

F631ZX / F631 / F632 超微粒鎢鋼塗層鋁用立銑刀

End Mills For Aluminium

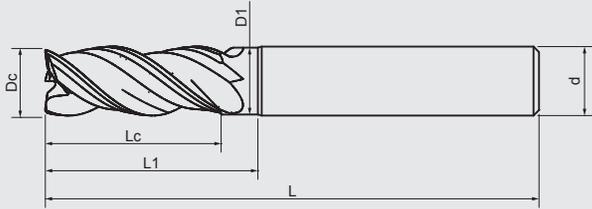
Designed with three variable helix geometry and three unequal flutes.

三個不等螺旋角。
三個不等分劃刃。

Designed with sharp cutting edge, high removal cutting geometry, and fine grinding smooth surface to prevent sticking problem.

刀口鋒利且高移除率刀形幾何設計及細緻抗沾黏性。採用ZrN氮化鈦塗層不含鋁鈦AlTi配方不會與鋁金屬產生親合作用，並得到表面硬度提高刀具壽命。

Adopting ZrN coating without AlTi in the formula would prevent from chemical affinity with Alu metal and enhance tool life by gaining better surface hardness.



VHM Carbide Bright ZrN 40° 不等 3 N 720° 90° Aluminium



Suitable for cutting aluminium.

適用切削於鋁合金材料。

Application for HPC/ roughing cutting process with high chip removal rate as well as for HSC/ finishing cutting with fine and smooth surface finishing.

可適用於高效率移除材料的粗切削加工應用及高光潔度的精切削加工應用。

N N N

DIN 6527 Standard Length

| Dc 0 -0.02 | Lc mm | L mm | d h5 | L1 mm | D1 mm | F631ZX ZrN | F631 Bright | | | | |
|------------------|----------|---------|---------|----------|----------|---------------|----------------|--|--|--|--|
| 3 | 8 | 57 | 6 | 14 | 2.8 | ● | ● | | | | |
| 4 | 11 | 57 | 6 | 16 | 3.8 | ● | ● | | | | |
| 5 | 13 | 57 | 6 | 18 | 4.8 | ● | ● | | | | |
| 6 | 13 | 57 | 6 | 20 | 5.8 | ● | ● | | | | |
| 8 | 19 | 63 | 8 | 26 | 7.7 | ● | ● | | | | |
| 10 | 22 | 72 | 10 | 31 | 9.7 | ● | ● | | | | |
| 12 | 26 | 83 | 12 | 37 | 11.6 | ● | ● | | | | |
| 16 | 32 | 92 | 16 | 43 | 15.5 | ● | ● | | | | |
| 20 | 38 | 104 | 20 | 53 | 19.5 | ● | ● | | | | |

Long Length

| Dc 0 -0.02 | Lc mm | L mm | d h5 | L1 mm | D1 mm | | | F632 Bright | | | |
|------------------|----------|---------|---------|----------|----------|--|--|----------------|--|--|--|
| 6 | 19 | 63 | 6 | 26 | 5.8 | | | ● | | | |
| 8 | 28 | 72 | 8 | 35 | 7.7 | | | ● | | | |
| 10 | 34 | 84 | 10 | 43 | 9.7 | | | ● | | | |
| 12 | 40 | 97 | 12 | 51 | 11.6 | | | ● | | | |
| 16 | 48 | 108 | 16 | 59 | 15.5 | | | ● | | | |
| 20 | 56 | 122 | 20 | 71 | 19.5 | | | ● | | | |

切削條件

Cutting Conditions

| | | | | | | | | | | | | |
|------------------------|-----------------------------------|-----|----------|-----|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|-----------------------------|--------------------------|
| F631ZX F631 F632 | | | | | cutting speed Vc (m/min) | feed per tooth fz(mm) |
| | Aluminium Steel Materials | | | | | | | | | | | |
| N | GRI0-1 Wrought Aluminium alloys | 400 | 0.005xDc | 400 | 0.006xDc | 400 | 0.007xDc | 400 | 0.008xDc | 400 | 0.008xDc | |
| | GRI0-2 Aluminium cast alloys <10% | 400 | 0.005xDc | 400 | 0.006xDc | 400 | 0.007xDc | 400 | 0.008xDc | 400 | 0.008xDc | |
| | GRI0-3 Aluminium cast alloys >10% | 350 | 0.005xDc | 380 | 0.006xDc | 380 | 0.007xDc | 380 | 0.008xDc | 380 | 0.008xDc | |

All cutting data serve for orientation only and should be adapted individually to the technical conditions on location

1. Please work with good rigidity / high precision facilities and collet chuck.
 2. Please choose proper cutting fluid.
 3. The cutting data is reference value only. Please adjust it according to your real working conditions.
 4. If RPM is lower the reference value, the Feed rate (fz) and RPM should be reduced by the same proportion.
 5. If vibration occurs during cutting, please reduce cutting parameter.
1. 請使用剛性好、精度高的設備和夾具。
 2. 請選擇適用於工件材料的切削液。
 3. 此切削條件表中的數值為切削條件的基準值，實際加工時，請考慮加工形狀、目的、使用機台等因素，對切削條件進行調整。
 4. 如果機台轉速低於表中所列數值，則進給速度應與轉速按同一比例降低。
 5. 切削加工時如果發生振顫，請降低切削條件。