 13140                              | 390  | 50 | 0.015 | 0.011  | 12420                                 | 300  | 47 | 0.012 | 0.008  |
| 1.2      | 26  | 6570                               | 165  | 25 | 0.013 | 0.011  | 6210                                  | 130  | 23 | 0.010 | 0.008  |
| 1.2      | 30  | 6570                               | 165  | 25 | 0.013 | 0.011  | 6210                                  | 130  | 23 | 0.010 | 0.008  |
| 1.4      | 6   | 19200                              | 815  | 84 | 0.021 | 0.088  | 18100                                 | 570  | 80 | 0.016 | 0.069  |
| 1.4      | 8   | 17280                              | 660  | 76 | 0.019 | 0.050  | 16290                                 | 460  | 72 | 0.014 | 0.039  |
| 1.4      | 10  | 17280                              | 660  | 76 | 0.019 | 0.050  | 16290                                 | 460  | 72 | 0.014 | 0.039  |
| 1.4      | 14  | 17280                              | 660  | 76 | 0.019 | 0.032  | 16290                                 | 460  | 72 | 0.014 | 0.025  |
| 1.4      | 16  | 15360                              | 520  | 68 | 0.017 | 0.032  | 14480                                 | 365  | 64 | 0.013 | 0.025  |
| 1.4      | 20  | 15360                              | 520  | 68 | 0.017 | 0.019  | 14480                                 | 365  | 64 | 0.013 | 0.015  |
| 1.5      | 4   | 19200                              | 905  | 90 | 0.024 | 0.135  | 18100                                 | 635  | 85 | 0.018 | 0.105  |
| 1.5      | 5   | 19200                              | 905  | 90 | 0.024 | 0.095  | 18100                                 | 635  | 85 | 0.018 | 0.074  |
| 1.5      | 6   | 19200                              | 905  | 90 | 0.024 | 0.095  | 18100                                 | 635  | 85 | 0.018 | 0.074  |
| 1.5      | 7   | 19200                              | 905  | 90 | 0.024 | 0.095  | 18100                                 | 635  | 85 | 0.018 | 0.074  |
| 1.5      | 8   | 17280                              | 735  | 81 | 0.021 | 0.054  | 16290                                 | 515  | 77 | 0.016 | 0.042  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

SEM845 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |    |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |    |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |    |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |    |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc | Fz    | Ap(mm) |
| 0.8      | 2   | 22800                        | 450  | 57 | 0.010 | 0.040  | 27400     | 775  | 69 | 0.014 | 0.072  |
| 0.8      | 3   | 22800                        | 450  | 57 | 0.010 | 0.028  | 27400     | 775  | 69 | 0.014 | 0.050  |
| 0.8      | 4   | 22800                        | 450  | 57 | 0.010 | 0.028  | 27400     | 775  | 69 | 0.014 | 0.050  |
| 0.8      | 5   | 20520                        | 365  | 52 | 0.009 | 0.016  | 24660     | 630  | 62 | 0.013 | 0.029  |
| 0.8      | 6   | 20520                        | 365  | 52 | 0.009 | 0.016  | 24660     | 630  | 62 | 0.013 | 0.029  |
| 0.8      | 8   | 20520                        | 365  | 52 | 0.009 | 0.010  | 24660     | 630  | 62 | 0.013 | 0.018  |
| 0.8      | 10  | 18240                        | 290  | 46 | 0.008 | 0.010  | 21920     | 495  | 55 | 0.011 | 0.018  |
| 0.8      | 12  | 18240                        | 290  | 46 | 0.008 | 0.006  | 21920     | 495  | 55 | 0.011 | 0.011  |
| 0.8      | 14  | 13680                        | 190  | 34 | 0.007 | 0.004  | 16440     | 325  | 41 | 0.010 | 0.007  |
| 0.8      | 16  | 13680                        | 190  | 34 | 0.007 | 0.004  | 16440     | 325  | 41 | 0.010 | 0.007  |
| 0.8      | 20  | 6840                         | 80   | 17 | 0.006 | 0.004  | 8220      | 140  | 21 | 0.009 | 0.007  |
| 0.9      | 6   | 18450                        | 330  | 52 | 0.009 | 0.018  | 22140     | 575  | 63 | 0.013 | 0.032  |
| 0.9      | 8   | 18450                        | 330  | 52 | 0.009 | 0.011  | 22140     | 575  | 63 | 0.013 | 0.020  |
| 0.9      | 10  | 16400                        | 260  | 46 | 0.008 | 0.011  | 19680     | 455  | 56 | 0.012 | 0.020  |
| 1.0      | 2   | 20500                        | 665  | 64 | 0.016 | 0.050  | 24600     | 1045 | 77 | 0.021 | 0.090  |
| 1.0      | 3   | 20500                        | 665  | 64 | 0.016 | 0.050  | 24600     | 1045 | 77 | 0.021 | 0.090  |
| 1.0      | 4   | 20500                        | 665  | 64 | 0.016 | 0.035  | 24600     | 1045 | 77 | 0.021 | 0.063  |
| 1.0      | 5   | 20500                        | 665  | 64 | 0.016 | 0.035  | 24600     | 1045 | 77 | 0.021 | 0.063  |
| 1.0      | 6   | 18450                        | 540  | 58 | 0.015 | 0.020  | 22140     | 845  | 70 | 0.019 | 0.036  |
| 1.0      | 7   | 18450                        | 540  | 58 | 0.015 | 0.020  | 22140     | 845  | 70 | 0.019 | 0.036  |
| 1.0      | 8   | 18450                        | 540  | 58 | 0.015 | 0.020  | 22140     | 845  | 70 | 0.019 | 0.036  |
| 1.0      | 10  | 18450                        | 540  | 58 | 0.015 | 0.013  | 22140     | 845  | 70 | 0.019 | 0.023  |
| 1.0      | 12  | 16400                        | 425  | 52 | 0.013 | 0.013  | 19680     | 670  | 62 | 0.017 | 0.023  |
| 1.0      | 14  | 16400                        | 425  | 52 | 0.013 | 0.008  | 19680     | 670  | 62 | 0.017 | 0.014  |
| 1.0      | 16  | 12300                        | 280  | 39 | 0.011 | 0.008  | 14760     | 440  | 46 | 0.015 | 0.014  |
| 1.0      | 18  | 12300                        | 280  | 39 | 0.011 | 0.005  | 14760     | 440  | 46 | 0.015 | 0.009  |
| 1.0      | 20  | 12300                        | 280  | 39 | 0.011 | 0.005  | 14760     | 440  | 46 | 0.015 | 0.009  |
| 1.0      | 22  | 6150                         | 120  | 19 | 0.010 | 0.005  | 7380      | 190  | 23 | 0.013 | 0.009  |
| 1.0      | 26  | 6150                         | 120  | 19 | 0.010 | 0.005  | 7380      | 190  | 23 | 0.013 | 0.009  |
| 1.0      | 30  | 6150                         | 120  | 19 | 0.010 | 0.005  | 7380      | 190  | 23 | 0.013 | 0.009  |
| 1.0      | 40  | 2050                         | 35   | 6  | 0.009 | 0.005  | 2460      | 50   | 8  | 0.010 | 0.009  |
| 1.0      | 50  | 2050                         | 35   | 6  | 0.009 | 0.003  | 2460      | 50   | 8  | 0.010 | 0.006  |
| 1.2      | 4   | 18200                        | 485  | 69 | 0.013 | 0.042  | 21900     | 930  | 83 | 0.021 | 0.076  |
| 1.2      | 6   | 18200                        | 485  | 69 | 0.013 | 0.042  | 21900     | 930  | 83 | 0.021 | 0.076  |
| 1.2      | 8   | 16380                        | 395  | 62 | 0.012 | 0.024  | 19710     | 755  | 74 | 0.019 | 0.043  |
| 1.2      | 10  | 16380                        | 395  | 62 | 0.012 | 0.015  | 19710     | 755  | 74 | 0.019 | 0.027  |
| 1.2      | 12  | 16380                        | 395  | 62 | 0.012 | 0.015  | 19710     | 755  | 74 | 0.019 | 0.027  |
| 1.2      | 14  | 14560                        | 310  | 55 | 0.011 | 0.015  | 17520     | 595  | 66 | 0.017 | 0.027  |
| 1.2      | 16  | 14560                        | 310  | 55 | 0.011 | 0.009  | 17520     | 595  | 66 | 0.017 | 0.016  |
| 1.2      | 20  | 10920                        | 205  | 41 | 0.009 | 0.006  | 13140     | 390  | 50 | 0.015 | 0.011  |
| 1.2      | 26  | 5460                         | 85   | 21 | 0.008 | 0.006  | 6570      | 165  | 25 | 0.013 | 0.011  |
| 1.2      | 30  | 5460                         | 85   | 21 | 0.008 | 0.006  | 6570      | 165  | 25 | 0.013 | 0.011  |
| 1.4      | 6   | 16000                        | 425  | 70 | 0.013 | 0.049  | 19200     | 815  | 84 | 0.021 | 0.088  |
| 1.4      | 8   | 14400                        | 345  | 63 | 0.012 | 0.028  | 17280     | 660  | 76 | 0.019 | 0.050  |
| 1.4      | 10  | 14400                        | 345  | 63 | 0.012 | 0.028  | 17280     | 660  | 76 | 0.019 | 0      |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

SEM845 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 1.5      | 10  | 17280                              | 735  | 81  | 0.021 | 0.054  | 16290                                 | 515  | 77 | 0.016 | 0.042  |
| 1.5      | 12  | 17280                              | 735  | 81  | 0.021 | 0.054  | 16290                                 | 515  | 77 | 0.016 | 0.042  |
| 1.5      | 14  | 17280                              | 735  | 81  | 0.021 | 0.034  | 16290                                 | 515  | 77 | 0.016 | 0.026  |
| 1.5      | 16  | 15360                              | 580  | 72  | 0.019 | 0.034  | 14480                                 | 405  | 68 | 0.014 | 0.026  |
| 1.5      | 18  | 15360                              | 580  | 72  | 0.019 | 0.034  | 14480                                 | 405  | 68 | 0.014 | 0.026  |
| 1.5      | 20  | 15360                              | 580  | 72  | 0.019 | 0.020  | 14480                                 | 405  | 68 | 0.014 | 0.016  |
| 1.5      | 22  | 15360                              | 580  | 72  | 0.019 | 0.020  | 14480                                 | 405  | 68 | 0.014 | 0.016  |
| 1.5      | 26  | 11520                              | 380  | 54  | 0.016 | 0.014  | 10860                                 | 265  | 51 | 0.012 | 0.011  |
| 1.5      | 30  | 11520                              | 380  | 54  | 0.016 | 0.014  | 10860                                 | 265  | 51 | 0.012 | 0.011  |
| 1.6      | 8   | 17800                              | 840  | 89  | 0.024 | 0.101  | 16800                                 | 655  | 84 | 0.019 | 0.078  |
| 1.6      | 10  | 16020                              | 680  | 81  | 0.021 | 0.058  | 15120                                 | 530  | 76 | 0.018 | 0.045  |
| 1.6      | 12  | 16020                              | 680  | 81  | 0.021 | 0.058  | 15120                                 | 530  | 76 | 0.018 | 0.045  |
| 1.6      | 16  | 16020                              | 680  | 81  | 0.021 | 0.036  | 15120                                 | 530  | 76 | 0.018 | 0.028  |
| 1.6      | 20  | 14240                              | 540  | 72  | 0.019 | 0.036  | 13440                                 | 420  | 68 | 0.016 | 0.028  |
| 1.8      | 8   | 17800                              | 840  | 101 | 0.024 | 0.113  | 16800                                 | 655  | 95 | 0.019 | 0.088  |
| 1.8      | 10  | 16020                              | 680  | 91  | 0.021 | 0.065  | 15120                                 | 530  | 86 | 0.018 | 0.050  |
| 1.8      | 12  | 16020                              | 680  | 91  | 0.021 | 0.065  | 15120                                 | 530  | 86 | 0.018 | 0.050  |
| 1.8      | 16  | 16020                              | 680  | 91  | 0.021 | 0.041  | 15120                                 | 530  | 86 | 0.018 | 0.032  |
| 1.8      | 20  | 14240                              | 540  | 81  | 0.019 | 0.041  | 13440                                 | 420  | 76 | 0.016 | 0.032  |
| 2.0      | 6   | 14400                              | 820  | 90  | 0.028 | 0.180  | 13600                                 | 620  | 85 | 0.023 | 0.140  |
| 2.0      | 8   | 14400                              | 820  | 90  | 0.028 | 0.126  | 13600                                 | 620  | 85 | 0.023 | 0.098  |
| 2.0      | 10  | 14400                              | 820  | 90  | 0.028 | 0.126  | 13600                                 | 620  | 85 | 0.023 | 0.098  |
| 2.0      | 12  | 12960                              | 665  | 81  | 0.026 | 0.072  | 12240                                 | 500  | 77 | 0.020 | 0.056  |
| 2.0      | 14  | 12960                              | 665  | 81  | 0.026 | 0.072  | 12240                                 | 500  | 77 | 0.020 | 0.056  |
| 2.0      | 16  | 12960                              | 665  | 81  | 0.026 | 0.072  | 12240                                 | 500  | 77 | 0.020 | 0.056  |
| 2.0      | 18  | 12960                              | 665  | 81  | 0.026 | 0.045  | 12240                                 | 500  | 77 | 0.020 | 0.035  |
| 2.0      | 20  | 12960                              | 665  | 81  | 0.026 | 0.045  | 12240                                 | 500  | 77 | 0.020 | 0.035  |
| 2.0      | 22  | 11520                              | 525  | 72  | 0.023 | 0.045  | 10880                                 | 395  | 68 | 0.018 | 0.035  |
| 2.0      | 26  | 11520                              | 525  | 72  | 0.023 | 0.045  | 10880                                 | 395  | 68 | 0.018 | 0.035  |
| 2.0      | 30  | 11520                              | 525  | 72  | 0.023 | 0.027  | 10880                                 | 395  | 68 | 0.018 | 0.021  |
| 2.0      | 35  | 8640                               | 345  | 54  | 0.020 | 0.018  | 8160                                  | 260  | 51 | 0.016 | 0.014  |
| 2.0      | 40  | 8640                               | 345  | 54  | 0.020 | 0.018  | 8160                                  | 260  | 51 | 0.016 | 0.014  |
| 2.0      | 45  | 4320                               | 150  | 27  | 0.017 | 0.018  | 4080                                  | 110  | 26 | 0.013 | 0.014  |
| 2.0      | 50  | 4320                               | 150  | 27  | 0.017 | 0.018  | 4080                                  | 110  | 26 | 0.013 | 0.014  |
| 2.0      | 60  | 4320                               | 150  | 27  | 0.017 | 0.018  | 4080                                  | 110  | 26 | 0.013 | 0.014  |
| 2.5      | 8   | 12300                              | 970  | 97  | 0.039 | 0.158  | 11600                                 | 680  | 91 | 0.029 | 0.123  |
| 2.5      | 10  | 12300                              | 970  | 97  | 0.039 | 0.158  | 11600                                 | 680  | 91 | 0.029 | 0.123  |
| 2.5      | 12  | 12300                              | 970  | 97  | 0.039 | 0.158  | 11600                                 | 680  | 91 | 0.029 | 0.123  |
| 2.5      | 14  | 11070                              | 785  | 87  | 0.035 | 0.090  | 10440                                 | 550  | 82 | 0.026 | 0.070  |
| 2.5      | 16  | 11070                              | 785  | 87  | 0.035 | 0.090  | 10440                                 | 550  | 82 | 0.026 | 0.070  |
| 2.5      | 18  | 11070                              | 785  | 87  | 0.035 | 0.090  | 10440                                 | 550  | 82 | 0.026 | 0.070  |
| 2.5      | 20  | 11070                              | 785  | 87  | 0.035 | 0.090  | 10440                                 | 550  | 82 | 0.026 | 0.070  |
| 2.5      | 22  | 11070                              | 785  | 87  | 0.035 | 0.056  | 10440                                 | 550  | 82 | 0.026 | 0.044  |
| 2.5      | 26  | 9840                               | 620  | 77  | 0.032 | 0.056  | 9280                                  | 435  | 73 | 0.023 | 0.044  |
| 2.5      | 30  | 9840                               | 620  | 77  | 0.032 | 0.056  | 9280                                  | 435  | 73 | 0.023 | 0.044  |
| 2.5      | 35  | 9840                               | 620  | 77  | 0.032 | 0.034  | 9280                                  | 435  | 73 | 0.023 | 0.026  |
| 2.5      | 40  | 7380                               | 405  | 58  | 0.027 | 0.034  | 6960                                  | 285  | 55 | 0.020 | 0.026  |
| 2.5      | 45  | 7380                               | 405  | 58  | 0.027 | 0.023  | 6960                                  | 285  | 55 | 0.020 | 0.018  |
| 2.5      | 50  | 7380                               | 405  | 58  | 0.027 | 0.023  | 6960                                  | 285  | 55 | 0.020 | 0.018  |
| 3.0      | 6   | 10900                              | 860  | 103 | 0.039 | 0.270  | 10300                                 | 605  | 97 | 0.029 | 0.210  |
| 3.0      | 8   | 10900                              | 860  | 103 | 0.039 | 0.270  | 10300                                 | 605  | 97 | 0.029 | 0.210  |
| 3.0      | 10  | 10900                              | 860  | 103 | 0.039 | 0.189  | 10300                                 | 605  | 97 | 0.029 | 0.147  |
| 3.0      | 12  | 10900                              | 860  | 103 | 0.039 | 0.189  | 10300                                 | 605  | 97 | 0.029 | 0.147  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

SEM845 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 1.5      | 10  | 14400                        | 385  | 68 | 0.013 | 0.030  | 17280     | 735  | 81  | 0.021 | 0.054  |
| 1.5      | 12  | 14400                        | 385  | 68 | 0.013 | 0.030  | 17280     | 735  | 81  | 0.021 | 0.054  |
| 1.5      | 14  | 14400                        | 385  | 68 | 0.013 | 0.019  | 17280     | 735  | 81  | 0.021 | 0.034  |
| 1.5      | 16  | 12800                        | 305  | 60 | 0.012 | 0.019  | 15360     | 580  | 72  | 0.019 | 0.034  |
| 1.5      | 18  | 12800                        | 305  | 60 | 0.012 | 0.019  | 15360     | 580  | 72  | 0.019 | 0.034  |
| 1.5      | 20  | 12800                        | 305  | 60 | 0.012 | 0.011  | 15360     | 580  | 72  | 0.019 | 0.020  |
| 1.5      | 22  | 12800                        | 305  | 60 | 0.012 | 0.011  | 15360     | 580  | 72  | 0.019 | 0.020  |
| 1.5      | 26  | 9600                         | 200  | 45 | 0.010 | 0.008  | 11520     | 380  | 54  | 0.016 | 0.014  |
| 1.5      | 30  | 9600                         | 200  | 45 | 0.010 | 0.008  | 11520     | 380  | 54  | 0.016 | 0.014  |
| 1.6      | 8   | 14800                        | 490  | 74 | 0.017 | 0.056  | 17800     | 840  | 89  | 0.024 | 0.101  |
| 1.6      | 10  | 13320                        | 395  | 67 | 0.015 | 0.032  | 16020     | 680  | 81  | 0.021 | 0.058  |
| 1.6      | 12  | 13320                        | 395  | 67 | 0.015 | 0.032  | 16020     | 680  | 81  | 0.021 | 0.058  |
| 1.6      | 16  | 13320                        | 395  | 67 | 0.015 | 0.020  | 16020     | 680  | 81  | 0.021 | 0.036  |
| 1.6      | 20  | 11840                        | 315  | 60 | 0.013 | 0.020  | 14240     | 540  | 72  | 0.019 | 0.036  |
| 1.8      | 8   | 14800                        | 490  | 84 | 0.017 | 0.063  | 17800     | 840  | 101 | 0.024 | 0.113  |
| 1.8      | 10  | 13320                        | 395  | 75 | 0.015 | 0.036  | 16020     | 680  | 91  | 0.021 | 0.065  |
| 1.8      | 12  | 13320                        | 395  | 75 | 0.015 | 0.036  | 16020     | 680  | 91  | 0.021 | 0.065  |
| 1.8      | 16  | 13320                        | 395  | 75 | 0.015 | 0.023  | 16020     | 680  | 91  | 0.021 | 0.041  |
| 1.8      | 20  | 11840                        | 315  | 67 | 0.013 | 0.023  | 14240     | 540  | 81  | 0.019 | 0.041  |
| 2.0      | 6   | 12000                        | 475  | 75 | 0.020 | 0.100  | 14400     | 820  | 90  | 0.028 | 0.180  |
| 2.0      | 8   | 12000                        | 475  | 75 | 0.020 | 0.070  | 14400     | 820  | 90  | 0.028 | 0.126  |
| 2.0      | 10  | 12000                        | 475  | 75 | 0.020 | 0.070  | 14400     | 820  | 90  | 0.028 | 0.126  |
| 2.0      | 12  | 10800                        | 385  | 68 | 0.018 | 0.040  | 12960     | 665  | 81  | 0.026 | 0.072  |
| 2.0      | 14  | 10800                        | 385  | 68 | 0.018 | 0.040  | 12960     | 665  | 81  | 0.026 | 0.072  |
| 2.0      | 16  | 10800                        | 385  | 68 | 0.018 | 0.040  | 12960     | 665  | 81  | 0.026 | 0.072  |
| 2.0      | 18  | 10800                        | 385  | 68 | 0.018 | 0.025  | 12960     | 665  | 81  | 0.026 | 0.045  |
| 2.0      | 20  | 10800                        | 385  | 68 | 0.018 | 0.025  | 12960     | 665  | 81  | 0.026 | 0.045  |
| 2.0      | 22  | 9600                         | 305  | 60 | 0.016 | 0.025  | 11520     | 525  | 72  | 0.023 | 0.045  |
| 2.0      | 26  | 9600                         | 305  | 60 | 0.016 | 0.025  | 11520     | 525  | 72  | 0.023 | 0.045  |
| 2.0      | 30  | 9600                         | 305  | 60 | 0.016 | 0.015  | 11520     | 525  | 72  | 0.023 | 0.027  |
| 2.0      | 35  | 7200                         | 200  | 45 | 0.014 | 0.010  | 8640      | 345  | 54  | 0.020 | 0.018  |
| 2.0      | 40  | 7200                         | 200  | 45 | 0.014 | 0.010  | 8640      | 345  | 54  | 0.020 | 0.018  |
| 2.0      | 45  | 3600                         | 85   | 23 | 0.012 | 0.010  | 4320      | 150  | 27  | 0.017 | 0.018  |
| 2.0      | 50  | 3600                         | 85   | 23 | 0.012 | 0.010  | 4320      | 150  | 27  | 0.017 | 0.018  |
| 2.0      | 60  | 3600                         | 85   | 23 | 0.012 | 0.010  | 4320      | 150  | 27  | 0.017 | 0.018  |
| 2.5      | 8   | 10300                        | 510  | 81 | 0.025 | 0.088  | 12300     | 970  | 97  | 0.039 | 0.158  |
| 2.5      | 10  | 10300                        | 510  | 81 | 0.025 | 0.088  | 12300     | 970  | 97  | 0.039 | 0.158  |
| 2.5      | 12  | 10300                        | 510  | 81 | 0.025 | 0.088  | 12300     | 970  | 97  | 0.039 | 0.158  |
| 2.5      | 14  | 9270                         | 415  | 73 | 0.022 | 0.050  | 11070     | 785  | 87  | 0.035 | 0.090  |
| 2.5      | 16  | 9270                         | 415  | 73 | 0.022 | 0.050  | 11070     | 785  | 87  | 0.035 | 0.090  |
| 2.5      | 18  | 9270                         | 415  | 73 | 0.022 | 0.050  | 11070     | 785  | 87  | 0.035 | 0.090  |
| 2.5      | 20  | 9270                         | 415  | 73 | 0.022 | 0.050  | 11070     | 785  | 87  | 0.035 | 0.090  |
| 2.5      | 22  | 9270                         | 415  | 73 | 0.022 | 0.031  | 11070     | 785  | 87  | 0.035 | 0.056  |
| 2.5      | 26  | 8240                         | 325  | 65 | 0.020 | 0.031  | 9840      | 620  | 77  | 0.032 | 0.056  |
| 2.5      | 30  | 8240                         | 325  | 65 | 0.020 | 0.031  | 9840      | 620  | 77  | 0.032 | 0.056  |
| 2.5      | 35  | 8240                         | 325  | 65 | 0.020 | 0.019  | 9840      | 620  | 77  | 0.032 | 0.034  |
| 2.5      | 40  | 6180                         | 215  | 49 | 0.017 | 0.019  | 7380      | 405  | 58  | 0.027 | 0.034  |
| 2.5      | 45  | 6180                         | 215  | 49 | 0.017 | 0.013  | 7380      | 405  | 58  | 0.027 | 0.023  |
| 2.5      | 50  | 6180                         | 215  | 49 | 0.017 | 0.013  | 7380      | 405  | 58  | 0.027 | 0.023  |
| 3.0      | 6   | 6600                         | 450  | 62 | 0.034 | 0.150  | 10900     | 860  | 103 | 0.039 | 0.270  |
| 3.0      | 8   | 6600                         | 450  | 62 | 0.034 | 0.150  | 10900     | 860  | 103 | 0.039 | 0.270  |
| 3.0      | 10  | 6600                         | 450  | 62 | 0.034 | 0.105  | 10900     | 860  | 103 | 0.039 | 0.189  |
| 3.0      | 12  | 6600                         | 450  | 62 | 0.034 | 0.105  | 10900     | 860  | 103 | 0.039 | 0.189  |

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

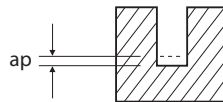
DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 3.0      | 14  | 10900                              | 860  | 103 | 0.039 | 0.189  | 10300                                 | 605  | 97 | 0.029 | 0.147  |
| 3.0      | 16  | 9810                               | 695  | 92  | 0.035 | 0.108  | 9270                                  | 490  | 87 | 0.026 | 0.084  |
| 3.0      | 18  | 9810                               | 695  | 92  | 0.035 | 0.108  | 9270                                  | 490  | 87 | 0.026 | 0.084  |
| 3.0      | 20  | 9810                               | 695  | 92  | 0.035 | 0.108  | 9270                                  | 490  | 87 | 0.026 | 0.084  |
| 3.0      | 22  | 9810                               | 695  | 92  | 0.035 | 0.108  | 9270                                  | 490  | 87 | 0.026 | 0.084  |
| 3.0      | 26  | 9810                               | 695  | 92  | 0.035 | 0.068  | 9270                                  | 490  | 87 | 0.026 | 0.053  |
| 3.0      | 30  | 9810                               | 695  | 92  | 0.035 | 0.068  | 9270                                  | 490  | 87 | 0.026 | 0.053  |
| 3.0      | 35  | 8720                               | 550  | 82  | 0.032 | 0.068  | 8240                                  | 385  | 78 | 0.023 | 0.053  |
| 3.0      | 40  | 8720                               | 550  | 82  | 0.032 | 0.041  | 8240                                  | 385  | 78 | 0.023 | 0.032  |
| 3.0      | 45  | 8720                               | 550  | 82  | 0.032 | 0.041  | 8240                                  | 385  | 78 | 0.023 | 0.032  |
| 3.0      | 50  | 6540                               | 360  | 62  | 0.028 | 0.027  | 6180                                  | 255  | 58 | 0.021 | 0.021  |
| 3.0      | 60  | 6540                               | 360  | 62  | 0.028 | 0.027  | 6180                                  | 255  | 58 | 0.021 | 0.021  |
| 4.0      | 8   | 8000                               | 1300 | 101 | 0.081 | 0.360  | 7600                                  | 1160 | 96 | 0.076 | 0.280  |
| 4.0      | 10  | 8000                               | 1300 | 101 | 0.081 | 0.360  | 7600                                  | 1160 | 96 | 0.076 | 0.280  |
| 4.0      | 12  | 8000                               | 1300 | 101 | 0.081 | 0.360  | 7600                                  | 1160 | 96 | 0.076 | 0.280  |
| 4.0      | 14  | 8000                               | 1300 | 101 | 0.081 | 0.252  | 7600                                  | 1160 | 96 | 0.076 | 0.196  |
| 4.0      | 16  | 8000                               | 1300 | 101 | 0.081 | 0.252  | 7600                                  | 1160 | 96 | 0.076 | 0.196  |
| 4.0      | 18  | 8000                               | 1300 | 101 | 0.081 | 0.252  | 7600                                  | 1160 | 96 | 0.076 | 0.196  |
| 4.0      | 20  | 8000                               | 1300 | 101 | 0.081 | 0.252  | 7600                                  | 1160 | 96 | 0.076 | 0.196  |
| 4.0      | 22  | 7200                               | 1055 | 90  | 0.073 | 0.144  | 6840                                  | 940  | 86 | 0.069 | 0.112  |
| 4.0      | 26  | 7200                               | 1055 | 90  | 0.073 | 0.144  | 6840                                  | 940  | 86 | 0.069 | 0.112  |
| 4.0      | 30  | 7200                               | 1055 | 90  | 0.073 | 0.144  | 6840                                  | 940  | 86 | 0.069 | 0.112  |
| 4.0      | 35  | 7200                               | 1055 | 90  | 0.073 | 0.090  | 6840                                  | 940  | 86 | 0.069 | 0.070  |
| 4.0      | 40  | 7200                               | 1055 | 90  | 0.073 | 0.090  | 6840                                  | 940  | 86 | 0.069 | 0.070  |
| 4.0      | 45  | 6400                               | 830  | 80  | 0.065 | 0.090  | 6080                                  | 740  | 76 | 0.061 | 0.070  |
| 4.0      | 50  | 6400                               | 830  | 80  | 0.065 | 0.090  | 6080                                  | 740  | 76 | 0.061 | 0.070  |
| 4.0      | 60  | 6400                               | 830  | 80  | 0.065 | 0.054  | 6080                                  | 740  | 76 | 0.061 | 0.042  |
| 5.0      | 16  | 6400                               | 1155 | 101 | 0.090 | 0.315  | 6100                                  | 900  | 96 | 0.074 | 0.245  |
| 5.0      | 20  | 6400                               | 1155 | 101 | 0.090 | 0.315  | 6100                                  | 900  | 96 | 0.074 | 0.245  |
| 5.0      | 26  | 5760                               | 935  | 90  | 0.081 | 0.180  | 5490                                  | 730  | 86 | 0.066 | 0.140  |
| 5.0      | 30  | 5760                               | 935  | 90  | 0.081 | 0.180  | 5490                                  | 730  | 86 | 0.066 | 0.140  |
| 5.0      | 35  | 5760                               | 935  | 90  | 0.081 | 0.180  | 5490                                  | 730  | 86 | 0.066 | 0.140  |
| 5.0      | 40  | 5760                               | 935  | 90  | 0.081 | 0.180  | 5490                                  | 730  | 86 | 0.066 | 0.140  |
| 5.0      | 50  | 5760                               | 935  | 90  | 0.081 | 0.113  | 5490                                  | 730  | 86 | 0.066 | 0.088  |
| 5.0      | 60  | 5120                               | 740  | 80  | 0.072 | 0.113  | 4880                                  | 575  | 77 | 0.059 | 0.088  |
| 6.0      | 15  | 5300                               | 1055 | 100 | 0.100 | 0.540  | 5000                                  | 820  | 94 | 0.082 | 0.420  |
| 6.0      | 20  | 5300                               | 1055 | 100 | 0.100 | 0.378  | 5000                                  | 820  | 94 | 0.082 | 0.294  |
| 6.0      | 30  | 5300                               | 1055 | 100 | 0.100 | 0.378  | 5000                                  | 820  | 94 | 0.082 | 0.294  |
| 6.0      | 32  | 4770                               | 855  | 90  | 0.090 | 0.216  | 4500                                  | 665  | 85 | 0.074 | 0.168  |
| 8.0      | 25  | 4000                               | 950  | 101 | 0.119 | 0.504  | 3800                                  | 750  | 96 | 0.099 | 0.392  |
| 8.0      | 30  | 4000                               | 950  | 101 | 0.119 | 0.504  | 3800                                  | 750  | 96 | 0.099 | 0.392  |
| 8.0      | 42  | 3600                               | 770  | 90  | 0.107 | 0.288  | 3400                                  | 605  | 85 | 0.089 | 0.224  |
| 10.0     | 30  | 3200                               | 900  | 101 | 0.141 | 0.900  | 3050                                  | 680  | 96 | 0.111 | 0.700  |
| 10.0     | 35  | 3200                               | 900  | 101 | 0.141 | 0.630  | 3050                                  | 680  | 96 | 0.111 | 0.490  |
| 10.0     | 45  | 3200                               | 900  | 101 | 0.141 | 0.630  | 3050                                  | 680  | 96 | 0.111 | 0.490  |
| 12.0     | 35  | 2650                               | 800  | 100 | 0.151 | 1.080  | 2520                                  | 600  | 95 | 0.119 | 0.840  |
| 12.0     | 40  | 2650                               | 800  | 100 | 0.151 | 0.756  | 2520                                  | 600  | 95 | 0.119 | 0.588  |
| 12.0     | 50  | 2650                               | 800  | 100 | 0.151 | 0.756  | 2520                                  | 600  | 95 | 0.119 | 0.588  |

(Depth of Cut pre one pass)

Y-COATED SOLID CARBIDE END MILLS  
2 FLUTE LONG NECK

## SEM845 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

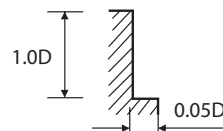
| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 3.0      | 14  | 6600                         | 450  | 62 | 0.034 | 0.105  | 10900     | 860  | 103 | 0.039 | 0.189  |
| 3.0      | 16  | 5940                         | 365  | 56 | 0.031 | 0.060  | 9810      | 695  | 92  | 0.035 | 0.108  |
| 3.0      | 18  | 5940                         | 365  | 56 | 0.031 | 0.060  | 9810      | 695  | 92  | 0.035 | 0.108  |
| 3.0      | 20  | 5940                         | 365  | 56 | 0.031 | 0.060  | 9810      | 695  | 92  | 0.035 | 0.108  |
| 3.0      | 22  | 5940                         | 365  | 56 | 0.031 | 0.060  | 9810      | 695  | 92  | 0.035 | 0.108  |
| 3.0      | 26  | 5940                         | 365  | 56 | 0.031 | 0.038  | 9810      | 695  | 92  | 0.035 | 0.068  |
| 3.0      | 30  | 5940                         | 365  | 56 | 0.031 | 0.038  | 9810      | 695  | 92  | 0.035 | 0.068  |
| 3.0      | 35  | 5280                         | 290  | 50 | 0.027 | 0.038  | 8720      | 550  | 82  | 0.032 | 0.068  |
| 3.0      | 40  | 5280                         | 290  | 50 | 0.027 | 0.023  | 8720      | 550  | 82  | 0.032 | 0.041  |
| 3.0      | 45  | 5280                         | 290  | 50 | 0.027 | 0.023  | 8720      | 550  | 82  | 0.032 | 0.041  |
| 3.0      | 50  | 3960                         | 190  | 37 | 0.024 | 0.015  | 6540      | 360  | 62  | 0.028 | 0.027  |
| 3.0      | 60  | 3960                         | 190  | 37 | 0.024 | 0.015  | 6540      | 360  | 62  | 0.028 | 0.027  |
| 4.0      | 8   | 6700                         | 770  | 84 | 0.057 | 0.200  | 8000      | 1300 | 101 | 0.081 | 0.360  |
| 4.0      | 10  | 6700                         | 770  | 84 | 0.057 | 0.200  | 8000      | 1300 | 101 | 0.081 | 0.360  |
| 4.0      | 12  | 6700                         | 770  | 84 | 0.057 | 0.200  | 8000      | 1300 | 101 | 0.081 | 0.360  |
| 4.0      | 14  | 6700                         | 770  | 84 | 0.057 | 0.140  | 8000      | 1300 | 101 | 0.081 | 0.252  |
| 4.0      | 16  | 6700                         | 770  | 84 | 0.057 | 0.140  | 8000      | 1300 | 101 | 0.081 | 0.252  |
| 4.0      | 18  | 6700                         | 770  | 84 | 0.057 | 0.140  | 8000      | 1300 | 101 | 0.081 | 0.252  |
| 4.0      | 20  | 6700                         | 770  | 84 | 0.057 | 0.140  | 8000      | 1300 | 101 | 0.081 | 0.252  |
| 4.0      | 22  | 6030                         | 625  | 76 | 0.052 | 0.080  | 7200      | 1055 | 90  | 0.073 | 0.144  |
| 4.0      | 26  | 6030                         | 625  | 76 | 0.052 | 0.080  | 7200      | 1055 | 90  | 0.073 | 0.144  |
| 4.0      | 30  | 6030                         | 625  | 76 | 0.052 | 0.080  | 7200      | 1055 | 90  | 0.073 | 0.144  |
| 4.0      | 35  | 6030                         | 625  | 76 | 0.052 | 0.050  | 7200      | 1055 | 90  | 0.073 | 0.090  |
| 4.0      | 40  | 6030                         | 625  | 76 | 0.052 | 0.050  | 7200      | 1055 | 90  | 0.073 | 0.090  |
| 4.0      | 45  | 5360                         | 495  | 67 | 0.046 | 0.050  | 6400      | 830  | 80  | 0.065 | 0.090  |
| 4.0      | 50  | 5360                         | 495  | 67 | 0.046 | 0.050  | 6400      | 830  | 80  | 0.065 | 0.090  |
| 4.0      | 60  | 5360                         | 495  | 67 | 0.046 | 0.030  | 6400      | 830  | 80  | 0.065 | 0.054  |
| 5.0      | 16  | 5400                         | 605  | 85 | 0.056 | 0.175  | 6400      | 1155 | 101 | 0.090 | 0.315  |
| 5.0      | 20  | 5400                         | 605  | 85 | 0.056 | 0.175  | 6400      | 1155 | 101 | 0.090 | 0.315  |
| 5.0      | 26  | 4860                         | 490  | 76 | 0.050 | 0.100  | 5760      | 935  | 90  | 0.081 | 0.180  |
| 5.0      | 30  | 4860                         | 490  | 76 | 0.050 | 0.100  | 5760      | 935  | 90  | 0.081 | 0.180  |
| 5.0      | 35  | 4860                         | 490  | 76 | 0.050 | 0.100  | 5760      | 935  | 90  | 0.081 | 0.180  |
| 5.0      | 40  | 4860                         | 490  | 76 | 0.050 | 0.100  | 5760      | 935  | 90  | 0.081 | 0.180  |
| 5.0      | 50  | 4860                         | 490  | 76 | 0.050 | 0.063  | 5760      | 935  | 90  | 0.081 | 0.113  |
| 5.0      | 60  | 4320                         | 385  | 68 | 0.045 | 0.063  | 5120      | 740  | 80  | 0.072 | 0.113  |
| 6.0      | 15  | 4400                         | 550  | 83 | 0.063 | 0.300  | 5300      | 1055 | 100 | 0.100 | 0.540  |
| 6.0      | 20  | 4400                         | 550  | 83 | 0.063 | 0.210  | 5300      | 1055 | 100 | 0.100 | 0.378  |
| 6.0      | 30  | 4400                         | 550  | 83 | 0.063 | 0.210  | 5300      | 1055 | 100 | 0.100 | 0.378  |
| 6.0      | 32  | 3960                         | 445  | 75 | 0.056 | 0.120  | 4770      | 855  | 90  | 0.090 | 0.216  |
| 8.0      | 25  | 3300                         | 500  | 83 | 0.076 | 0.280  | 4000      | 950  | 101 | 0.119 | 0.504  |
| 8.0      | 30  | 3300                         | 500  | 83 | 0.076 | 0.280  | 4000      | 950  | 101 | 0.119 | 0.504  |
| 8.0      | 42  | 2950                         | 405  | 74 | 0.069 | 0.160  | 3600      | 770  | 90  | 0.107 | 0.288  |
| 10.0     | 30  | 2630                         | 400  | 83 | 0.076 | 0.500  | 3200      | 900  | 101 | 0.141 | 0.900  |
| 10.0     | 35  | 2630                         | 400  | 83 | 0.076 | 0.350  | 3200      | 900  | 101 | 0.141 | 0.630  |
| 10.0     | 45  | 2630                         | 400  | 83 | 0.076 | 0.350  | 3200      | 900  | 101 | 0.141 | 0.630  |
| 12.0     | 35  | 2180                         | 350  | 82 | 0.080 | 0.600  | 2650      | 800  | 100 | 0.151 | 1.080  |
| 12.0     | 40  | 2180                         | 350  | 82 | 0.080 | 0.420  | 2650      | 800  | 100 | 0.151 | 0.756  |
| 12.0     | 50  | 2180                         | 350  | 82 | 0.080 | 0.420  | 2650      | 800  | 100 | 0.151 | 0.756  |

(Depth of Cut pre one pass)

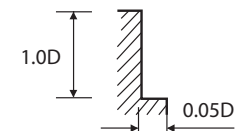


Y-COATED SOLID CARBIDE END MILLS  
4 FLUTESEME36 SERIES  
SEME71 SERIESRPM = rev./min. Vc = m/min.  
FEED = mm/min. Fz = mm/tooth

| MATERIAL | P                                  |      |     |       |                                       |      |    |       |                              |      |    |       |
|----------|------------------------------------|------|-----|-------|---------------------------------------|------|----|-------|------------------------------|------|----|-------|
|          | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       | HARDENED STEELS              |      |    |       |
| HARDNESS | ~ HRC 35                           |      |     |       | HRC 35 ~ HRC 45                       |      |    |       | HRC 45 ~ HRC 55              |      |    |       |
| STRENGTH | ~ 1100N/mm <sup>2</sup>            |      |     |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |
| DIAMETER | RPM                                | FEED | Vc  | Fz    | RPM                                   | FEED | Vc | Fz    | RPM                          | FEED | Vc | Fz    |
| 0.8      | 31250                              | 235  | 79  | 0.002 | 18750                                 | 140  | 47 | 0.002 | 12500                        | 42   | 31 | 0.001 |
| 0.9      | 29300                              | 245  | 83  | 0.002 | 17580                                 | 145  | 50 | 0.002 | 11720                        | 42   | 33 | 0.001 |
| 1.0      | 26800                              | 250  | 84  | 0.002 | 16080                                 | 150  | 51 | 0.002 | 10720                        | 47   | 34 | 0.001 |
| 1.2      | 22500                              | 265  | 85  | 0.003 | 13500                                 | 160  | 51 | 0.003 | 9000                         | 47   | 34 | 0.001 |
| 1.5      | 18750                              | 270  | 88  | 0.004 | 11250                                 | 165  | 53 | 0.004 | 7500                         | 47   | 35 | 0.002 |
| 2.0      | 14450                              | 295  | 91  | 0.005 | 9450                                  | 180  | 59 | 0.005 | 6300                         | 53   | 40 | 0.002 |
| 2.5      | 12800                              | 315  | 101 | 0.006 | 8200                                  | 195  | 64 | 0.006 | 5250                         | 58   | 41 | 0.003 |
| 3.0      | 11150                              | 335  | 105 | 0.008 | 6950                                  | 210  | 66 | 0.008 | 4200                         | 63   | 40 | 0.004 |
| 3.5      | 10300                              | 465  | 113 | 0.011 | 6360                                  | 290  | 70 | 0.011 | 3940                         | 63   | 43 | 0.004 |
| 4.0      | 9450                               | 600  | 119 | 0.016 | 5780                                  | 370  | 73 | 0.016 | 3680                         | 63   | 46 | 0.004 |
| 4.5      | 8660                               | 615  | 122 | 0.018 | 5250                                  | 375  | 74 | 0.018 | 3290                         | 70   | 47 | 0.005 |
| 5.0      | 7880                               | 630  | 124 | 0.020 | 4730                                  | 380  | 74 | 0.020 | 2900                         | 75   | 46 | 0.006 |
| 5.5      | 7410                               | 660  | 128 | 0.022 | 4460                                  | 405  | 77 | 0.023 | 2700                         | 80   | 47 | 0.007 |
| 6.0      | 6950                               | 695  | 131 | 0.025 | 4200                                  | 430  | 79 | 0.026 | 2500                         | 85   | 47 | 0.009 |
| 6.5      | 6530                               | 710  | 133 | 0.027 | 3940                                  | 425  | 80 | 0.027 | 2400                         | 95   | 49 | 0.010 |
| 7.0      | 6100                               | 720  | 134 | 0.030 | 3680                                  | 415  | 81 | 0.028 | 2300                         | 100  | 51 | 0.011 |
| 7.5      | 5680                               | 735  | 134 | 0.032 | 3410                                  | 410  | 80 | 0.030 | 2200                         | 110  | 52 | 0.013 |
| 8.0      | 5250                               | 745  | 132 | 0.035 | 3150                                  | 400  | 79 | 0.032 | 2100                         | 115  | 53 | 0.014 |
| 8.5      | 4960                               | 720  | 132 | 0.036 | 2990                                  | 380  | 80 | 0.032 | 2000                         | 110  | 53 | 0.014 |
| 9.0      | 4660                               | 695  | 132 | 0.037 | 2830                                  | 355  | 80 | 0.031 | 1900                         | 105  | 54 | 0.014 |
| 9.5      | 4370                               | 665  | 130 | 0.038 | 2660                                  | 335  | 79 | 0.031 | 1800                         | 100  | 54 | 0.014 |
| 10.0     | 4080                               | 640  | 128 | 0.039 | 2500                                  | 315  | 79 | 0.032 | 1700                         | 95   | 53 | 0.014 |
| 10.5     | 3910                               | 620  | 129 | 0.040 | 2400                                  | 305  | 79 | 0.032 | 1640                         | 95   | 54 | 0.014 |
| 11.0     | 3750                               | 595  | 130 | 0.040 | 2300                                  | 290  | 79 | 0.032 | 1580                         | 90   | 55 | 0.014 |
| 11.5     | 3590                               | 570  | 130 | 0.040 | 2200                                  | 280  | 79 | 0.032 | 1510                         | 90   | 55 | 0.015 |
| 12.0     | 3430                               | 545  | 129 | 0.040 | 2100                                  | 265  | 79 | 0.032 | 1450                         | 85   | 55 | 0.015 |
| 13.0     | 3260                               | 520  | 133 | 0.040 | 2000                                  | 250  | 82 | 0.031 | 1370                         | 80   | 56 | 0.015 |
| 14.0     | 3090                               | 490  | 136 | 0.040 | 1900                                  | 235  | 84 | 0.031 | 1290                         | 75   | 57 | 0.015 |
| 15.0     | 2920                               | 460  | 138 | 0.039 | 1800                                  | 225  | 85 | 0.031 | 1210                         | 70   | 57 | 0.014 |
| 16.0     | 2750                               | 440  | 138 | 0.040 | 1700                                  | 215  | 85 | 0.032 | 1130                         | 65   | 57 | 0.014 |
| 17.0     | 2590                               | 410  | 138 | 0.040 | 1610                                  | 200  | 86 | 0.031 | 1060                         | 60   | 57 | 0.014 |
| 18.0     | 2430                               | 385  | 137 | 0.040 | 1510                                  | 190  | 85 | 0.031 | 990                          | 55   | 56 | 0.014 |
| 19.0     | 2260                               | 360  | 135 | 0.040 | 1420                                  | 180  | 85 | 0.032 | 920                          | 47   | 55 | 0.013 |
| 20.0     | 2100                               | 335  | 132 | 0.040 | 1330                                  | 170  | 84 | 0.032 | 850                          | 42   | 53 | 0.012 |
| 21.0     | 2020                               | 320  | 133 | 0.040 | 1270                                  | 165  | 84 | 0.032 | 820                          | 42   | 54 | 0.013 |
| 22.0     | 1940                               | 310  | 134 | 0.040 | 1220                                  | 160  | 84 | 0.033 | 780                          | 39   | 54 | 0.013 |
| 23.0     | 1860                               | 295  | 134 | 0.040 | 1160                                  | 145  | 84 | 0.031 | 750                          | 37   | 54 | 0.012 |
| 24.0     | 1780                               | 280  | 134 | 0.039 | 1110                                  | 140  | 84 | 0.032 | 710                          | 32   | 54 | 0.011 |
| 25.0     | 1700                               | 265  | 134 | 0.039 | 1050                                  | 135  | 82 | 0.032 | 680                          | 32   | 53 | 0.012 |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTESEME36 SERIES  
SEME71 SERIESRPM = rev./min. Vc = m/min.  
FEED = mm/min. Fz = mm/tooth

| MATERIAL | M                            |      |    |       | K         |      |     |       |
|----------|------------------------------|------|----|-------|-----------|------|-----|-------|
|          | STAINLESS STEELS             |      |    |       | CAST IRON |      |     |       |
| HARDNESS | HRC 45 ~ HRC 55              |      |    |       |           |      |     |       |
| STRENGTH | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |           |      |     |       |
| DIAMETER | RPM                          | FEED | Vc | Fz    | RPM       | FEED | Vc  | Fz    |
| 0.8      | 15630                        | 120  | 39 | 0.002 | 31250     | 235  | 79  | 0.002 |
| 0.9      | 14650                        | 120  | 41 | 0.002 | 29300     | 245  | 83  | 0.002 |
| 1.0      | 13400                        | 125  | 42 | 0.002 | 26800     | 250  | 84  | 0.002 |
| 1.2      | 11250                        | 130  | 42 | 0.003 | 22500     | 265  | 85  | 0.003 |
| 1.5      | 9380                         | 135  | 44 | 0.004 | 18750     | 270  | 88  | 0.004 |
| 2.0      | 7880                         | 145  | 50 | 0.005 | 14450     | 295  | 91  | 0.005 |
| 2.5      | 6830                         | 165  | 54 | 0.006 | 12800     | 315  | 101 | 0.006 |
| 3.0      | 5780                         | 180  | 54 | 0.008 | 11150     | 335  | 105 | 0.008 |
| 3.5      | 5310                         | 235  | 58 | 0.011 | 10300     | 465  | 113 | 0.011 |
| 4.0      | 4850                         | 295  | 61 | 0.015 | 9450      | 600  | 119 | 0.016 |
| 4.5      | 4400                         | 305  | 62 | 0.017 | 8660      | 615  | 122 | 0.018 |
| 5.0      | 3950                         | 315  | 62 | 0.020 | 7880      | 630  | 124 | 0.020 |
| 5.5      | 3750                         | 330  | 65 | 0.022 | 7410      | 660  | 128 | 0.022 |
| 6.0      | 3550                         | 345  | 67 | 0.024 | 6950      | 695  | 131 | 0.025 |
| 6.5      | 3320                         | 350  | 68 | 0.026 | 6530      | 710  | 133 | 0.027 |
| 7.0      | 3090                         | 355  | 68 | 0.029 | 6100      | 720  | 134 | 0.030 |
| 7.5      | 2860                         | 360  | 67 | 0.031 | 5680      | 735  | 134 | 0.032 |
| 8.0      | 2630                         | 370  | 66 | 0.035 | 5250      | 745  | 132 | 0.035 |
| 8.5      | 2490                         | 355  | 66 | 0.036 | 4960      | 720  | 132 | 0.036 |
| 9.0      | 2360                         | 340  | 67 | 0.036 | 4660      | 695  | 132 | 0.037 |
| 9.5      | 2230                         | 330  | 67 | 0.037 | 4370      | 665  | 130 | 0.038 |
| 10.0     | 2100                         | 315  | 66 | 0.038 | 4080      | 640  | 128 | 0.039 |
| 10.5     | 2000                         | 300  | 66 | 0.038 | 3910      | 620  | 129 | 0.040 |
| 11.0     | 1900                         | 285  | 66 | 0.038 | 3750      | 595  | 130 | 0.040 |
| 11.5     | 1800                         | 270  | 65 | 0.038 | 3590      | 570  | 130 | 0.040 |
| 12.0     | 1700                         | 250  | 64 | 0.037 | 3430      | 545  | 129 | 0.040 |
| 13.0     | 1620                         | 240  | 66 | 0.037 | 3260      | 520  | 133 | 0.040 |
| 14.0     | 1540                         | 230  | 68 | 0.037 | 3090      | 490  | 136 | 0.040 |
| 15.0     | 1460                         | 220  | 69 | 0.038 | 2920      | 460  | 138 | 0.039 |
| 16.0     | 1380                         | 210  | 69 | 0.038 | 2750      | 440  | 138 | 0.040 |
| 17.0     | 1290                         | 200  | 69 | 0.039 | 2590      | 410  | 138 | 0.040 |
| 18.0     | 1210                         | 185  | 68 | 0.038 | 2430      | 385  | 137 | 0.040 |
| 19.0     | 1130                         | 175  | 67 | 0.039 | 2260      | 360  | 135 | 0.040 |
| 20.0     | 1050                         | 160  | 66 | 0.038 | 2100      | 335  | 132 | 0.040 |
| 21.0     | 1010                         | 150  | 67 | 0.037 | 2020      | 320  | 133 | 0.040 |
| 22.0     | 970                          | 145  | 67 | 0.037 | 1940      | 310  | 134 | 0.040 |
| 23.0     | 930                          | 140  | 67 | 0.038 | 1860      | 295  | 134 | 0.040 |
| 24.0     | 890                          | 130  | 67 | 0.037 | 1780      | 280  | 134 | 0.039 |
| 25.0     | 850                          | 125  | 67 | 0.037 | 1700      | 265  | 134 | 0.039 |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

SEME72 SERIES

| DIA. = Diameter<br>LOC = Length of Cut |     |                                    |      |    |       | RPM = rev./min.<br>FEED = mm/min.     |      | Vc = m/min.<br>Fz = mm/tooth |       |
|----------------------------------------|-----|------------------------------------|------|----|-------|---------------------------------------|------|------------------------------|-------|
| MATERIAL                               |     | P                                  |      |    |       |                                       |      |                              |       |
|                                        |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |                              |       |
| HARDNESS                               |     | ~ HRC 35                           |      |    |       | HRC 35 ~ HRC 45                       |      |                              |       |
| STRENGTH                               |     | ~ 1100N/mm <sup>2</sup>            |      |    |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |                              |       |
| DIA.                                   | LOC | RPM                                | FEED | Vc | Fz    | RPM                                   | FEED | Vc                           | Fz    |
| 1.0                                    | 3   | 19200                              | 180  | 60 | 0.002 | 10940                                 | 70   | 34                           | 0.002 |
| 1.0                                    | 4   | 19200                              | 180  | 60 | 0.002 | 10940                                 | 70   | 34                           | 0.002 |
| 1.0                                    | 5   | 19200                              | 180  | 60 | 0.002 | 10940                                 | 70   | 34                           | 0.002 |
| 1.0                                    | 6   | 17280                              | 145  | 54 | 0.002 | 9850                                  | 60   | 31                           | 0.002 |
| 1.0                                    | 7   | 17280                              | 145  | 54 | 0.002 | 9850                                  | 60   | 31                           | 0.002 |
| 1.0                                    | 8   | 17280                              | 130  | 54 | 0.002 | 9850                                  | 50   | 31                           | 0.001 |
| 1.0                                    | 10  | 17280                              | 130  | 54 | 0.002 | 9850                                  | 50   | 31                           | 0.001 |
| 1.0                                    | 12  | 15360                              | 100  | 48 | 0.002 | 8760                                  | 40   | 28                           | 0.001 |
| 1.2                                    | 4   | 16200                              | 205  | 61 | 0.003 | 9230                                  | 80   | 35                           | 0.002 |
| 1.2                                    | 6   | 16200                              | 205  | 61 | 0.003 | 9230                                  | 80   | 35                           | 0.002 |
| 1.2                                    | 8   | 14580                              | 165  | 55 | 0.003 | 8310                                  | 65   | 31                           | 0.002 |
| 1.2                                    | 10  | 14580                              | 145  | 55 | 0.002 | 8310                                  | 60   | 31                           | 0.002 |
| 1.2                                    | 12  | 14580                              | 145  | 55 | 0.002 | 8310                                  | 60   | 31                           | 0.002 |
| 1.5                                    | 6   | 13800                              | 215  | 65 | 0.004 | 7870                                  | 85   | 37                           | 0.003 |
| 1.5                                    | 8   | 12420                              | 195  | 59 | 0.004 | 7080                                  | 80   | 33                           | 0.003 |
| 1.5                                    | 10  | 12420                              | 175  | 59 | 0.004 | 7080                                  | 70   | 33                           | 0.002 |
| 1.5                                    | 12  | 12420                              | 155  | 59 | 0.003 | 7080                                  | 60   | 33                           | 0.002 |
| 1.5                                    | 14  | 12420                              | 155  | 59 | 0.003 | 7080                                  | 60   | 33                           | 0.002 |
| 1.5                                    | 16  | 11040                              | 120  | 52 | 0.003 | 6290                                  | 50   | 30                           | 0.002 |
| 2.0                                    | 8   | 10580                              | 240  | 66 | 0.006 | 6050                                  | 95   | 38                           | 0.004 |
| 2.0                                    | 10  | 10580                              | 240  | 66 | 0.006 | 6050                                  | 95   | 38                           | 0.004 |
| 2.0                                    | 12  | 9530                               | 195  | 60 | 0.005 | 5440                                  | 80   | 34                           | 0.004 |
| 2.0                                    | 14  | 9530                               | 195  | 60 | 0.005 | 5440                                  | 80   | 34                           | 0.004 |
| 2.0                                    | 16  | 9530                               | 175  | 60 | 0.005 | 5440                                  | 70   | 34                           | 0.003 |
| 2.5                                    | 10  | 8990                               | 260  | 71 | 0.007 | 5170                                  | 110  | 41                           | 0.005 |
| 2.5                                    | 12  | 8990                               | 260  | 71 | 0.007 | 5170                                  | 110  | 41                           | 0.005 |
| 2.5                                    | 16  | 8090                               | 210  | 64 | 0.006 | 4650                                  | 85   | 37                           | 0.005 |
| 2.5                                    | 20  | 8090                               | 185  | 64 | 0.006 | 4650                                  | 80   | 37                           | 0.004 |
| 2.5                                    | 26  | 7200                               | 145  | 57 | 0.005 | 4130                                  | 60   | 32                           | 0.004 |
| 3.0                                    | 10  | 7400                               | 275  | 70 | 0.009 | 4280                                  | 120  | 40                           | 0.007 |
| 3.0                                    | 12  | 7400                               | 275  | 70 | 0.009 | 4280                                  | 120  | 40                           | 0.007 |
| 3.0                                    | 14  | 7400                               | 275  | 70 | 0.009 | 4280                                  | 120  | 40                           | 0.007 |
| 3.0                                    | 16  | 6660                               | 250  | 63 | 0.009 | 3860                                  | 110  | 36                           | 0.007 |
| 3.0                                    | 20  | 6660                               | 225  | 63 | 0.008 | 3860                                  | 95   | 36                           | 0.006 |
| 3.0                                    | 26  | 6660                               | 200  | 63 | 0.008 | 3860                                  | 85   | 36                           | 0.006 |
| 3.0                                    | 30  | 6660                               | 200  | 63 | 0.008 | 3860                                  | 85   | 36                           | 0.006 |
| 4.0                                    | 12  | 6000                               | 335  | 75 | 0.014 | 3410                                  | 140  | 43                           | 0.010 |
| 4.0                                    | 16  | 6000                               | 335  | 75 | 0.014 | 3410                                  | 140  | 43                           | 0.010 |
| 4.0                                    | 20  | 6000                               | 335  | 75 | 0.014 | 3410                                  | 140  | 43                           | 0.010 |
| 4.0                                    | 26  | 5400                               | 270  | 68 | 0.013 | 3070                                  | 110  | 39                           | 0.009 |
| 4.0                                    | 30  | 5400                               | 270  | 68 | 0.013 | 3070                                  | 110  | 39                           | 0.009 |
| 5.0                                    | 20  | 5120                               | 430  | 80 | 0.021 | 2900                                  | 170  | 46                           | 0.015 |
| 5.0                                    | 25  | 5120                               | 430  | 80 | 0.021 | 2900                                  | 170  | 46                           | 0.015 |
| 5.0                                    | 30  | 4610                               | 350  | 72 | 0.019 | 2610                                  | 135  | 41                           | 0.013 |
| 5.0                                    | 35  | 4610                               | 350  | 72 | 0.019 | 2610                                  | 135  | 41                           | 0.013 |
| 5.0                                    | 40  | 4610                               | 310  | 72 | 0.017 | 2610                                  | 120  | 41                           | 0.011 |
| 6.0                                    | 15  | 4420                               | 515  | 83 | 0.029 | 2520                                  | 215  | 48                           | 0.021 |
| 6.0                                    | 20  | 4420                               | 515  | 83 | 0.029 | 2520                                  | 215  | 48                           | 0.021 |
| 6.0                                    | 25  | 4420                               | 515  | 83 | 0.029 | 2520                                  | 215  | 48                           | 0.021 |
| 6.0                                    | 30  | 4420                               | 440  | 83 | 0.025 | 2520                                  | 185  | 48                           | 0.018 |
| 6.0                                    | 35  | 3970                               | 395  | 75 | 0.025 | 2270                                  | 165  | 43                           | 0.018 |
| 6.0                                    | 40  | 3970                               | 350  | 75 | 0.022 | 2270                                  | 145  | 43                           | 0.016 |
| 6.0                                    | 45  | 3970                               | 350  | 75 | 0.022 | 2270                                  | 145  | 43                           | 0.016 |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

SEME72 SERIES

| DIA. = Diameter<br>LOC = Length of Cut |     |                              |      |    |       | RPM = rev./min.<br>FEED = mm/min. |      | Vc = m/min.<br>Fz = mm/tooth |       |
|----------------------------------------|-----|------------------------------|------|----|-------|-----------------------------------|------|------------------------------|-------|
| MATERIAL                               |     | P                            |      |    |       | K                                 |      |                              |       |
|                                        |     | HARDENED STEELS              |      |    |       | CAST IRON                         |      |                              |       |
| HARDNESS                               |     | HRc 45 ~ HRc 55              |      |    |       |                                   |      |                              |       |
| STRENGTH                               |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |                                   |      |                              |       |
| DIA.                                   | LOC | RPM                          | FEED | Vc | Fz    | RPM                               | FEED | Vc                           | Fz    |
| 1.0                                    | 3   | 6720                         | 35   | 21 | 0.001 | 19200                             | 180  | 60                           | 0.002 |
| 1.0                                    | 4   | 6720                         | 35   | 21 | 0.001 | 19200                             | 180  | 60                           | 0.002 |
| 1.0                                    | 5   | 6720                         | 35   | 21 | 0.001 | 19200                             | 180  | 60                           | 0.002 |
| 1.0                                    | 6   | 6050                         | 30   | 19 | 0.001 | 17280                             | 145  | 54                           | 0.002 |
| 1.0                                    | 7   | 6050                         | 30   | 19 | 0.001 | 17280                             | 145  | 54                           | 0.002 |
| 1.0                                    | 8   | 6050                         | 25   | 19 | 0.001 | 17280                             | 130  | 54                           | 0.002 |
| 1.0                                    | 10  | 6050                         | 25   | 19 | 0.001 | 17280                             | 130  | 54                           | 0.002 |
| 1.0                                    | 12  | 5380                         | 20   | 17 | 0.001 | 15360                             | 100  | 48                           | 0.002 |
| 1.2                                    | 4   | 5670                         | 40   | 21 | 0.002 | 16200                             | 205  | 61                           | 0.003 |
| 1.2                                    | 6   | 5670                         | 40   | 21 | 0.002 | 16200                             | 205  | 61                           | 0.003 |
| 1.2                                    | 8   | 5100                         | 35   | 19 | 0.002 | 14580                             | 165  | 55                           | 0.003 |
| 1.2                                    | 10  | 5100                         | 30   | 19 | 0.001 | 14580                             | 145  | 55                           | 0.002 |
| 1.2                                    | 12  | 5100                         | 30   | 19 | 0.001 | 14580                             | 145  | 55                           | 0.002 |
| 1.5                                    | 6   | 4830                         | 45   | 23 | 0.002 | 13800                             | 215  | 65                           | 0.004 |
| 1.5                                    | 8   | 4350                         | 40   | 20 | 0.002 | 12420                             | 195  | 59                           | 0.004 |
| 1.5                                    | 10  | 4350                         | 35   | 20 | 0.002 | 12420                             | 175  | 59                           | 0.004 |
| 1.5                                    | 12  | 4350                         | 30   | 20 | 0.002 | 12420                             | 155  | 59                           | 0.003 |
| 1.5                                    | 14  | 4350                         | 30   | 20 | 0.002 | 12420                             | 155  | 59                           | 0.003 |
| 1.5                                    | 16  | 3860                         | 25   | 18 | 0.002 | 11040                             | 120  | 52                           | 0.003 |
| 2.0                                    | 8   | 3780                         | 55   | 24 | 0.004 | 10580                             | 240  | 66                           | 0.006 |
| 2.0                                    | 10  | 3780                         | 55   | 24 | 0.004 | 10580                             | 240  | 66                           | 0.006 |
| 2.0                                    | 12  | 3400                         | 45   | 21 | 0.003 | 9530                              | 195  | 60                           | 0.005 |
| 2.0                                    | 14  | 3400                         | 45   | 21 | 0.003 | 9530                              | 195  | 60                           | 0.005 |
| 2.0                                    | 16  | 3400                         | 40   | 21 | 0.003 | 9530                              | 175  | 60                           | 0.005 |
| 2.5                                    | 10  | 3210                         | 60   | 25 | 0.005 | 8990                              | 260  | 71                           | 0.007 |
| 2.5                                    | 12  | 3210                         | 60   | 25 | 0.005 | 8990                              | 260  | 71                           | 0.007 |
| 2.5                                    | 16  | 2890                         | 50   | 23 | 0.004 | 8090                              | 210  | 64                           | 0.006 |
| 2.5                                    | 20  | 2890                         | 45   | 23 | 0.004 | 8090                              | 185  | 64                           | 0.006 |
| 2.5                                    | 26  | 2570                         | 35   | 20 | 0.003 | 7200                              | 145  | 57                           | 0.005 |
| 3.0                                    | 10  | 2640                         | 65   | 25 | 0.006 | 7400                              | 275  | 70                           | 0.009 |
| 3.0                                    | 12  | 2640                         | 65   | 25 | 0.006 | 7400                              | 275  | 70                           | 0.009 |
| 3.0                                    | 14  | 2640                         | 65   | 25 | 0.006 | 7400                              | 275  | 70                           | 0.009 |
| 3.0                                    | 16  | 2380                         | 60   | 22 | 0.006 | 6660                              | 250  | 63                           | 0.009 |
| 3.0                                    | 20  | 2380                         | 55   | 22 | 0.006 | 6660                              | 225  | 63                           | 0.008 |
| 3.0                                    | 26  | 2380                         | 50   | 22 | 0.005 | 6660                              | 200  | 63                           | 0.008 |
| 3.0                                    | 30  | 2380                         | 50   | 22 | 0.005 | 6660                              | 200  | 63                           | 0.008 |
| 4.0                                    | 12  | 2150                         | 70   | 27 | 0.008 | 6000                              | 335  | 75                           | 0.014 |
| 4.0                                    | 16  | 2150                         | 70   | 27 | 0.008 | 6000                              | 335  | 75                           | 0.014 |
| 4.0                                    | 20  | 2150                         | 70   | 27 | 0.008 | 6000                              | 335  | 75                           | 0.014 |
| 4.0                                    | 26  | 1930                         | 60   | 24 | 0.008 | 5400                              | 270  | 68                           | 0.013 |
| 4.0                                    | 30  | 1930                         | 60   | 24 | 0.008 | 5400                              | 270  | 68                           | 0.013 |
| 5.0                                    | 20  | 1900                         | 85   | 30 | 0.011 | 5120                              | 430  | 80                           | 0.021 |
| 5.0                                    | 25  | 1900                         | 85   | 30 | 0.011 | 5120                              | 430  | 80                           | 0.021 |
| 5.0                                    | 30  | 1710                         | 70   | 27 | 0.010 | 4610                              | 350  | 72                           | 0.019 |
| 5.0                                    | 35  | 1710                         | 70   | 27 | 0.010 | 4610                              | 350  | 72                           | 0.019 |
| 5.0                                    | 40  | 1710                         | 60   | 27 | 0.009 | 4610                              | 310  | 72                           | 0.017 |
| 6.0                                    | 15  | 1640                         | 110  | 31 | 0.017 | 4420                              | 515  | 83                           | 0.029 |
| 6.0                                    | 20  | 1640                         | 110  | 31 | 0.017 | 4420                              | 515  | 83                           | 0.029 |
| 6.0                                    | 25  | 1640                         | 110  | 31 | 0.017 | 4420                              | 515  | 83                           | 0.029 |
| 6.0                                    | 30  | 1640                         | 90   | 31 | 0.014 | 4420                              | 440  | 83                           | 0.025 |
| 6.0                                    | 35  | 1480                         | 85   | 28 | 0.014 | 3970                              | 395  | 75                           | 0.025 |
| 6.0                                    | 40  | 1480                         | 75   | 28 | 0.013 | 3970                              | 350  | 75                           | 0.022 |
| 6.0                                    | 45  | 1480                         | 75   | 28 | 0.013 | 3970                              | 350  | 75                           | 0.022 |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

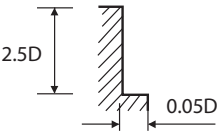
SEME72 SERIES

DIA. = Diameter  
LOC = Length of Cut

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |    |       |                                       |      |    |       |
|----------|-----|------------------------------------|------|----|-------|---------------------------------------|------|----|-------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |
| HARDNESS |     | ~ HRC 35                           |      |    |       | HRC 35 ~ HRC 45                       |      |    |       |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |    |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |
| DIA.     | LOC | RPM                                | FEED | Vc | Fz    | RPM                                   | FEED | Vc | Fz    |
| 8.0      | 25  | 3360                               | 550  | 84 | 0.041 | 1900                                  | 215  | 48 | 0.028 |
| 8.0      | 30  | 3360                               | 550  | 84 | 0.041 | 1900                                  | 215  | 48 | 0.028 |
| 8.0      | 35  | 3360                               | 550  | 84 | 0.041 | 1900                                  | 215  | 48 | 0.028 |
| 8.0      | 40  | 3360                               | 470  | 84 | 0.035 | 1900                                  | 185  | 48 | 0.024 |
| 8.0      | 45  | 3020                               | 420  | 76 | 0.035 | 1710                                  | 165  | 43 | 0.024 |
| 8.0      | 50  | 3020                               | 375  | 76 | 0.031 | 1710                                  | 145  | 43 | 0.021 |
| 10.0     | 30  | 2820                               | 550  | 89 | 0.049 | 1640                                  | 215  | 52 | 0.033 |
| 10.0     | 35  | 2820                               | 550  | 89 | 0.049 | 1640                                  | 215  | 52 | 0.033 |
| 10.0     | 40  | 2820                               | 550  | 89 | 0.049 | 1640                                  | 215  | 52 | 0.033 |
| 10.0     | 45  | 2820                               | 470  | 89 | 0.042 | 1640                                  | 185  | 52 | 0.028 |
| 10.0     | 50  | 2820                               | 470  | 89 | 0.042 | 1640                                  | 185  | 52 | 0.028 |
| 10.0     | 55  | 2540                               | 420  | 80 | 0.041 | 1480                                  | 165  | 46 | 0.028 |
| 10.0     | 60  | 2540                               | 375  | 80 | 0.037 | 1480                                  | 145  | 46 | 0.024 |
| 12.0     | 35  | 2300                               | 430  | 87 | 0.047 | 1390                                  | 190  | 52 | 0.034 |
| 12.0     | 40  | 2300                               | 430  | 87 | 0.047 | 1390                                  | 190  | 52 | 0.034 |
| 12.0     | 45  | 2300                               | 365  | 87 | 0.040 | 1390                                  | 165  | 52 | 0.030 |
| 12.0     | 50  | 2300                               | 365  | 87 | 0.040 | 1390                                  | 165  | 52 | 0.030 |
| 12.0     | 55  | 2300                               | 365  | 87 | 0.040 | 1390                                  | 165  | 52 | 0.030 |
| 12.0     | 60  | 2300                               | 325  | 87 | 0.035 | 1390                                  | 145  | 52 | 0.026 |
| 12.0     | 65  | 2070                               | 290  | 78 | 0.035 | 1250                                  | 130  | 47 | 0.026 |
| 12.0     | 70  | 2070                               | 290  | 78 | 0.035 | 1250                                  | 130  | 47 | 0.026 |
| 14.0     | 50  | 2120                               | 345  | 93 | 0.041 | 1230                                  | 145  | 54 | 0.029 |
| 14.0     | 60  | 2120                               | 345  | 93 | 0.041 | 1230                                  | 145  | 54 | 0.029 |
| 16.0     | 40  | 1940                               | 385  | 98 | 0.050 | 1070                                  | 150  | 54 | 0.035 |
| 16.0     | 50  | 1940                               | 385  | 98 | 0.050 | 1070                                  | 150  | 54 | 0.035 |
| 16.0     | 60  | 1940                               | 325  | 98 | 0.042 | 1070                                  | 130  | 54 | 0.030 |
| 16.0     | 70  | 1940                               | 325  | 98 | 0.042 | 1070                                  | 130  | 54 | 0.030 |
| 16.0     | 80  | 1940                               | 290  | 98 | 0.037 | 1070                                  | 115  | 54 | 0.027 |
| 16.0     | 90  | 1750                               | 260  | 88 | 0.037 | 960                                   | 100  | 48 | 0.026 |
| 16.0     | 110 | 1750                               | 260  | 88 | 0.037 | 960                                   | 100  | 48 | 0.026 |
| 16.0     | 120 | 1750                               | 260  | 88 | 0.037 | 960                                   | 100  | 48 | 0.026 |
| 18.0     | 50  | 1680                               | 330  | 95 | 0.049 | 940                                   | 130  | 53 | 0.035 |
| 18.0     | 70  | 1680                               | 280  | 95 | 0.042 | 940                                   | 110  | 53 | 0.029 |
| 18.0     | 100 | 1510                               | 225  | 85 | 0.037 | 850                                   | 85   | 48 | 0.025 |
| 20.0     | 50  | 1420                               | 275  | 89 | 0.048 | 820                                   | 110  | 52 | 0.034 |
| 20.0     | 60  | 1420                               | 275  | 89 | 0.048 | 820                                   | 110  | 52 | 0.034 |
| 20.0     | 70  | 1420                               | 235  | 89 | 0.041 | 820                                   | 90   | 52 | 0.027 |
| 20.0     | 80  | 1420                               | 235  | 89 | 0.041 | 820                                   | 90   | 52 | 0.027 |
| 20.0     | 90  | 1420                               | 205  | 89 | 0.036 | 820                                   | 80   | 52 | 0.024 |
| 20.0     | 110 | 1270                               | 185  | 80 | 0.036 | 730                                   | 75   | 46 | 0.026 |
| 20.0     | 120 | 1270                               | 185  | 80 | 0.036 | 730                                   | 75   | 46 | 0.026 |
| 22.0     | 75  | 1260                               | 205  | 87 | 0.041 | 820                                   | 90   | 57 | 0.027 |
| 22.0     | 110 | 1260                               | 180  | 87 | 0.036 | 820                                   | 80   | 57 | 0.024 |
| 25.0     | 70  | 1100                               | 215  | 86 | 0.049 | 820                                   | 110  | 64 | 0.034 |
| 25.0     | 90  | 1100                               | 185  | 86 | 0.042 | 820                                   | 90   | 64 | 0.027 |
| 25.0     | 110 | 1100                               | 185  | 86 | 0.042 | 820                                   | 90   | 64 | 0.027 |
| 25.0     | 120 | 1100                               | 160  | 86 | 0.036 | 820                                   | 80   | 64 | 0.024 |



Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG LENGTH

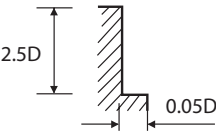
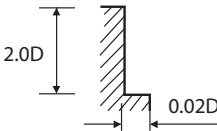
SEME72 SERIES

DIA. = Diameter  
LOC = Length of Cut

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       | K         |      |    |       |
|----------|-----|------------------------------|------|----|-------|-----------|------|----|-------|
|          |     | HARDENED STEELS              |      |    |       | CAST IRON |      |    |       |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |           |      |    |       |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |           |      |    |       |
| DIA.     | LOC | RPM                          | FEED | Vc | Fz    | RPM       | FEED | Vc | Fz    |
| 8.0      | 25  | 1260                         | 110  | 32 | 0.022 | 3360      | 550  | 84 | 0.041 |
| 8.0      | 30  | 1260                         | 110  | 32 | 0.022 | 3360      | 550  | 84 | 0.041 |
| 8.0      | 35  | 1260                         | 110  | 32 | 0.022 | 3360      | 550  | 84 | 0.041 |
| 8.0      | 40  | 1260                         | 90   | 32 | 0.018 | 3360      | 470  | 84 | 0.035 |
| 8.0      | 45  | 1130                         | 85   | 28 | 0.019 | 3020      | 420  | 76 | 0.035 |
| 8.0      | 50  | 1130                         | 75   | 28 | 0.017 | 3020      | 375  | 76 | 0.031 |
| 10.0     | 30  | 1010                         | 110  | 32 | 0.027 | 2820      | 550  | 89 | 0.049 |
| 10.0     | 35  | 1010                         | 110  | 32 | 0.027 | 2820      | 550  | 89 | 0.049 |
| 10.0     | 40  | 1010                         | 110  | 32 | 0.027 | 2820      | 550  | 89 | 0.049 |
| 10.0     | 45  | 1010                         | 90   | 32 | 0.022 | 2820      | 470  | 89 | 0.042 |
| 10.0     | 50  | 1010                         | 90   | 32 | 0.022 | 2820      | 470  | 89 | 0.042 |
| 10.0     | 55  | 910                          | 85   | 29 | 0.023 | 2540      | 420  | 80 | 0.041 |
| 10.0     | 60  | 910                          | 75   | 29 | 0.021 | 2540      | 375  | 80 | 0.037 |
| 12.0     | 35  | 840                          | 85   | 32 | 0.025 | 2300      | 430  | 87 | 0.047 |
| 12.0     | 40  | 840                          | 85   | 32 | 0.025 | 2300      | 430  | 87 | 0.047 |
| 12.0     | 45  | 840                          | 70   | 32 | 0.021 | 2300      | 365  | 87 | 0.040 |
| 12.0     | 50  | 840                          | 70   | 32 | 0.021 | 2300      | 365  | 87 | 0.040 |
| 12.0     | 55  | 840                          | 70   | 32 | 0.021 | 2300      | 365  | 87 | 0.040 |
| 12.0     | 60  | 840                          | 65   | 32 | 0.019 | 2300      | 325  | 87 | 0.035 |
| 12.0     | 65  | 760                          | 55   | 29 | 0.018 | 2070      | 290  | 78 | 0.035 |
| 12.0     | 70  | 760                          | 55   | 29 | 0.018 | 2070      | 290  | 78 | 0.035 |
| 14.0     | 50  | 760                          | 65   | 33 | 0.021 | 2120      | 345  | 93 | 0.041 |
| 14.0     | 60  | 760                          | 65   | 33 | 0.021 | 2120      | 345  | 93 | 0.041 |
| 16.0     | 40  | 670                          | 70   | 34 | 0.026 | 1940      | 385  | 98 | 0.050 |
| 16.0     | 50  | 670                          | 70   | 34 | 0.026 | 1940      | 385  | 98 | 0.050 |
| 16.0     | 60  | 670                          | 60   | 34 | 0.022 | 1940      | 325  | 98 | 0.042 |
| 16.0     | 70  | 670                          | 60   | 34 | 0.022 | 1940      | 325  | 98 | 0.042 |
| 16.0     | 80  | 670                          | 55   | 34 | 0.021 | 1940      | 290  | 98 | 0.037 |
| 16.0     | 90  | 600                          | 50   | 30 | 0.021 | 1750      | 260  | 88 | 0.037 |
| 16.0     | 110 | 600                          | 50   | 30 | 0.021 | 1750      | 260  | 88 | 0.037 |
| 18.0     | 50  | 590                          | 65   | 33 | 0.028 | 1680      | 330  | 95 | 0.049 |
| 18.0     | 70  | 590                          | 55   | 33 | 0.023 | 1680      | 280  | 95 | 0.042 |
| 18.0     | 100 | 530                          | 45   | 30 | 0.021 | 1510      | 225  | 85 | 0.037 |
| 20.0     | 50  | 500                          | 55   | 31 | 0.028 | 1420      | 275  | 89 | 0.048 |
| 20.0     | 60  | 500                          | 55   | 31 | 0.028 | 1420      | 275  | 89 | 0.048 |
| 20.0     | 70  | 500                          | 45   | 31 | 0.023 | 1420      | 235  | 89 | 0.041 |
| 20.0     | 80  | 500                          | 45   | 31 | 0.023 | 1420      | 235  | 89 | 0.041 |
| 20.0     | 90  | 500                          | 40   | 31 | 0.020 | 1420      | 205  | 89 | 0.036 |
| 20.0     | 110 | 450                          | 35   | 28 | 0.019 | 1270      | 185  | 80 | 0.036 |
| 20.0     | 120 | 450                          | 35   | 28 | 0.019 | 1270      | 185  | 80 | 0.036 |
| 22.0     | 75  | 500                          | 45   | 35 | 0.023 | 1260      | 205  | 87 | 0.041 |
| 22.0     | 110 | 500                          | 40   | 35 | 0.020 | 1260      | 180  | 87 | 0.036 |
| 25.0     | 70  | 500                          | 55   | 39 | 0.028 | 1100      | 215  | 86 | 0.049 |
| 25.0     | 90  | 500                          | 45   | 39 | 0.023 | 1100      | 185  | 86 | 0.042 |
| 25.0     | 110 | 500                          | 45   | 39 | 0.023 | 1100      | 185  | 86 | 0.042 |
| 25.0     | 120 | 500                          | 40   | 39 | 0.020 | 1100      | 160  | 86 | 0.036 |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

SEME73 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |    |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |    |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |    |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |    |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 1.0      | 2   | 22000                              | 310  | 69 | 0.004 | 0.021  | 13500                                 | 180  | 42 | 0.003 | 0.016  |
| 1.0      | 3   | 22000                              | 310  | 69 | 0.004 | 0.021  | 13500                                 | 180  | 42 | 0.003 | 0.016  |
| 1.0      | 4   | 22000                              | 310  | 69 | 0.004 | 0.015  | 13500                                 | 180  | 42 | 0.003 | 0.011  |
| 1.0      | 5   | 22000                              | 310  | 69 | 0.004 | 0.015  | 13500                                 | 180  | 42 | 0.003 | 0.011  |
| 1.0      | 6   | 19800                              | 250  | 62 | 0.003 | 0.008  | 12150                                 | 145  | 38 | 0.003 | 0.006  |
| 1.0      | 7   | 19800                              | 250  | 62 | 0.003 | 0.008  | 12150                                 | 145  | 38 | 0.003 | 0.006  |
| 1.0      | 8   | 19800                              | 250  | 62 | 0.003 | 0.008  | 12150                                 | 145  | 38 | 0.003 | 0.006  |
| 1.0      | 10  | 19800                              | 250  | 62 | 0.003 | 0.005  | 12150                                 | 145  | 38 | 0.003 | 0.004  |
| 1.0      | 12  | 17600                              | 200  | 55 | 0.003 | 0.005  | 10800                                 | 115  | 34 | 0.003 | 0.004  |
| 1.0      | 14  | 17600                              | 200  | 55 | 0.003 | 0.003  | 10800                                 | 115  | 34 | 0.003 | 0.002  |
| 1.0      | 16  | 13200                              | 130  | 41 | 0.002 | 0.003  | 8100                                  | 75   | 25 | 0.002 | 0.002  |
| 1.0      | 18  | 13200                              | 130  | 41 | 0.002 | 0.002  | 8100                                  | 75   | 25 | 0.002 | 0.002  |
| 1.0      | 20  | 13200                              | 130  | 41 | 0.002 | 0.002  | 8100                                  | 75   | 25 | 0.002 | 0.002  |
| 1.0      | 22  | 6600                               | 55   | 21 | 0.002 | 0.002  | 4050                                  | 30   | 13 | 0.002 | 0.002  |
| 1.0      | 26  | 6600                               | 55   | 21 | 0.002 | 0.002  | 4050                                  | 30   | 13 | 0.002 | 0.002  |
| 1.0      | 30  | 6600                               | 55   | 21 | 0.002 | 0.002  | 4050                                  | 30   | 13 | 0.002 | 0.002  |
| 1.0      | 40  | 2200                               | 15   | 7  | 0.002 | 0.002  | 1350                                  | 10   | 4  | 0.002 | 0.002  |
| 1.0      | 50  | 2200                               | 15   | 7  | 0.002 | 0.002  | 1350                                  | 10   | 4  | 0.002 | 0.002  |
| 1.2      | 4   | 19500                              | 315  | 74 | 0.004 | 0.018  | 12100                                 | 185  | 46 | 0.004 | 0.013  |
| 1.2      | 6   | 19500                              | 315  | 74 | 0.004 | 0.018  | 12100                                 | 185  | 46 | 0.004 | 0.013  |
| 1.2      | 8   | 17550                              | 255  | 66 | 0.004 | 0.010  | 10890                                 | 150  | 41 | 0.003 | 0.008  |
| 1.2      | 10  | 17550                              | 255  | 66 | 0.004 | 0.006  | 10890                                 | 150  | 41 | 0.003 | 0.005  |
| 1.2      | 12  | 17550                              | 255  | 66 | 0.004 | 0.006  | 10890                                 | 150  | 41 | 0.003 | 0.005  |
| 1.2      | 14  | 15600                              | 200  | 59 | 0.003 | 0.006  | 9680                                  | 120  | 36 | 0.003 | 0.005  |
| 1.2      | 16  | 15600                              | 200  | 59 | 0.003 | 0.004  | 9680                                  | 120  | 36 | 0.003 | 0.003  |
| 1.2      | 20  | 11700                              | 130  | 44 | 0.003 | 0.003  | 7260                                  | 80   | 27 | 0.003 | 0.002  |
| 1.2      | 26  | 5850                               | 55   | 22 | 0.002 | 0.003  | 3630                                  | 35   | 14 | 0.002 | 0.002  |
| 1.2      | 30  | 5850                               | 55   | 22 | 0.002 | 0.003  | 3630                                  | 35   | 14 | 0.002 | 0.002  |
| 1.5      | 4   | 17000                              | 320  | 80 | 0.005 | 0.032  | 10700                                 | 190  | 50 | 0.004 | 0.024  |
| 1.5      | 5   | 17000                              | 320  | 80 | 0.005 | 0.022  | 10700                                 | 190  | 50 | 0.004 | 0.017  |
| 1.5      | 6   | 17000                              | 320  | 80 | 0.005 | 0.022  | 10700                                 | 190  | 50 | 0.004 | 0.017  |
| 1.5      | 7   | 17000                              | 320  | 80 | 0.005 | 0.022  | 10700                                 | 190  | 50 | 0.004 | 0.017  |
| 1.5      | 8   | 15300                              | 260  | 72 | 0.004 | 0.013  | 9630                                  | 155  | 45 | 0.004 | 0.009  |
| 1.5      | 10  | 15300                              | 260  | 72 | 0.004 | 0.013  | 9630                                  | 155  | 45 | 0.004 | 0.009  |
| 1.5      | 12  | 15300                              | 260  | 72 | 0.004 | 0.013  | 9630                                  | 155  | 45 | 0.004 | 0.009  |
| 1.5      | 14  | 15300                              | 260  | 72 | 0.004 | 0.008  | 9630                                  | 155  | 45 | 0.004 | 0.006  |
| 1.5      | 16  | 13600                              | 205  | 64 | 0.004 | 0.008  | 8560                                  | 120  | 40 | 0.004 | 0.006  |
| 1.5      | 18  | 13600                              | 205  | 64 | 0.004 | 0.008  | 8560                                  | 120  | 40 | 0.004 | 0.006  |
| 1.5      | 20  | 13600                              | 205  | 64 | 0.004 | 0.005  | 8560                                  | 120  | 40 | 0.004 | 0.004  |
| 1.5      | 22  | 13600                              | 205  | 64 | 0.004 | 0.005  | 8560                                  | 120  | 40 | 0.004 | 0.004  |
| 1.5      | 26  | 10200                              | 135  | 48 | 0.003 | 0.003  | 6420                                  | 80   | 30 | 0.003 | 0.002  |
| 1.5      | 30  | 10200                              | 135  | 48 | 0.003 | 0.003  | 6420                                  | 80   | 30 | 0.003 | 0.002  |
| 2.0      | 6   | 13900                              | 330  | 87 | 0.006 | 0.042  | 9070                                  | 200  | 57 | 0.006 | 0.032  |
| 2.0      | 8   | 13900                              | 330  | 87 | 0.006 | 0.029  | 9070                                  | 200  | 57 | 0.006 | 0.022  |
| 2.0      | 10  | 13900                              | 330  | 87 | 0.006 | 0.029  | 9070                                  | 200  | 57 | 0.006 | 0.022  |
| 2.0      | 12  | 12510                              | 265  | 79 | 0.005 | 0.017  | 8160                                  | 160  | 51 | 0.005 | 0.013  |
| 2.0      | 16  | 12510                              | 265  | 79 | 0.005 | 0.017  | 8160                                  | 160  | 51 | 0.005 | 0.013  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

SEME73 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |    |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |    |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |    |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |    |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc | Fz    | Ap(mm) |
| 1.0      | 2   | 8500                         | 50   | 27 | 0.001 | 0.013  | 22000     | 310  | 69 | 0.004 | 0.021  |
| 1.0      | 3   | 8500                         | 50   | 27 | 0.001 | 0.013  | 22000     | 310  | 69 | 0.004 | 0.021  |
| 1.0      | 4   | 8500                         | 50   | 27 | 0.001 | 0.009  | 22000     | 310  | 69 | 0.004 | 0.015  |
| 1.0      | 5   | 8500                         | 50   | 27 | 0.001 | 0.009  | 22000     | 310  | 69 | 0.004 | 0.015  |
| 1.0      | 6   | 7650                         | 40   | 24 | 0.001 | 0.005  | 19800     | 250  | 62 | 0.003 | 0.008  |
| 1.0      | 7   | 7650                         | 40   | 24 | 0.001 | 0.005  | 19800     | 250  | 62 | 0.003 | 0.008  |
| 1.0      | 8   | 7650                         | 40   | 24 | 0.001 | 0.005  | 19800     | 250  | 62 | 0.003 | 0.008  |
| 1.0      | 10  | 7650                         | 40   | 24 | 0.001 | 0.003  | 19800     | 250  | 62 | 0.003 | 0.005  |
| 1.0      | 12  | 6800                         | 30   | 21 | 0.001 | 0.003  | 17600     | 200  | 55 | 0.003 | 0.005  |
| 1.0      | 14  | 6800                         | 30   | 21 | 0.001 | 0.002  | 17600     | 200  | 55 | 0.003 | 0.003  |
| 1.0      | 16  | 5100                         | 20   | 16 | 0.001 | 0.002  | 13200     | 130  | 41 | 0.002 | 0.003  |
| 1.0      | 18  | 5100                         | 20   | 16 | 0.001 | 0.001  | 13200     | 130  | 41 | 0.002 | 0.002  |
| 1.0      | 20  | 5100                         | 20   | 16 | 0.001 | 0.001  | 13200     | 130  | 41 | 0.002 | 0.002  |
| 1.0      | 22  | 2550                         | 10   | 8  | 0.001 | 0.001  | 6600      | 55   | 21 | 0.002 | 0.002  |
| 1.0      | 26  | 2550                         | 10   | 8  | 0.001 | 0.001  | 6600      | 55   | 21 | 0.002 | 0.002  |
| 1.0      | 30  | 2550                         | 10   | 8  | 0.001 | 0.001  | 6600      | 55   | 21 | 0.002 | 0.002  |
| 1.0      | 40  | 850                          | 5    | 3  | 0.001 | 0.001  | 2200      | 15   | 7  | 0.002 | 0.002  |
| 1.0      | 50  | 850                          | 5    | 3  | 0.001 | 0.001  | 2200      | 15   | 7  | 0.002 | 0.002  |
| 1.2      | 4   | 7500                         | 50   | 28 | 0.002 | 0.011  | 19500     | 315  | 74 | 0.004 | 0.018  |
| 1.2      | 6   | 7500                         | 50   | 28 | 0.002 | 0.011  | 19500     | 315  | 74 | 0.004 | 0.018  |
| 1.2      | 8   | 6750                         | 40   | 25 | 0.001 | 0.006  | 17550     | 255  | 66 | 0.004 | 0.010  |
| 1.2      | 10  | 6750                         | 40   | 25 | 0.001 | 0.004  | 17550     | 255  | 66 | 0.004 | 0.006  |
| 1.2      | 12  | 6750                         | 40   | 25 | 0.001 | 0.004  | 17550     | 255  | 66 | 0.004 | 0.006  |
| 1.2      | 14  | 6000                         | 30   | 23 | 0.001 | 0.004  | 15600     | 200  | 59 | 0.003 | 0.006  |
| 1.2      | 16  | 6000                         | 30   | 23 | 0.001 | 0.002  | 15600     | 200  | 59 | 0.003 | 0.004  |
| 1.2      | 20  | 4500                         | 20   | 17 | 0.001 | 0.002  | 11700     | 130  | 44 | 0.003 | 0.003  |
| 1.2      | 26  | 2250                         | 10   | 8  | 0.001 | 0.002  | 5850      | 55   | 22 | 0.002 | 0.003  |
| 1.2      | 30  | 2250                         | 10   | 8  | 0.001 | 0.002  | 5850      | 55   | 22 | 0.002 | 0.003  |
| 1.5      | 4   | 6500                         | 50   | 31 | 0.002 | 0.019  | 17000     | 320  | 80 | 0.005 | 0.032  |
| 1.5      | 5   | 6500                         | 50   | 31 | 0.002 | 0.013  | 17000     | 320  | 80 | 0.005 | 0.022  |
| 1.5      | 6   | 6500                         | 50   | 31 | 0.002 | 0.013  | 17000     | 320  | 80 | 0.005 | 0.022  |
| 1.5      | 7   | 6500                         | 50   | 31 | 0.002 | 0.013  | 17000     | 320  | 80 | 0.005 | 0.022  |
| 1.5      | 8   | 5850                         | 40   | 28 | 0.002 | 0.008  | 15300     | 260  | 72 | 0.004 | 0.013  |
| 1.5      | 10  | 5850                         | 40   | 28 | 0.002 | 0.008  | 15300     | 260  | 72 | 0.004 | 0.013  |
| 1.5      | 12  | 5850                         | 40   | 28 | 0.002 | 0.008  | 15300     | 260  | 72 | 0.004 | 0.013  |
| 1.5      | 14  | 5850                         | 40   | 28 | 0.002 | 0.005  | 15300     | 260  | 72 | 0.004 | 0.008  |
| 1.5      | 16  | 5200                         | 30   | 25 | 0.001 | 0.005  | 13600     | 205  | 64 | 0.004 | 0.008  |
| 1.5      | 18  | 5200                         | 30   | 25 | 0.001 | 0.005  | 13600     | 205  | 64 | 0.004 | 0.008  |
| 1.5      | 20  | 5200                         | 30   | 25 | 0.001 | 0.003  | 13600     | 205  | 64 | 0.004 | 0.005  |
| 1.5      | 22  | 5200                         | 30   | 25 | 0.001 | 0.003  | 13600     | 205  | 64 | 0.004 | 0.005  |
| 1.5      | 26  | 3900                         | 20   | 18 | 0.001 | 0.002  | 10200     | 135  | 48 | 0.003 | 0.003  |
| 1.5      | 30  | 3900                         | 20   | 18 | 0.001 | 0.002  | 10200     | 135  | 48 | 0.003 | 0.003  |
| 2.0      | 6   | 6000                         | 60   | 38 | 0.003 | 0.025  | 13900     | 330  | 87 | 0.006 | 0.042  |
| 2.0      | 8   | 6000                         | 60   | 38 | 0.003 | 0.018  | 13900     | 330  | 87 | 0.006 | 0.029  |
| 2.0      | 10  | 6000                         | 60   | 38 | 0.003 | 0.018  | 13900     | 330  | 87 | 0.006 | 0.029  |
| 2.0      | 12  | 5400                         | 50   | 34 | 0.002 | 0.010  | 12510     | 265  | 79 | 0.005 | 0.017  |
| 2.0      | 16  | 5400                         | 50   | 34 | 0.002 | 0.010  | 12510     | 265  | 79 | 0.005 | 0.017  |





RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

SEME73 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 2.0      | 18  | 12510                              | 265  | 79  | 0.005 | 0.011  | 8160                                  | 160  | 51 | 0.005 | 0.008  |
| 2.0      | 20  | 12510                              | 265  | 79  | 0.005 | 0.011  | 8160                                  | 160  | 51 | 0.005 | 0.008  |
| 2.0      | 22  | 11120                              | 210  | 70  | 0.005 | 0.011  | 7260                                  | 130  | 46 | 0.004 | 0.008  |
| 2.0      | 26  | 11120                              | 210  | 70  | 0.005 | 0.011  | 7260                                  | 130  | 46 | 0.004 | 0.008  |
| 2.0      | 30  | 11120                              | 210  | 70  | 0.005 | 0.006  | 7260                                  | 130  | 46 | 0.004 | 0.005  |
| 2.0      | 35  | 8340                               | 140  | 52  | 0.004 | 0.004  | 5440                                  | 85   | 34 | 0.004 | 0.003  |
| 2.0      | 40  | 8340                               | 140  | 52  | 0.004 | 0.004  | 5440                                  | 85   | 34 | 0.004 | 0.003  |
| 2.0      | 45  | 4170                               | 60   | 26  | 0.004 | 0.004  | 2720                                  | 35   | 17 | 0.003 | 0.003  |
| 2.0      | 50  | 4170                               | 60   | 26  | 0.004 | 0.004  | 2720                                  | 35   | 17 | 0.003 | 0.003  |
| 2.0      | 60  | 4170                               | 60   | 26  | 0.004 | 0.004  | 2720                                  | 35   | 17 | 0.003 | 0.003  |
| 2.5      | 8   | 12000                              | 350  | 94  | 0.007 | 0.037  | 7600                                  | 220  | 60 | 0.007 | 0.028  |
| 2.5      | 10  | 12000                              | 350  | 94  | 0.007 | 0.037  | 7600                                  | 220  | 60 | 0.007 | 0.028  |
| 2.5      | 12  | 12000                              | 350  | 94  | 0.007 | 0.037  | 7600                                  | 220  | 60 | 0.007 | 0.028  |
| 2.5      | 14  | 10800                              | 285  | 85  | 0.007 | 0.021  | 6840                                  | 180  | 54 | 0.007 | 0.016  |
| 2.5      | 16  | 10800                              | 285  | 85  | 0.007 | 0.021  | 6840                                  | 180  | 54 | 0.007 | 0.016  |
| 2.5      | 18  | 10800                              | 285  | 85  | 0.007 | 0.021  | 6840                                  | 180  | 54 | 0.007 | 0.016  |
| 2.5      | 20  | 10800                              | 285  | 85  | 0.007 | 0.021  | 6840                                  | 180  | 54 | 0.007 | 0.016  |
| 2.5      | 22  | 10800                              | 285  | 85  | 0.007 | 0.013  | 6840                                  | 180  | 54 | 0.007 | 0.010  |
| 2.5      | 26  | 9600                               | 225  | 75  | 0.006 | 0.013  | 6080                                  | 140  | 48 | 0.006 | 0.010  |
| 2.5      | 30  | 9600                               | 225  | 75  | 0.006 | 0.013  | 6080                                  | 140  | 48 | 0.006 | 0.010  |
| 2.5      | 35  | 9600                               | 225  | 75  | 0.006 | 0.008  | 6080                                  | 140  | 48 | 0.006 | 0.006  |
| 2.5      | 40  | 7200                               | 145  | 57  | 0.005 | 0.008  | 4560                                  | 90   | 36 | 0.005 | 0.006  |
| 2.5      | 45  | 7200                               | 145  | 57  | 0.005 | 0.005  | 4560                                  | 90   | 36 | 0.005 | 0.004  |
| 2.5      | 50  | 7200                               | 145  | 57  | 0.005 | 0.005  | 4560                                  | 90   | 36 | 0.005 | 0.004  |
| 3.0      | 6   | 10700                              | 380  | 101 | 0.009 | 0.063  | 6670                                  | 240  | 63 | 0.009 | 0.047  |
| 3.0      | 8   | 10700                              | 380  | 101 | 0.009 | 0.063  | 6670                                  | 240  | 63 | 0.009 | 0.047  |
| 3.0      | 10  | 10700                              | 380  | 101 | 0.009 | 0.044  | 6670                                  | 240  | 63 | 0.009 | 0.033  |
| 3.0      | 12  | 10700                              | 380  | 101 | 0.009 | 0.044  | 6670                                  | 240  | 63 | 0.009 | 0.033  |
| 3.0      | 14  | 10700                              | 380  | 101 | 0.009 | 0.044  | 6670                                  | 240  | 63 | 0.009 | 0.033  |
| 3.0      | 16  | 9630                               | 310  | 91  | 0.008 | 0.025  | 6000                                  | 195  | 57 | 0.008 | 0.019  |
| 3.0      | 18  | 9630                               | 310  | 91  | 0.008 | 0.025  | 6000                                  | 195  | 57 | 0.008 | 0.019  |
| 3.0      | 20  | 9630                               | 310  | 91  | 0.008 | 0.025  | 6000                                  | 195  | 57 | 0.008 | 0.019  |
| 3.0      | 22  | 9630                               | 310  | 91  | 0.008 | 0.025  | 6000                                  | 195  | 57 | 0.008 | 0.019  |
| 3.0      | 26  | 9630                               | 310  | 91  | 0.008 | 0.016  | 6000                                  | 195  | 57 | 0.008 | 0.012  |
| 3.0      | 30  | 9630                               | 310  | 91  | 0.008 | 0.016  | 6000                                  | 195  | 57 | 0.008 | 0.012  |
| 3.0      | 35  | 8560                               | 245  | 81  | 0.007 | 0.016  | 5340                                  | 155  | 50 | 0.007 | 0.012  |
| 3.0      | 40  | 8560                               | 245  | 81  | 0.007 | 0.009  | 5340                                  | 155  | 50 | 0.007 | 0.007  |
| 3.0      | 45  | 8560                               | 245  | 81  | 0.007 | 0.009  | 5340                                  | 155  | 50 | 0.007 | 0.007  |
| 3.0      | 50  | 6420                               | 160  | 61  | 0.006 | 0.006  | 4000                                  | 100  | 38 | 0.006 | 0.005  |
| 3.0      | 60  | 6420                               | 160  | 61  | 0.006 | 0.006  | 4000                                  | 100  | 38 | 0.006 | 0.005  |
| 4.0      | 8   | 9070                               | 680  | 114 | 0.019 | 0.084  | 5540                                  | 420  | 70 | 0.019 | 0.063  |
| 4.0      | 10  | 9070                               | 680  | 114 | 0.019 | 0.084  | 5540                                  | 420  | 70 | 0.019 | 0.063  |
| 4.0      | 12  | 9070                               | 680  | 114 | 0.019 | 0.084  | 5540                                  | 420  | 70 | 0.019 | 0.063  |
| 4.0      | 14  | 9070                               | 680  | 114 | 0.019 | 0.059  | 5540                                  | 420  | 70 | 0.019 | 0.044  |
| 4.0      | 16  | 9070                               | 680  | 114 | 0.019 | 0.059  | 5540                                  | 420  | 70 | 0.019 | 0.044  |
| 4.0      | 18  | 9070                               | 680  | 114 | 0.019 | 0.059  | 5540                                  | 420  | 70 | 0.019 | 0.044  |
| 4.0      | 20  | 9070                               | 680  | 114 | 0.019 | 0.059  | 5540                                  | 420  | 70 | 0.019 | 0.044  |



RECOMMENDED CUTTING CONDITIONS

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

SEME73 SERIES

DIA. = Diameter  
LBS = Length Below Shank  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 2.0      | 18  | 5400                         | 50   | 34 | 0.002 | 0.006  | 12510     | 265  | 79  | 0.005 | 0.011  |
| 2.0      | 20  | 5400                         | 50   | 34 | 0.002 | 0.006  | 12510     | 265  | 79  | 0.005 | 0.011  |
| 2.0      | 22  | 4800                         | 40   | 30 | 0.002 | 0.006  | 11120     | 210  | 70  | 0.005 | 0.011  |
| 2.0      | 26  | 4800                         | 40   | 30 | 0.002 | 0.006  | 11120     | 210  | 70  | 0.005 | 0.011  |
| 2.0      | 30  | 4800                         | 40   | 30 | 0.002 | 0.004  | 11120     | 210  | 70  | 0.005 | 0.006  |
| 2.0      | 35  | 3600                         | 25   | 23 | 0.002 | 0.003  | 8340      | 140  | 52  | 0.004 | 0.004  |
| 2.0      | 40  | 3600                         | 25   | 23 | 0.002 | 0.003  | 8340      | 140  | 52  | 0.004 | 0.004  |
| 2.0      | 45  | 1800                         | 10   | 11 | 0.001 | 0.003  | 4170      | 60   | 26  | 0.004 | 0.004  |
| 2.0      | 50  | 1800                         | 10   | 11 | 0.001 | 0.003  | 4170      | 60   | 26  | 0.004 | 0.004  |
| 2.0      | 60  | 1800                         | 10   | 11 | 0.001 | 0.003  | 4170      | 60   | 26  | 0.004 | 0.004  |
| 2.5      | 8   | 4500                         | 60   | 35 | 0.003 | 0.022  | 12000     | 350  | 94  | 0.007 | 0.037  |
| 2.5      | 10  | 4500                         | 60   | 35 | 0.003 | 0.022  | 12000     | 350  | 94  | 0.007 | 0.037  |
| 2.5      | 12  | 4500                         | 60   | 35 | 0.003 | 0.022  | 12000     | 350  | 94  | 0.007 | 0.037  |
| 2.5      | 14  | 4050                         | 50   | 32 | 0.003 | 0.013  | 10800     | 285  | 85  | 0.007 | 0.021  |
| 2.5      | 16  | 4050                         | 50   | 32 | 0.003 | 0.013  | 10800     | 285  | 85  | 0.007 | 0.021  |
| 2.5      | 18  | 4050                         | 50   | 32 | 0.003 | 0.013  | 10800     | 285  | 85  | 0.007 | 0.021  |
| 2.5      | 20  | 4050                         | 50   | 32 | 0.003 | 0.013  | 10800     | 285  | 85  | 0.007 | 0.021  |
| 2.5      | 22  | 4050                         | 50   | 32 | 0.003 | 0.008  | 10800     | 285  | 85  | 0.007 | 0.013  |
| 2.5      | 26  | 3600                         | 40   | 28 | 0.003 | 0.008  | 9600      | 225  | 75  | 0.006 | 0.013  |
| 2.5      | 30  | 3600                         | 40   | 28 | 0.003 | 0.008  | 9600      | 225  | 75  | 0.006 | 0.013  |
| 2.5      | 35  | 3600                         | 40   | 28 | 0.003 | 0.005  | 9600      | 225  | 75  | 0.006 | 0.008  |
| 2.5      | 40  | 2700                         | 25   | 21 | 0.002 | 0.005  | 7200      | 145  | 57  | 0.005 | 0.008  |
| 2.5      | 45  | 2700                         | 25   | 21 | 0.002 | 0.003  | 7200      | 145  | 57  | 0.005 | 0.005  |
| 2.5      | 50  | 2700                         | 25   | 21 | 0.002 | 0.003  | 7200      | 145  | 57  | 0.005 | 0.005  |
| 3.0      | 6   | 4030                         | 70   | 38 | 0.004 | 0.038  | 10700     | 380  | 101 | 0.009 | 0.063  |
| 3.0      | 8   | 4030                         | 70   | 38 | 0.004 | 0.038  | 10700     | 380  | 101 | 0.009 | 0.063  |
| 3.0      | 10  | 4030                         | 70   | 38 | 0.004 | 0.026  | 10700     | 380  | 101 | 0.009 | 0.044  |
| 3.0      | 12  | 4030                         | 70   | 38 | 0.004 | 0.026  | 10700     | 380  | 101 | 0.009 | 0.044  |
| 3.0      | 14  | 4030                         | 70   | 38 | 0.004 | 0.026  | 10700     | 380  | 101 | 0.009 | 0.044  |
| 3.0      | 16  | 3630                         | 55   | 34 | 0.004 | 0.015  | 9630      | 310  | 91  | 0.008 | 0.025  |
| 3.0      | 18  | 3630                         | 55   | 34 | 0.004 | 0.015  | 9630      | 310  | 91  | 0.008 | 0.025  |
| 3.0      | 20  | 3630                         | 55   | 34 | 0.004 | 0.015  | 9630      | 310  | 91  | 0.008 | 0.025  |
| 3.0      | 22  | 3630                         | 55   | 34 | 0.004 | 0.015  | 9630      | 310  | 91  | 0.008 | 0.025  |
| 3.0      | 26  | 3630                         | 55   | 34 | 0.004 | 0.009  | 9630      | 310  | 91  | 0.008 | 0.016  |
| 3.0      | 30  | 3630                         | 55   | 34 | 0.004 | 0.009  | 9630      | 310  | 91  | 0.008 | 0.016  |
| 3.0      | 35  | 3220                         | 45   | 30 | 0.003 | 0.009  | 8560      | 245  | 81  | 0.007 | 0.016  |
| 3.0      | 40  | 3220                         | 45   | 30 | 0.003 | 0.006  | 8560      | 245  | 81  | 0.007 | 0.009  |
| 3.0      | 45  | 3220                         | 45   | 30 | 0.003 | 0.006  | 8560      | 245  | 81  | 0.007 | 0.009  |
| 3.0      | 50  | 2420                         | 30   | 23 | 0.003 | 0.004  | 6420      | 160  | 61  | 0.006 | 0.006  |
| 3.0      | 60  | 2420                         | 30   | 23 | 0.003 | 0.004  | 6420      | 160  | 61  | 0.006 | 0.006  |
| 4.0      | 8   | 3530                         | 70   | 44 | 0.005 | 0.050  | 9070      | 680  | 114 | 0.019 | 0.084  |
| 4.0      | 10  | 3530                         | 70   | 44 | 0.005 | 0.050  | 9070      | 680  | 114 | 0.019 | 0.084  |
| 4.0      | 12  | 3530                         | 70   | 44 | 0.005 | 0.050  | 9070      | 680  | 114 | 0.019 | 0.084  |
| 4.0      | 14  | 3530                         | 70   | 44 | 0.005 | 0.035  | 9070      | 680  | 114 | 0.019 | 0.059  |
| 4.0      | 16  | 3530                         | 70   | 44 | 0.005 | 0.035  | 9070      | 680  | 114 | 0.019 | 0.059  |
| 4.0      | 18  | 3530                         | 70   | 44 | 0.005 | 0.035  | 9070      | 680  | 114 | 0.019 | 0.059  |
| 4.0      | 20  | 3530                         | 70   | 44 | 0.005 | 0.035  | 9070      | 680  | 114 | 0.019 | 0.059  |

Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

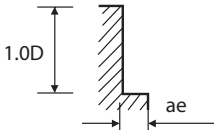
SEME73 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                  |      |     |       |        |                                       |      |    |       |        |
|----------|-----|------------------------------------|------|-----|-------|--------|---------------------------------------|------|----|-------|--------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       |        | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |        |
| HARDNESS |     | ~ HRC 35                           |      |     |       |        | HRC 35 ~ HRC 45                       |      |    |       |        |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       |        | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |        |
| DIA.     | LBS | RPM                                | FEED | Vc  | Fz    | Ap(mm) | RPM                                   | FEED | Vc | Fz    | Ap(mm) |
| 4.0      | 22  | 8160                               | 550  | 103 | 0.017 | 0.034  | 4990                                  | 340  | 63 | 0.017 | 0.025  |
| 4.0      | 26  | 8160                               | 550  | 103 | 0.017 | 0.034  | 4990                                  | 340  | 63 | 0.017 | 0.025  |
| 4.0      | 30  | 8160                               | 550  | 103 | 0.017 | 0.034  | 4990                                  | 340  | 63 | 0.017 | 0.025  |
| 4.0      | 35  | 8160                               | 550  | 103 | 0.017 | 0.021  | 4990                                  | 340  | 63 | 0.017 | 0.016  |
| 4.0      | 40  | 8160                               | 550  | 103 | 0.017 | 0.021  | 4990                                  | 340  | 63 | 0.017 | 0.016  |
| 4.0      | 45  | 7260                               | 435  | 91  | 0.015 | 0.021  | 4430                                  | 270  | 56 | 0.015 | 0.016  |
| 4.0      | 50  | 7260                               | 435  | 91  | 0.015 | 0.021  | 4430                                  | 270  | 56 | 0.015 | 0.016  |
| 4.0      | 60  | 7260                               | 435  | 91  | 0.015 | 0.013  | 4430                                  | 270  | 56 | 0.015 | 0.009  |
| 5.0      | 16  | 7560                               | 720  | 119 | 0.024 | 0.074  | 4530                                  | 430  | 71 | 0.024 | 0.055  |
| 5.0      | 20  | 7560                               | 720  | 119 | 0.024 | 0.074  | 4530                                  | 430  | 71 | 0.024 | 0.055  |
| 5.0      | 26  | 6800                               | 585  | 107 | 0.022 | 0.042  | 4080                                  | 350  | 64 | 0.021 | 0.032  |
| 5.0      | 30  | 6800                               | 585  | 107 | 0.022 | 0.042  | 4080                                  | 350  | 64 | 0.021 | 0.032  |
| 5.0      | 35  | 6800                               | 585  | 107 | 0.022 | 0.042  | 4080                                  | 350  | 64 | 0.021 | 0.032  |
| 5.0      | 40  | 6800                               | 585  | 107 | 0.022 | 0.042  | 4080                                  | 350  | 64 | 0.021 | 0.032  |
| 5.0      | 50  | 6800                               | 585  | 107 | 0.022 | 0.026  | 4080                                  | 350  | 64 | 0.021 | 0.020  |
| 5.0      | 60  | 6050                               | 460  | 95  | 0.019 | 0.026  | 3620                                  | 275  | 57 | 0.019 | 0.020  |
| 6.0      | 15  | 6670                               | 790  | 126 | 0.030 | 0.126  | 4030                                  | 490  | 76 | 0.030 | 0.095  |
| 6.0      | 20  | 6670                               | 790  | 126 | 0.030 | 0.088  | 4030                                  | 490  | 76 | 0.030 | 0.066  |
| 6.0      | 30  | 6670                               | 790  | 126 | 0.030 | 0.088  | 4030                                  | 490  | 76 | 0.030 | 0.066  |
| 6.0      | 32  | 6000                               | 640  | 113 | 0.027 | 0.050  | 3630                                  | 395  | 68 | 0.027 | 0.038  |
| 8.0      | 25  | 5040                               | 850  | 127 | 0.042 | 0.118  | 3020                                  | 450  | 76 | 0.037 | 0.088  |
| 8.0      | 30  | 5040                               | 850  | 127 | 0.042 | 0.118  | 3020                                  | 450  | 76 | 0.037 | 0.088  |
| 8.0      | 42  | 4540                               | 690  | 114 | 0.038 | 0.067  | 2720                                  | 365  | 68 | 0.034 | 0.050  |
| 10.0     | 30  | 3910                               | 730  | 123 | 0.047 | 0.210  | 2400                                  | 360  | 75 | 0.038 | 0.158  |
| 10.0     | 35  | 3910                               | 730  | 123 | 0.047 | 0.147  | 2400                                  | 360  | 75 | 0.038 | 0.110  |
| 10.0     | 45  | 3910                               | 730  | 123 | 0.047 | 0.147  | 2400                                  | 360  | 75 | 0.038 | 0.110  |
| 12.0     | 35  | 3300                               | 620  | 124 | 0.047 | 0.252  | 2010                                  | 300  | 76 | 0.037 | 0.189  |
| 12.0     | 40  | 3300                               | 620  | 124 | 0.047 | 0.176  | 2010                                  | 300  | 76 | 0.037 | 0.132  |
| 12.0     | 50  | 3300                               | 620  | 124 | 0.047 | 0.176  | 2010                                  | 300  | 76 | 0.037 | 0.132  |



Y-COATED SOLID CARBIDE END MILLS  
4 FLUTE LONG NECK

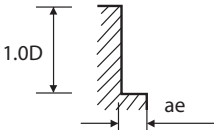
SEME73 SERIES

DIA. = Diameter  
LBS = Length Below Shank

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       |        | K         |      |     |       |        |
|----------|-----|------------------------------|------|----|-------|--------|-----------|------|-----|-------|--------|
|          |     | HARDENED STEELS              |      |    |       |        | CAST IRON |      |     |       |        |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |        |           |      |     |       |        |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |        |           |      |     |       |        |
| DIA.     | LBS | RPM                          | FEED | Vc | Fz    | Ap(mm) | RPM       | FEED | Vc  | Fz    | Ap(mm) |
| 4.0      | 22  | 3180                         | 55   | 40 | 0.004 | 0.020  | 8160      | 550  | 103 | 0.017 | 0.034  |
| 4.0      | 26  | 3180                         | 55   | 40 | 0.004 | 0.020  | 8160      | 550  | 103 | 0.017 | 0.034  |
| 4.0      | 30  | 3180                         | 55   | 40 | 0.004 | 0.020  | 8160      | 550  | 103 | 0.017 | 0.034  |
| 4.0      | 35  | 3180                         | 55   | 40 | 0.004 | 0.013  | 8160      | 550  | 103 | 0.017 | 0.021  |
| 4.0      | 40  | 3180                         | 55   | 40 | 0.004 | 0.013  | 8160      | 550  | 103 | 0.017 | 0.021  |
| 4.0      | 45  | 2820                         | 45   | 35 | 0.004 | 0.013  | 7260      | 435  | 91  | 0.015 | 0.021  |
| 4.0      | 50  | 2820                         | 45   | 35 | 0.004 | 0.013  | 7260      | 435  | 91  | 0.015 | 0.021  |
| 4.0      | 60  | 2820                         | 45   | 35 | 0.004 | 0.008  | 7260      | 435  | 91  | 0.015 | 0.013  |
| 5.0      | 16  | 2780                         | 85   | 44 | 0.008 | 0.044  | 7560      | 720  | 119 | 0.024 | 0.074  |
| 5.0      | 20  | 2780                         | 85   | 44 | 0.008 | 0.044  | 7560      | 720  | 119 | 0.024 | 0.074  |
| 5.0      | 26  | 2500                         | 70   | 39 | 0.007 | 0.025  | 6800      | 585  | 107 | 0.022 | 0.042  |
| 5.0      | 30  | 2500                         | 70   | 39 | 0.007 | 0.025  | 6800      | 585  | 107 | 0.022 | 0.042  |
| 5.0      | 35  | 2500                         | 70   | 39 | 0.007 | 0.025  | 6800      | 585  | 107 | 0.022 | 0.042  |
| 5.0      | 40  | 2500                         | 70   | 39 | 0.007 | 0.025  | 6800      | 585  | 107 | 0.022 | 0.042  |
| 5.0      | 50  | 2500                         | 70   | 39 | 0.007 | 0.016  | 6800      | 585  | 107 | 0.022 | 0.026  |
| 5.0      | 60  | 2220                         | 55   | 35 | 0.006 | 0.016  | 6050      | 460  | 95  | 0.019 | 0.026  |
| 6.0      | 15  | 2400                         | 95   | 45 | 0.010 | 0.076  | 6670      | 790  | 126 | 0.030 | 0.126  |
| 6.0      | 20  | 2400                         | 95   | 45 | 0.010 | 0.053  | 6670      | 790  | 126 | 0.030 | 0.088  |
| 6.0      | 30  | 2400                         | 95   | 45 | 0.010 | 0.053  | 6670      | 790  | 126 | 0.030 | 0.088  |
| 6.0      | 32  | 2160                         | 75   | 41 | 0.009 | 0.030  | 6000      | 640  | 113 | 0.027 | 0.050  |
| 8.0      | 25  | 2010                         | 130  | 51 | 0.016 | 0.071  | 5040      | 850  | 127 | 0.042 | 0.118  |
| 8.0      | 30  | 2010                         | 130  | 51 | 0.016 | 0.071  | 5040      | 850  | 127 | 0.042 | 0.118  |
| 8.0      | 42  | 1810                         | 105  | 45 | 0.015 | 0.040  | 4540      | 690  | 114 | 0.038 | 0.067  |
| 10.0     | 30  | 1630                         | 105  | 51 | 0.016 | 0.126  | 3910      | 730  | 123 | 0.047 | 0.210  |
| 10.0     | 35  | 1630                         | 105  | 51 | 0.016 | 0.088  | 3910      | 730  | 123 | 0.047 | 0.147  |
| 10.0     | 45  | 1630                         | 105  | 51 | 0.016 | 0.088  | 3910      | 730  | 123 | 0.047 | 0.147  |
| 12.0     | 35  | 1400                         | 95   | 53 | 0.017 | 0.151  | 3300      | 620  | 124 | 0.047 | 0.252  |
| 12.0     | 40  | 1400                         | 95   | 53 | 0.017 | 0.106  | 3300      | 620  | 124 | 0.047 | 0.176  |
| 12.0     | 50  | 1400                         | 95   | 53 | 0.017 | 0.106  | 3300      | 620  | 124 | 0.047 | 0.176  |

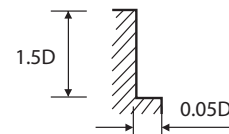
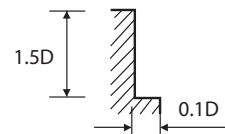


Y-COATED SOLID CARBIDE END MILLS  
6 FLUTE 45° HELIX - NORMAL SPEED

## SEME75 SERIES

DIA. = Diameter  
LOC = Length of Cut  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

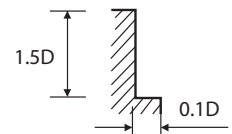
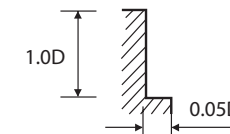
| MATERIAL |     | P                                  |      |     |       |                                       |      |    |       |
|----------|-----|------------------------------------|------|-----|-------|---------------------------------------|------|----|-------|
|          |     | NON-ALLOYED STEELS<br>ALLOY STEELS |      |     |       | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |    |       |
| HARDNESS |     | ~ HRC 35                           |      |     |       | HRC 35 ~ HRC 45                       |      |    |       |
| STRENGTH |     | ~ 1100N/mm <sup>2</sup>            |      |     |       | 1110 ~ 1500N/mm <sup>2</sup>          |      |    |       |
| DIA.     | LOC | RPM                                | FEED | Vc  | Fz    | RPM                                   | FEED | Vc | Fz    |
| 6.0      | 15  | 5840                               | 2100 | 110 | 0.060 | 4075                                  | 1440 | 77 | 0.059 |
| 6.0      | 20  | 5840                               | 2100 | 110 | 0.060 | 4075                                  | 1440 | 77 | 0.059 |
| 6.0      | 30  | 5840                               | 1785 | 110 | 0.051 | 4075                                  | 1225 | 77 | 0.050 |
| 8.0      | 20  | 4410                               | 2100 | 111 | 0.079 | 3085                                  | 1440 | 78 | 0.078 |
| 8.0      | 30  | 4410                               | 2100 | 111 | 0.079 | 3085                                  | 1440 | 78 | 0.078 |
| 8.0      | 35  | 4410                               | 2100 | 111 | 0.079 | 3085                                  | 1440 | 78 | 0.078 |
| 8.0      | 40  | 4410                               | 1785 | 111 | 0.067 | 3085                                  | 1225 | 78 | 0.066 |
| 10.0     | 25  | 3530                               | 2100 | 111 | 0.099 | 2435                                  | 1440 | 76 | 0.099 |
| 10.0     | 30  | 3530                               | 2100 | 111 | 0.099 | 2435                                  | 1440 | 76 | 0.099 |
| 10.0     | 40  | 3530                               | 2100 | 111 | 0.099 | 2435                                  | 1440 | 76 | 0.099 |
| 10.0     | 50  | 3530                               | 1785 | 111 | 0.084 | 2435                                  | 1225 | 76 | 0.084 |
| 12.0     | 30  | 2980                               | 1765 | 112 | 0.099 | 2100                                  | 1220 | 79 | 0.097 |
| 12.0     | 40  | 2980                               | 1765 | 112 | 0.099 | 2100                                  | 1220 | 79 | 0.097 |
| 12.0     | 50  | 2980                               | 1500 | 112 | 0.084 | 2100                                  | 1035 | 79 | 0.082 |
| 12.0     | 60  | 2980                               | 1325 | 112 | 0.074 | 2100                                  | 915  | 79 | 0.073 |
| 16.0     | 40  | 2205                               | 1325 | 111 | 0.100 | 1555                                  | 925  | 78 | 0.099 |
| 16.0     | 50  | 2205                               | 1325 | 111 | 0.100 | 1555                                  | 925  | 78 | 0.099 |
| 16.0     | 60  | 2205                               | 1125 | 111 | 0.085 | 1555                                  | 790  | 78 | 0.085 |
| 16.0     | 90  | 1985                               | 895  | 100 | 0.075 | 1395                                  | 625  | 70 | 0.075 |
| 16.0     | 110 | 1985                               | 895  | 100 | 0.075 | 1395                                  | 625  | 70 | 0.075 |
| 20.0     | 45  | 1765                               | 1060 | 111 | 0.100 | 1220                                  | 725  | 77 | 0.099 |
| 20.0     | 60  | 1765                               | 1060 | 111 | 0.100 | 1220                                  | 725  | 77 | 0.099 |
| 20.0     | 70  | 1765                               | 905  | 111 | 0.085 | 1220                                  | 615  | 77 | 0.084 |
| 20.0     | 110 | 1585                               | 715  | 100 | 0.075 | 1090                                  | 490  | 68 | 0.075 |

Y-COATED SOLID CARBIDE END MILLS  
6 FLUTE 45° HELIX - NORMAL SPEED

## SEME75 SERIES

DIA. = Diameter  
LOC = Length of Cut  
RPM = rev./min.  
FEED = mm/min.  
Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                            |      |    |       | K         |      |     |       |
|----------|-----|------------------------------|------|----|-------|-----------|------|-----|-------|
|          |     | HARDENED STEELS              |      |    |       | CAST IRON |      |     |       |
| HARDNESS |     | HRC 45 ~ HRC 55              |      |    |       |           |      |     |       |
| STRENGTH |     | 1500 ~ 2000N/mm <sup>2</sup> |      |    |       |           |      |     |       |
| DIA.     | LOC | RPM                          | FEED | Vc | Fz    | RPM       | FEED | Vc  | Fz    |
| 6.0      | 15  | 1660                         | 220  | 31 | 0.022 | 5840      | 2100 | 110 | 0.060 |
| 6.0      | 20  | 1660                         | 220  | 31 | 0.022 | 5840      | 2100 | 110 | 0.060 |
| 6.0      | 30  | 1660                         | 190  | 31 | 0.019 | 5840      | 1785 | 110 | 0.051 |
| 8.0      | 20  | 1220                         | 220  | 31 | 0.030 | 4410      | 2100 | 111 | 0.079 |
| 8.0      | 30  | 1220                         | 220  | 31 | 0.030 | 4410      | 2100 | 111 | 0.079 |
| 8.0      | 35  | 1220                         | 220  | 31 | 0.030 | 4410      | 2100 | 111 | 0.079 |
| 8.0      | 40  | 1220                         | 190  | 31 | 0.026 | 4410      | 1785 | 111 | 0.067 |
| 10.0     | 25  | 1050                         | 220  | 33 | 0.035 | 3530      | 2100 | 111 | 0.099 |
| 10.0     | 30  | 1050                         | 220  | 33 | 0.035 | 3530      | 2100 | 111 | 0.099 |
| 10.0     | 40  | 1050                         | 220  | 33 | 0.035 | 3530      | 2100 | 111 | 0.099 |
| 10.0     | 50  | 1050                         | 190  | 33 | 0.030 | 3530      | 1785 | 111 | 0.084 |
| 12.0     | 30  | 880                          | 190  | 33 | 0.036 | 2980      | 1765 | 112 | 0.099 |
| 12.0     | 40  | 880                          | 190  | 33 | 0.036 | 2980      | 1765 | 112 | 0.099 |
| 12.0     | 50  | 880                          | 165  | 33 | 0.031 | 2980      | 1500 | 112 | 0.084 |
| 12.0     | 60  | 880                          | 140  | 33 | 0.027 | 2980      | 1325 | 112 | 0.074 |
| 16.0     | 40  | 670                          | 135  | 34 | 0.034 | 2205      | 1325 | 111 | 0.100 |
| 16.0     | 50  | 670                          | 135  | 34 | 0.034 | 2205      | 1325 | 111 | 0.100 |
| 16.0     | 60  | 670                          | 115  | 34 | 0.029 | 2205      | 1125 | 111 | 0.085 |
| 16.0     | 90  | 610                          | 95   | 31 | 0.026 | 1985      | 895  | 100 | 0.075 |
| 16.0     | 110 | 610                          | 95   | 31 | 0.026 | 1985      | 895  | 100 | 0.075 |
| 20.0     | 45  | 525                          | 115  | 33 | 0.037 | 1765      | 1060 | 111 | 0.100 |
| 20.0     | 60  | 525                          | 115  | 33 | 0.037 | 1765      | 1060 | 111 | 0.100 |
| 20.0     | 70  | 525                          | 100  | 33 | 0.032 | 1765      | 905  | 111 | 0.085 |
| 20.0     | 110 | 475                          | 80   | 30 | 0.028 | 1585      | 715  | 100 | 0.075 |



Y-COATED SOLID CARBIDE END MILLS  
6 FLUTE 45° HELIX - HIGH SPEED

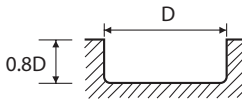
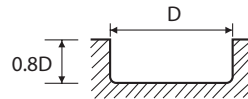
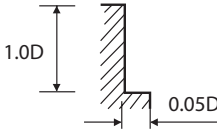
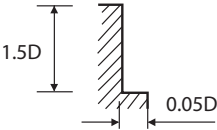
SEME75 SERIES

DIA. = Diameter  
LOC = Length of Cut

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL |     | P                                     |      |     |       |                              |      |     |       |
|----------|-----|---------------------------------------|------|-----|-------|------------------------------|------|-----|-------|
|          |     | ALLOY STEELS<br>HEAT RESISTANT STEELS |      |     |       | HARDENED STEELS              |      |     |       |
| HARDNESS |     | HRc 35 ~ HRc 45                       |      |     |       | HRc 45 ~ HRc 55              |      |     |       |
| STRENGTH |     | 1110 ~ 1500N/mm <sup>2</sup>          |      |     |       | 1500 ~ 2000N/mm <sup>2</sup> |      |     |       |
| DIA.     | LOC | RPM                                   | FEED | Vc  | Fz    | RPM                          | FEED | Vc  | Fz    |
| 6.0      | 15  | 17640                                 | 6395 | 333 | 0.060 | 8820                         | 3205 | 166 | 0.061 |
| 6.0      | 20  | 17640                                 | 6395 | 333 | 0.060 | 8820                         | 3205 | 166 | 0.061 |
| 6.0      | 30  | 17640                                 | 5435 | 333 | 0.051 | 8820                         | 2720 | 166 | 0.051 |
| 8.0      | 20  | 13230                                 | 6395 | 333 | 0.081 | 6615                         | 3205 | 166 | 0.081 |
| 8.0      | 30  | 13230                                 | 6395 | 333 | 0.081 | 6615                         | 3205 | 166 | 0.081 |
| 8.0      | 35  | 13230                                 | 6395 | 333 | 0.081 | 6615                         | 3205 | 166 | 0.081 |
| 8.0      | 40  | 13230                                 | 5435 | 333 | 0.068 | 6615                         | 2725 | 166 | 0.069 |
| 10.0     | 25  | 10480                                 | 6290 | 329 | 0.100 | 5290                         | 3205 | 166 | 0.101 |
| 10.0     | 30  | 10480                                 | 6290 | 329 | 0.100 | 5290                         | 3205 | 166 | 0.101 |
| 10.0     | 40  | 10480                                 | 6290 | 329 | 0.100 | 5290                         | 3205 | 166 | 0.101 |
| 10.0     | 50  | 10480                                 | 5345 | 329 | 0.085 | 5290                         | 2720 | 166 | 0.086 |
| 12.0     | 30  | 8820                                  | 5290 | 333 | 0.100 | 4410                         | 2645 | 166 | 0.100 |
| 12.0     | 40  | 8820                                  | 5290 | 333 | 0.100 | 4410                         | 2645 | 166 | 0.100 |
| 12.0     | 50  | 8820                                  | 4500 | 333 | 0.085 | 4410                         | 2245 | 166 | 0.085 |
| 12.0     | 60  | 8820                                  | 3970 | 333 | 0.075 | 4410                         | 1985 | 166 | 0.075 |
| 16.0     | 40  | 6615                                  | 3970 | 333 | 0.100 | 3320                         | 1985 | 167 | 0.100 |
| 16.0     | 50  | 6615                                  | 3970 | 333 | 0.100 | 3320                         | 1985 | 167 | 0.100 |
| 16.0     | 60  | 6615                                  | 3375 | 333 | 0.085 | 3320                         | 1685 | 167 | 0.085 |
| 16.0     | 90  | 5955                                  | 2680 | 299 | 0.075 | 2980                         | 1340 | 150 | 0.075 |
| 16.0     | 110 | 5955                                  | 2680 | 299 | 0.075 | 2980                         | 1340 | 150 | 0.075 |
| 20.0     | 45  | 5290                                  | 3205 | 332 | 0.101 | 2645                         | 1545 | 166 | 0.097 |
| 20.0     | 60  | 5290                                  | 3205 | 332 | 0.101 | 2645                         | 1545 | 166 | 0.097 |
| 20.0     | 70  | 5290                                  | 2720 | 332 | 0.086 | 2645                         | 1315 | 166 | 0.083 |
| 20.0     | 110 | 4765                                  | 2165 | 299 | 0.076 | 2385                         | 1040 | 150 | 0.073 |



X-COATED SOLID CARBIDE END MILLS  
4&5 FLUTE MULTIPLE HELIX CORNER RADIUS

G9D75 SERIES  
G9D67 SERIES

G9D76 SERIES  
G9D68 SERIES

G9D77 SERIES  
G9D69 SERIES

RPM = rev./min.  
FEED = mm/min.

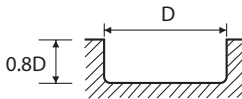
Vc = m/min.  
Fz = mm/tooth

| MATERIAL | P                                                          |      |     |       |                                                                               |      |     |       |
|----------|------------------------------------------------------------|------|-----|-------|-------------------------------------------------------------------------------|------|-----|-------|
|          | ALLOYED STEELS,<br>CARBON STEELS<br>TOOL STEELS, CAST IRON |      |     |       | ALLOYED STEELS, CARBON STEELS<br>TOOL STEELS, CAST IRON<br>PREHARDENED STEELS |      |     |       |
| HARDNESS | ~ HRc 25                                                   |      |     |       | HRc 25 ~ HRc 40                                                               |      |     |       |
| DIAMETER | RPM                                                        | FEED | Vc  | Fz    | RPM                                                                           | FEED | Vc  | Fz    |
| 6.0      | 12000                                                      | 1550 | 225 | 0.032 | 10600                                                                         | 1100 | 200 | 0.026 |
| 8.0      | 9000                                                       | 1650 | 225 | 0.046 | 8100                                                                          | 1180 | 205 | 0.036 |
| 10.0     | 7200                                                       | 1650 | 225 | 0.057 | 6400                                                                          | 1180 | 200 | 0.046 |
| 12.0     | 6000                                                       | 1540 | 225 | 0.064 | 5400                                                                          | 1140 | 205 | 0.053 |
| 16.0     | 4500                                                       | 1500 | 225 | 0.067 | 4100                                                                          | 1050 | 205 | 0.051 |
| 20.0     | 3600                                                       | 1330 | 225 | 0.074 | 3200                                                                          | 900  | 200 | 0.056 |

RPM = rev./min.  
FEED = mm/min.

Vc = m/min.  
Fz = mm/tooth

| MATERIAL | K         |      |     |       |       |      |     |       |
|----------|-----------|------|-----|-------|-------|------|-----|-------|
|          | CAST IRON |      |     |       |       |      |     |       |
| HARDNESS |           |      |     |       |       |      |     |       |
| DIAMETER | RPM       | FEED | Vc  | Fz    | RPM   | FEED | Vc  | Fz    |
| 6.0      | 12000     | 1550 | 225 | 0.032 | 10600 | 1100 | 200 | 0.026 |
| 8.0      | 9000      | 1650 | 225 | 0.046 | 8100  | 1180 | 205 | 0.036 |
| 10.0     | 7200      | 1650 | 225 | 0.057 | 6400  | 1180 | 200 | 0.046 |
| 12.0     | 6000      | 1540 | 225 | 0.064 | 5400  | 1140 | 205 | 0.053 |
| 16.0     | 4500      | 1500 | 225 | 0.067 | 4100  | 1050 | 205 | 0.051 |
| 20.0     | 3600      | 1330 | 225 | 0.074 | 3200  | 900  | 200 | 0.056 |



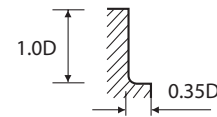
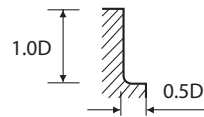


## X-COATED SOLID CARBIDE END MILLS

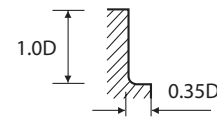
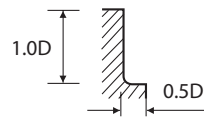
## 4&amp;5 FLUTE MULTIPLE HELIX CORNER RADIUS

**G9D75** SERIES  
**G9D67** SERIES**G9D76** SERIES  
**G9D68** SERIES**G9D77** SERIES  
**G9D69** SERIESRPM = rev./min. Vc = m/min.  
FEED = mm/min. Fz = mm/tooth

| MATERIAL | P                                                          |      |     |       |                                                                               |      |     |       |
|----------|------------------------------------------------------------|------|-----|-------|-------------------------------------------------------------------------------|------|-----|-------|
|          | ALLOYED STEELS,<br>CARBON STEELS<br>TOOL STEELS, CAST IRON |      |     |       | ALLOYED STEELS, CARBON STEELS<br>TOOL STEELS, CAST IRON<br>PREHARDENED STEELS |      |     |       |
| HARDNESS | ~ HRC 25                                                   |      |     |       | HRC 25 ~ HRC 40                                                               |      |     |       |
| DIAMETER | RPM                                                        | FEED | Vc  | Fz    | RPM                                                                           | FEED | Vc  | Fz    |
| 6.0      | 15800                                                      | 2570 | 300 | 0.041 | 14300                                                                         | 1850 | 270 | 0.032 |
| 8.0      | 11900                                                      | 2700 | 300 | 0.057 | 10700                                                                         | 1950 | 270 | 0.046 |
| 10.0     | 9500                                                       | 2700 | 300 | 0.071 | 8500                                                                          | 1950 | 265 | 0.057 |
| 12.0     | 8000                                                       | 2570 | 300 | 0.080 | 7100                                                                          | 1850 | 270 | 0.065 |
| 16.0     | 6000                                                       | 2450 | 300 | 0.082 | 5400                                                                          | 1750 | 270 | 0.065 |
| 20.0     | 4800                                                       | 2140 | 300 | 0.089 | 4300                                                                          | 1500 | 270 | 0.070 |

RPM = rev./min. Vc = m/min.  
FEED = mm/min. Fz = mm/tooth

| MATERIAL | K         |      |     |       |       |      |     |       |
|----------|-----------|------|-----|-------|-------|------|-----|-------|
|          | CAST IRON |      |     |       |       |      |     |       |
| HARDNESS |           |      |     |       |       |      |     |       |
| DIAMETER | RPM       | FEED | Vc  | Fz    | RPM   | FEED | Vc  | Fz    |
| 6.0      | 15800     | 2570 | 300 | 0.041 | 14300 | 1850 | 270 | 0.032 |
| 8.0      | 11900     | 2700 | 300 | 0.057 | 10700 | 1950 | 270 | 0.046 |
| 10.0     | 9500      | 2700 | 300 | 0.071 | 8500  | 1950 | 265 | 0.057 |
| 12.0     | 8000      | 2570 | 300 | 0.080 | 7100  | 1850 | 270 | 0.065 |
| 16.0     | 6000      | 2450 | 300 | 0.082 | 5400  | 1750 | 270 | 0.065 |
| 20.0     | 4800      | 2140 | 300 | 0.089 | 4300  | 1500 | 270 | 0.070 |



## X-COATED HSS-PM END MILLS

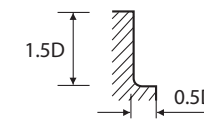
## 4&amp;5 FLUTE MULTIPLE HELIX SHORT LENGTH CORNER RADIUS

**GAE53** SERIESRPM = rev./min. Vc = m/min.  
FEED = mm/min. Fz = mm/tooth

| MATERIAL | P                                  |      |    |       |                                                |      |    |       |                                            |      |    |       |
|----------|------------------------------------|------|----|-------|------------------------------------------------|------|----|-------|--------------------------------------------|------|----|-------|
|          | STRUCTURAL STEELS<br>CARBON STEELS |      |    |       | STRUCTURAL STEELS<br>CARBON STEELS, CAST IRONS |      |    |       | CARBON STEELS<br>ALLOY STEELS, TOOL STEELS |      |    |       |
| HARDNESS |                                    |      |    |       | ~ HRC 20                                       |      |    |       | HRC 20 ~ 30                                |      |    |       |
| STRENGTH | ~ 500N/mm <sup>2</sup>             |      |    |       | 500 ~ 800N/mm <sup>2</sup>                     |      |    |       | 800 ~ 1000N/mm <sup>2</sup>                |      |    |       |
| DIAMETER | RPM                                | FEED | Vc | Fz    | RPM                                            | FEED | Vc | Fz    | RPM                                        | FEED | Vc | Fz    |
| 6.0      | 3250                               | 240  | 60 | 0.019 | 2500                                           | 185  | 48 | 0.018 | 1800                                       | 120  | 34 | 0.017 |
| 8.0      | 2750                               | 300  | 70 | 0.027 | 2150                                           | 240  | 54 | 0.028 | 1550                                       | 170  | 38 | 0.027 |
| 10.0     | 2150                               | 430  | 70 | 0.050 | 1700                                           | 330  | 54 | 0.049 | 1200                                       | 205  | 38 | 0.043 |
| 12.0     | 1800                               | 430  | 70 | 0.060 | 1400                                           | 350  | 54 | 0.063 | 1000                                       | 240  | 38 | 0.059 |
| 14.0     | 1550                               | 430  | 70 | 0.055 | 1200                                           | 350  | 54 | 0.073 | 850                                        | 240  | 38 | 0.069 |
| 16.0     | 1400                               | 430  | 70 | 0.063 | 1100                                           | 350  | 54 | 0.081 | 750                                        | 240  | 38 | 0.080 |
| 18.0     | 1200                               | 430  | 70 | 0.072 | 1000                                           | 350  | 54 | 0.085 | 700                                        | 240  | 38 | 0.086 |
| 20.0     | 1100                               | 445  | 70 | 0.080 | 850                                            | 350  | 54 | 0.101 | 600                                        | 240  | 38 | 0.100 |

RPM = rev./min. Vc = m/min.  
FEED = mm/min. Fz = mm/tooth

| MATERIAL | P                                  |      |    |       | M                |      |    |       | K         |      |    |       |
|----------|------------------------------------|------|----|-------|------------------|------|----|-------|-----------|------|----|-------|
|          | STRUCTURAL STEELS<br>CARBON STEELS |      |    |       | STAINLESS STEELS |      |    |       | CAST IRON |      |    |       |
| HARDNESS | HRC 30 ~ 40                        |      |    |       |                  |      |    |       |           |      |    |       |
| STRENGTH | 1000 ~ 1300N/mm <sup>2</sup>       |      |    |       |                  |      |    |       |           |      |    |       |
| DIAMETER | RPM                                | FEED | Vc | Fz    | RPM              | FEED | Vc | Fz    | RPM       | FEED | Vc | Fz    |
| 6.0      | 1500                               | 110  | 28 | 0.018 | 1750             | 130  | 33 | 0.019 | 2500      | 185  | 48 | 0.018 |
| 8.0      | 1200                               | 130  | 32 | 0.028 | 1450             | 170  | 36 | 0.029 | 2150      | 240  | 54 | 0.028 |
| 10.0     | 1000                               | 170  | 32 | 0.041 | 1150             | 200  | 36 | 0.045 | 1700      | 330  | 54 | 0.049 |
| 12.0     | 850                                | 190  | 32 | 0.055 | 950              | 245  | 36 | 0.064 | 1400      | 350  | 54 | 0.063 |
| 14.0     | 700                                | 190  | 32 | 0.065 | 850              | 245  | 36 | 0.074 | 1200      | 350  | 54 | 0.073 |
| 16.0     | 600                                | 190  | 32 | 0.075 | 700              | 245  | 36 | 0.085 | 1100      | 350  | 54 | 0.081 |
| 18.0     | 550                                | 190  | 32 | 0.082 | 650              | 245  | 36 | 0.093 | 1000      | 350  | 54 | 0.085 |
| 20.0     | 500                                | 190  | 32 | 0.092 | 600              | 245  | 36 | 0.107 | 850       | 350  | 54 | 0.101 |





## HIGH QUALITY PRODUCTS and ON TIME DELIVERY for WORLD-WIDE CUSTOMERS

Since 1982, YG-1 has been committed to Quality, Innovation and the unique customer experience. Our performance and experience has granted YG-1 the Global impression of one of the leading manufacturers of high quality cutting tool solutions. This Global footprint expands over 75 countries, with international logistic centers, pledging to our customers to give the best service available today - and tomorrow.

### EUROPE

|                                                                                                    |                                                                                             |                                                                                               |                                                                                              |                                                                                              |                                                                                                     |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|  BELGIUM        |  FINLAND |  ITALY     |  PORTUGAL |  SLOVENIA |  THE NETHERLANDS |
|  CROATIA        |  FRANCE  |  LITHUANIA |  ROMANIA  |  SPAIN    |  TURKEY          |
|  CZECH REPUBLIC |  GERMANY |  NORWAY    |  RUSSIA   |  SWEDEN   |  UNITED KINGDOM  |
|  DENMARK        |  HUNGARY |  POLAND    |  SERBIA   |  SWISS    |                                                                                                     |

### ASIA PACIFIC

|                                                                                                 |                                                                                               |                                                                                                             |                                                                                                 |                                                                                                          |
|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|  AUSTRALIA   |  INDONESIA |  KINGDOM OF SAUDI ARABIA |  SINGAPORE   |  UNITED ARAB EMIRATES |
|  CHINA       |  IRAN      |  MALAYSIA                |  SOUTH KOREA |  VIETNAM              |
|  HONG KONG |  ISRAEL  |  PAKISTAN              |  TAIWAN    |                                                                                                          |
|  INDIA     |  JAPAN   |  PHILIPPINES           |  THAILAND  |                                                                                                          |

### AMERICAS

|                                                                                              |                                                                                              |                                                                                                |                                                                                              |                                                                                                     |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
|  BRAZIL |  CANADA |  COLOMBIA |  MEXICO |  UNITED STATES |
|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|

### AFRICA

|                                                                                             |                                                                                                    |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|  EGYPT |  SOUTH AFRICA |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|

**YG** YG-1 CO., LTD.

\* For the more information on sales network, Please contact the head office as below;

#### YG-1 HEAD OFFICE

211, Sewolcheon-ro, Bupyeong-gu, Incheon, South Korea  
Phone : +82-32-526-0909  
E-mail : yg1@yg1.kr  
www.yg1.kr