# 4G MILL END MILLS

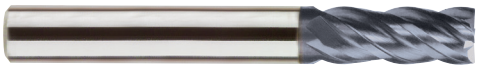
PLAIN SHANK **SEME71** SERIES

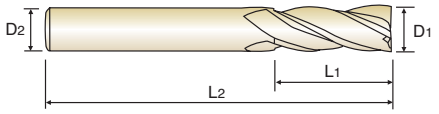
## CARBIDE, 4 FLUTE MULTIPLE HELIX (Sharp Corner Removal)

**VOLLHARTMETALL, 4 SCHNEIDEN MEHRSPIRAL (Scharfe Schneidenecken entfernt)**
**Fraise carbure, 4 dents, hélice multiple (Protection de l'angle d'attaque)**
**MD, 4 TAGLIENTI, TAGLIENTE RINFORZATO**

- New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRc55 and machine parts.
- Multiple Helix for 3.0mm and over 3.0mm diameter endmills minimizing vibration and decreasing wear in cutting.
  - Equal index flutes design for long length and single helix (38°) end mills.
- Gash land geometry applied at the end tooth, achieving heavy duty cutting.
- Available various length products like short, regular and long length end mills etc.
- Available in short, regular and long shank end mills.

- Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeo-metrien hervorragende Schnittleistung und Verschleißfestigkeit
- Ausgezeichnet geeignet für das Fräsen von vorvergütetem Stahl, kohlenstoff Stahl, legiertem Stahl für Formen, bis HRc55 und Maschinenbauteile.
- Aufgrund der Multi-Helix (M-Helix) bei Schaftfräsern ≥ 3,0mm ø werden Vibrationen zuverlässig verhindert und gleichzeitig der Schneidkantenverschleiß verringert.
  −Designed mit gleichgeteilten Spannuten für überlange Schaftfräser.
- Aufgrund der korrigierten Stirnschneiden ist eine Schwerzerspanung möglich.
- Erhältlich in verschiedenen Variationen: kurz, lang und extra lang.






CARBIDE | 4 | 35°/38° | PLAIN | Y Coating

p.C368~C371

D<Ø3, Long Length 38° HELIX

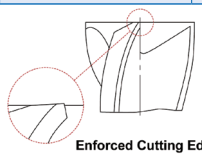
| Recommended ToolHolder | Flat Shank | Plain Shank |
|---|---|---|
| ◎ | END MILL HOLDER | HYDRAULIC CHUCK SHRINK FIT HOLDER |
| ◎ | - | POWER MILLING CHUCK |
| ○ | - | ER COLLET CHUCK SK SLIM CHUCK |

Unit : mm

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

★ : Stock Item

| Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|---|---|
| 0 ~ - 0.03 | h5 |



Enforced Cutting Edge

▶ NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommend | ○ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400 Rm | 1050 Rm | 550 | 630 | 400 | 550 |
| Recommend | | | | | | | | | | | | | | | | | | ○ | | ◎ | ○ |


phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions
YG-1 CO., LTD.

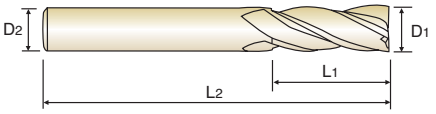
# CARBIDE, 4 FLUTE MULTIPLE HELIX (Sharp Corner Removal)

## VOLLHARTMETALL, 4 SCHNEIDEN MEHRSPIRAL (Scharfe Schneidenecken entfernt)
## Fraise carbure, 4 dents, hélice multiple (Protection de l'angle d'attaque)
## MD, 4 TAGLIENTI, TAGLIENTE RINFORZATO

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRc55 and machine parts.
- ▶ Multiple Helix for 3.0mm and over 3.0mm diameter endmills minimizing vibration and decreasing wear in cutting.
  - Equal index flutes design for long length and single helix (38°) end mills.
- ▶ Gash land geometry applied at the end tooth, achieving heavy duty cutting.
- ▶ Available various length products like short, regular and long length end mills etc.
- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeo-metrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Ausgezeichnet geeignet für das Fräsen von vorvergütetem Stahl, kohlenstoff Stahl, legiertem Stahl für Formen, bis HRc55 und Maschinenbauteile.
- ▶ Aufgrund der Multi-Helix (M-Helix) bei Schaftfräsern ≥ 3,0mm ø werden Vibrationen zuverlässig verhindert und gleichzeitig der Schneidkantenverschleiß verringert.
  −Designed mit gleichgeteilten Spannuten für überlange Schaftfräser.
- ▶ Aufgrund der korrigierten Stirnschneiden ist eine Schwerzerspanung möglich.
- ▶ Erhältlich in verschiedenen Variationen: kurz, lang und extra lang.






CARBIDE | 4 | 35°/38° | PLAIN | Y Coating

p.C368~C371

D<Ø3, Long Length 38° HELIX

| Recommended ToolHolder | Flat Shank | Plain Shank |
|---|---|---|
| | END MILL HOLDER | HYDRAULIC CHUCK SHRINK FIT HOLDER |
| | - | POWER MILLING CHUCK |
| | - | ER COLLET CHUCK SK SLIM CHUCK |

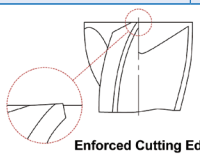
Unit : mm

| EDP No. | Mill Diameter D1 | Shank Diameter D2 | Length of Cut L1 | Overall Length L2 | Remark |
|---|---|---|---|---|---|
| SEME71015084SE | 1.5 | 4 | 8 | 50 | 4mm Shank |
| SEME71015104SE | 1.5 | 4 | 10 | 50 | 4mm Shank |
| SEME71015015E | 1.5 | 6 | 1.5 | 40 | Short |
| SEME7101503E | 1.5 | 6 | 3 | 40 | Short |
| ★ SEME71015E | 1.5 | 6 | 4 | 50 | Regular |
| SEME7101506E | 1.5 | 6 | 6 | 50 | Long |
| SEME7101508E | 1.5 | 6 | 8 | 50 | Long |
| SEME7101510E | 1.5 | 6 | 10 | 50 | Long |
| SEME71020024SE | 2.0 | 4 | 2 | 40 | 4mm Shank |
| SEME71020044SE | 2.0 | 4 | 4 | 40 | 4mm Shank |
| SEME710204SE | 2.0 | 4 | 6 | 50 | 4mm Shank |
| SEME71020084SE | 2.0 | 4 | 8 | 50 | 4mm Shank |
| SEME71020104SE | 2.0 | 4 | 10 | 50 | 4mm Shank |
| SEME71020124SE | 2.0 | 4 | 12 | 50 | 4mm Shank |
| SEME7102002E | 2.0 | 6 | 2 | 40 | Short |
| SEME7102004E | 2.0 | 6 | 4 | 40 | Short |
| ★ SEME71020E | 2.0 | 6 | 6 | 50 | Regular |
| SEME7102008E | 2.0 | 6 | 8 | 50 | Long |
| SEME7102010E | 2.0 | 6 | 10 | 50 | Long |
| SEME7102012E | 2.0 | 6 | 12 | 50 | Long |
| SEME710250254SE | 2.5 | 4 | 2.5 | 40 | 4mm Shank |
| SEME71025054SE | 2.5 | 4 | 5 | 40 | 4mm Shank |
| SEME710254SE | 2.5 | 4 | 7 | 50 | 4mm Shank |
| SEME71025104SE | 2.5 | 4 | 10 | 50 | 4mm Shank |

★ : Stock Item

▶ NEXT PAGE

| Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|---|---|
| 0 ~ - 0.03 | h5 |



Enforced Cutting Edge

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommend | ○ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400 Rm | 1050 Rm | 550 | 630 | 400 | 550 |
| Recommend | | | | | | | | | | | | | | | | | | ○ | | ◎ | ○ |

# 4G MILL END MILLS

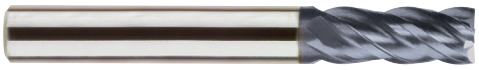
PLAIN SHANK **SEME71** SERIES

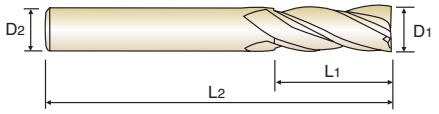
## CARBIDE, 4 FLUTE MULTIPLE HELIX (Sharp Corner Removal)

**VOLLHARTMETALL, 4 SCHNEIDEN MEHRSPIRAL (Scharfe Schneidenecken entfernt)**
**Fraise carbure, 4 dents, hélice multiple (Protection de l'angle d'attaque)**
**MD, 4 TAGLIENTI, TAGLIENTE RINFORZATO**

- New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRc55 and machine parts.
- Multiple Helix for 3.0mm and over 3.0mm diameter endmills minimizing vibration and decreasing wear in cutting.
  - Equal index flutes design for long length and single helix (38°) end mills.
- Gash land geometry applied at the end tooth, achieving heavy duty cutting.
- Available various length products like short, regular and long length end mills etc.
- Available in short, regular and long shank end mills.

- Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeo-metrien hervorragende Schnittleistung und Verschleißfestigkeit
- Ausgezeichnet geeignet für das Fräsen von vorvergütetem Stahl, kohlenstoff Stahl, legiertem Stahl für Formen, bis HRc55 und Maschinenbauteile.
- Aufgrund der Multi-Helix (M-Helix) bei Schaftfräsern ≥ 3,0mm ø werden Vibrationen zuverlässig verhindert und gleichzeitig der Schneidkantenverschleiß verringert.
  −Designed mit gleichgeteilten Spannuten für überlange Schaftfräser.
- Aufgrund der korrigierten Stirnschneiden ist eine Schwerzerspanung möglich.
- Erhältlich in verschiedenen Variationen: kurz, lang und extra lang.






CARBIDE | 4 | 35°/38° | PLAIN | Y Coating

p.C368~C371

D<Ø3, Long Length 38° HELIX

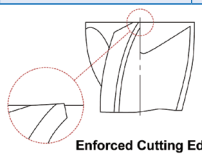
| Recommended ToolHolder | Flat Shank | Plain Shank |
|---|---|---|
| ◎ | END MILL HOLDER | HYDRAULIC CHUCK SHRINK FIT HOLDER |
| ◎ | - | POWER MILLING CHUCK |
| ○ | - | ER COLLET CHUCK SK SLIM CHUCK |

Unit : mm

| EDP No. | Mill Diameter D1 | Shank Diameter D2 | Length of Cut L1 | Overall Length L2 | Remark |
|---|---|---|---|---|---|
| SEME71025124SE | 2.5 | 4 | 12 | 50 | 4mm Shank |
| SEME71025025E | 2.5 | 6 | 2.5 | 40 | Short |
| SEME7102505E | 2.5 | 6 | 5 | 40 | Short |
| ★ SEME71025E | 2.5 | 6 | 7 | 50 | Regular |
| SEME7102510E | 2.5 | 6 | 10 | 50 | Long |
| SEME7102512E | 2.5 | 6 | 12 | 50 | Long |
| SEME7103003E | 3.0 | 6 | 3 | 40 | Short |
| SEME7103006E | 3.0 | 6 | 6 | 40 | Short |
| ★ SEME71030E | 3.0 | 6 | 8 | 50 | Regular |
| SEME7103010E | 3.0 | 6 | 10 | 50 | Long |
| SEME7103012E | 3.0 | 6 | 12 | 50 | Long |
| SEME7103014E | 3.0 | 6 | 14 | 50 | Long |
| SEME7104004E | 4.0 | 6 | 4 | 40 | Short |
| SEME7104008E | 4.0 | 6 | 8 | 40 | Short |
| ★ SEME71040E | 4.0 | 6 | 10 | 50 | Regular |
| SEME7104012E | 4.0 | 6 | 12 | 50 | Long |
| SEME7104014E | 4.0 | 6 | 14 | 50 | Long |
| SEME7104016E | 4.0 | 6 | 16 | 50 | Long |
| SEME7105005E | 5.0 | 6 | 5 | 50 | Short |
| SEME7105010E | 5.0 | 6 | 10 | 50 | Short |
| ★ SEME71050E | 5.0 | 6 | 15 | 60 | Regular |
| SEME7105020E | 5.0 | 6 | 20 | 60 | Long |
| SEME7105025E | 5.0 | 6 | 25 | 60 | Long |
| SEME7106006E | 6.0 | 6 | 6 | 50 | Short |

★ : Stock Item

| Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|---|---|
| 0 ~ - 0.03 | h5 |



Enforced Cutting Edge

▶ NEXT PAGE

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommend | ○ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400 Rm | 1050 Rm | 550 | 630 | 400 | 550 |
| Recommend | | | | | | | | | | | | | | | | | | ○ | | ◎ | ○ |


phone:+82-32-526-0909, www.yg1.solutions, E-mail:yg1@yg1.solutions
YG-1 CO., LTD.

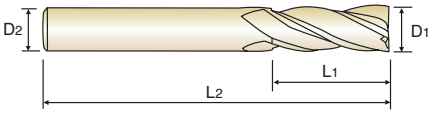
# CARBIDE, 4 FLUTE MULTIPLE HELIX (Sharp Corner Removal)

## VOLLHARTMETALL, 4 SCHNEIDEN MEHRSPIRAL (Scharfe Schneidenecken entfernt)
## Fraise carbure, 4 dents, hélice multiple (Protection de l'angle d'attaque)
## MD, 4 TAGLIENTI, TAGLIENTE RINFORZATO

- ▶ New coating and tool geometry applied resulting outstanding cutting abilities and wear resistance.
- ▶ Excellent for cutting prehardened steels, carbon steels, alloy steels of molds and dies, up to HRc55 and machine parts.
- ▶ Multiple Helix for 3.0mm and over 3.0mm diameter endmills minimizing vibration and decreasing wear in cutting.
  - Equal index flutes design for long length and single helix (38°) end mills.
- ▶ Gash land geometry applied at the end tooth, achieving heavy duty cutting.
- ▶ Available various length products like short, regular and long length end mills etc.
- ▶ Available in short, regular and long shank end mills.

- ▶ Aufgrund einer neuartigen Beschichtung und neuer Werkzeuggeo-metrien hervorragende Schnittleistung und Verschleißfestigkeit
- ▶ Ausgezeichnet geeignet für das Fräsen von vorvergütetem Stahl, kohlenstoff Stahl, legiertem Stahl für Formen, bis HRc55 und Maschinenbauteile.
- ▶ Aufgrund der Multi-Helix (M-Helix) bei Schaftfräsern ≥ 3,0mm ø werden Vibrationen zuverlässig verhindert und gleichzeitig der Schneidkantenverschleiß verringert.
  −Designed mit gleichgeteilten Spannuten für überlange Schaftfräser.
- ▶ Aufgrund der korrigierten Stirnschneiden ist eine Schwerzerspanung möglich.
- ▶ Erhältlich in verschiedenen Variationen: kurz, lang und extra lang.






CARBIDE | 4 | 35°/38° | PLAIN | Y Coating

p.C368~C371

D<Ø3, Long Length 38° HELIX

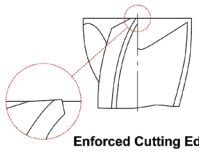
| Recommended ToolHolder | Flat Shank | Plain Shank |
|---|---|---|
| | END MILL HOLDER | HYDRAULIC CHUCK SHRINK FIT HOLDER |
| | - | POWER MILLING CHUCK |
| | - | ER COLLET CHUCK SK SLIM CHUCK |

Unit : mm

| EDP No. | Mill Diameter D1 | Shank Diameter D2 | Length of Cut L1 | Overall Length L2 | Remark |
|---|---|---|---|---|---|
| SEME7106012E | 6.0 | 6 | 12 | 50 | Short |
| ★ SEME71060E | 6.0 | 6 | 15 | 60 | Regular |
| SEME7106020E | 6.0 | 6 | 20 | 60 | Long |
| SEME7106025E | 6.0 | 6 | 25 | 60 | Long |
| SEME7108016E | 8.0 | 8 | 16 | 60 | Short |
| ★ SEME71080E | 8.0 | 8 | 20 | 70 | Regular |
| SEME7108025E | 8.0 | 8 | 25 | 70 | Long |
| SEME7108030E | 8.0 | 8 | 30 | 70 | Long |
| ★ SEME7110022E | 10.0 | 10 | 22 | 65 | Short |
| ★ SEME71100E | 10.0 | 10 | 25 | 75 | Regular |
| ★ SEME7110030E | 10.0 | 10 | 30 | 75 | Long |
| ★ SEME7110035E | 10.0 | 10 | 35 | 75 | Long |
| SEME7112026E | 12.0 | 12 | 26 | 70 | Short |
| ★ SEME71120E | 12.0 | 12 | 30 | 80 | Regular |
| ★ SEME7112035E | 12.0 | 12 | 35 | 80 | Long |
| ★ SEME7112040E | 12.0 | 12 | 40 | 80 | Long |
| SEME71140E | 14.0 | 16 | 35 | 100 | Regular |
| ★ SEME7116032E | 16.0 | 16 | 32 | 100 | Short |
| ★ SEME71160E | 16.0 | 16 | 40 | 100 | Regular |
| SEME71180E | 18.0 | 20 | 45 | 100 | Regular |
| ★ SEME71200E | 20.0 | 20 | 45 | 100 | Regular |

★ : Stock Item

| Mill Dia. Tolerance (mm) | Shank Dia. Tolerance |
|---|---|
| 0 ~ - 0.03 | h5 |



Enforced Cutting Edge

◎ : Excellent ○ : Good

| ISO | P | | | | | | | | | | | M | | | K | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Non-alloy steel | | | | | Low alloy steel | | | | High alloyed steel, and tool steel | | Stainless steel | | | Grey cast iron | | Nodular cast iron | | Malleable cast iron | |
| VDI 3323 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| HRc | | 13 | 25 | 28 | 32 | 10 | 29 | 32 | 38 | 15 | 35 | 15 | 23 | 10 | 10 | 26 | 3 | 25 | | 21 |
| HB | 125 | 190 | 250 | 270 | 300 | 180 | 275 | 300 | 350 | 200 | 325 | 200 | 240 | 180 | 180 | 260 | 160 | 250 | 130 | 230 |
| Recommend | ○ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | ◎ | ◎ | ○ | ◎ | | | ○ | ○ | ○ | ○ | ○ | ○ | ○ |

| ISO | N | | | | | | | | | | S | | | | | | | H | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Material Description | Aluminum-wrought alloy | | Aluminum-cast, alloyed | | | Copper and Copper Alloys (Bronze / Brass) | | | Non Metallic Materials | | Heat Resistant Super Alloys | | | | | Titanium Alloys | | Hardened steel | | Chilled Cast Iron | Hardened Cast Iron |
| VDI 3323 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| HRc | | | | | | | | | | | 15 | 30 | 25 | 38 | 34 | | | 55 | 60 | 42 | 55 |
| HB | 60 | 100 | 75 | 90 | 130 | 110 | 90 | 100 | | | 200 | 280 | 250 | 350 | 320 | 400 Rm | 1050 Rm | 550 | 630 | 400 | 550 |
| Recommend | | | | | | | | | | | | | | | | | | ○ | | ◎ | ○ |