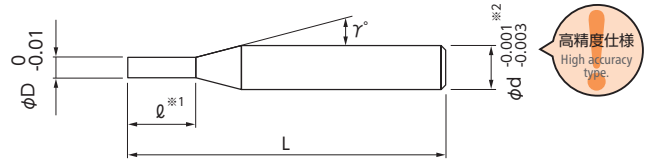


MSCZ440

New

無限コーティング SC用高効率 "Z" エンドミル
MUGEN-COATING 4-Flute High Efficient "Z" End Mill for Carbon Steels



- 不等分割・不等リードの採用、さらに刃部の剛性を高めた設計により、びびりを最大限に抑え、高効率な加工を実現!
- 側面加工・溝加工・ドリリングによるアプローチに対応した多機能な性能を実現する新開発の特殊刃形状を採用。
- 無限コーティングを採用し、長寿命で安定した加工が可能。
- 全62サイズ、刃長が刃径の2倍と3倍(一部サイズ)をラインナップ。
- Unequal flute spacing, unequal helix angle and high rigid end profile design to minimize chatter realize high efficient machining.
- New developed special edge profile realized multi-functional performance of side milling, slot milling and drilling approaches on carbon steels.
- Long time stable machining is realized by adopting MUGEN-COATING.
- Total 62 sizes, some sizes line up with L/D=2 or 3.

- ※1 刃長は、規格表の数値に対し0.1mm長くしております。
The practical Length of Cut is 0.1mm longer than the specification table.
- ※2 シャンク公差はJIS規格でh4に括られますが、当社では-0.001mm~-0.003mmの範囲[0.002mm]で生産しております。
Shank tolerance is h4(JIS), NS TOOL produces within 0.002mm from -0.001mm~-0.003mm.



被削材 Work Material

| 炭素鋼 Carbon Steels | 合金鋼・工具鋼 Alloy Steels・Tool Steels | 調質鋼 Prehardened Steels |
|----------------------|-------------------------------------|---------------------------|
| ○ | ○ | ○ |

※2020年1月発売 ※Released in January, 2020.

| コードNo. Code No. | (D)刃径 Dia. | (ℓ)刃長 Length of Cut | (γ)首角 Neck Taper Angle | (d)シャンク径 Shank Dia. | (L)全長 Overall Length | 標準価格 Retail Price |
|--------------------|---------------|------------------------|---------------------------|------------------------|-------------------------|----------------------|
| 08-00135-01020 | 1 | 2 | 12° | 4 | 50 | 4,500 |
| 08-00135-01030 | | 3 | 12° | 4 | 50 | 4,700 |
| 08-00135-01120 | 1.1 | 2.2 | 12° | 4 | 50 | 5,500 |
| 08-00135-01220 | 1.2 | 2.4 | 12° | 4 | 50 | 5,500 |
| 08-00135-01320 | 1.3 | 2.6 | 12° | 4 | 50 | 5,500 |
| 08-00135-01420 | 1.4 | 2.8 | 12° | 4 | 50 | 5,500 |
| 08-00135-01520 | 1.5 | 3 | 12° | 4 | 50 | 5,500 |
| 08-00135-01530 | | 4.5 | 12° | 4 | 50 | 5,900 |
| 08-00135-01620 | 1.6 | 3.2 | 12° | 6 | 50 | 5,800 |
| 08-00135-01720 | 1.7 | 3.4 | 12° | 6 | 50 | 5,800 |
| 08-00135-01820 | 1.8 | 3.6 | 12° | 6 | 50 | 5,800 |
| 08-00135-01920 | 1.9 | 3.8 | 12° | 6 | 50 | 5,800 |
| 08-00135-02020 | 2 | 4 | 12° | 6 | 50 | 5,800 |
| 08-00135-02030 | | 6 | 12° | 6 | 60 | 6,200 |
| 08-00135-02120 | 2.1 | 4.2 | 12° | 6 | 50 | 5,800 |
| 08-00135-02220 | 2.2 | 4.4 | 12° | 6 | 50 | 5,800 |
| 08-00135-02320 | 2.3 | 4.6 | 12° | 6 | 50 | 5,800 |
| 08-00135-02420 | 2.4 | 4.8 | 12° | 6 | 50 | 5,800 |
| 08-00135-02520 | 2.5 | 5 | 12° | 6 | 50 | 5,800 |
| 08-00135-02530 | | 7.5 | 12° | 6 | 60 | 6,300 |
| 08-00135-02620 | 2.6 | 5.2 | 12° | 6 | 50 | 5,800 |
| 08-00135-02720 | 2.7 | 5.4 | 12° | 6 | 50 | 5,800 |
| 08-00135-02820 | 2.8 | 5.6 | 12° | 6 | 50 | 5,800 |
| 08-00135-02920 | 2.9 | 5.8 | 12° | 6 | 50 | 5,800 |
| 08-00135-03020 | 3 | 6 | 12° | 6 | 50 | 5,800 |
| 08-00135-03030 | | 9 | 12° | 6 | 60 | 6,200 |
| 08-00135-03120 | 3.1 | 6.2 | 12° | 6 | 50 | 6,100 |
| 08-00135-03220 | 3.2 | 6.4 | 12° | 6 | 50 | 6,100 |
| 08-00135-03320 | 3.3 | 6.6 | 12° | 6 | 50 | 6,100 |
| 08-00135-03420 | 3.4 | 6.8 | 12° | 6 | 50 | 6,100 |

単位 [寸法: mm / 価格: 円] Unit [Size: mm / Retail Price: JPY]

| コードNo. Code No. | (D)刃径 Dia. | (ℓ)刃長 Length of Cut | (γ)首角 Neck Taper Angle | (d)シャンク径 Shank Dia. | (L)全長 Overall Length | 標準価格 Retail Price |
|--------------------|---------------|------------------------|---------------------------|------------------------|-------------------------|----------------------|
| 08-00135-03520 | 3.5 | 7 | 12° | 6 | 50 | 6,100 |
| 08-00135-03530 | | 10.5 | 12° | 6 | 60 | 6,600 |
| 08-00135-03620 | 3.6 | 7.2 | 12° | 6 | 50 | 6,100 |
| 08-00135-03720 | 3.7 | 7.4 | 12° | 6 | 50 | 6,100 |
| 08-00135-03820 | 3.8 | 7.6 | 12° | 6 | 50 | 6,100 |
| 08-00135-03920 | 3.9 | 7.8 | 12° | 6 | 50 | 6,100 |
| 08-00135-04020 | 4 | 8 | 12° | 6 | 50 | 6,100 |
| 08-00135-04030 | | 12 | 12° | 6 | 60 | 6,500 |
| 08-00135-04120 | 4.1 | 8.2 | 12° | 6 | 50 | 6,500 |
| 08-00135-04220 | 4.2 | 8.4 | 12° | 6 | 50 | 6,500 |
| 08-00135-04320 | 4.3 | 8.6 | 12° | 6 | 50 | 6,500 |
| 08-00135-04420 | 4.4 | 8.8 | 12° | 6 | 50 | 6,500 |
| 08-00135-04520 | 4.5 | 9 | 12° | 6 | 50 | 6,500 |
| 08-00135-04530 | | 13.5 | 12° | 6 | 60 | 7,000 |
| 08-00135-04620 | 4.6 | 9.2 | 12° | 6 | 50 | 6,500 |
| 08-00135-04720 | 4.7 | 9.4 | 12° | 6 | 50 | 6,500 |
| 08-00135-04820 | 4.8 | 9.6 | 12° | 6 | 50 | 6,500 |
| 08-00135-04920 | 4.9 | 9.8 | 12° | 6 | 50 | 6,500 |
| 08-00135-05020 | 5 | 10 | 12° | 6 | 50 | 6,500 |
| 08-00135-05030 | | 15 | 12° | 6 | 60 | 7,000 |
| 08-00135-05120 | 5.1 | 10.2 | 12° | 6 | 50 | 7,100 |
| 08-00135-05220 | 5.2 | 10.4 | 12° | 6 | 50 | 7,100 |
| 08-00135-05320 | 5.3 | 10.6 | 12° | 6 | 50 | 7,100 |
| 08-00135-05420 | 5.4 | 10.8 | 12° | 6 | 50 | 7,100 |
| 08-00135-05520 | 5.5 | 11 | 12° | 6 | 50 | 7,100 |
| 08-00135-05530 | | 16.5 | 12° | 6 | 60 | 7,700 |
| 08-00135-05620 | 5.6 | 11.2 | 12° | 6 | 50 | 7,100 |
| 08-00135-05720 | 5.7 | 11.4 | 12° | 6 | 50 | 7,100 |
| 08-00135-05820 | 5.8 | 11.6 | 12° | 6 | 50 | 7,100 |
| 08-00135-05920 | 5.9 | 11.8 | 12° | 6 | 50 | 7,100 |
| 08-00135-06020 | 6 | 12 | - | 6 | 60 | 6,800 |
| 08-00135-06030 | | 18 | - | 6 | 60 | 7,100 |

オーダー方法

MSCZ440 刃径 (D) × 刃長 (ℓ) を指示してください。
When you order, indicate MSCZ440 (D) × (ℓ).

※(γ)は参考値です。
※(γ) is reference value.