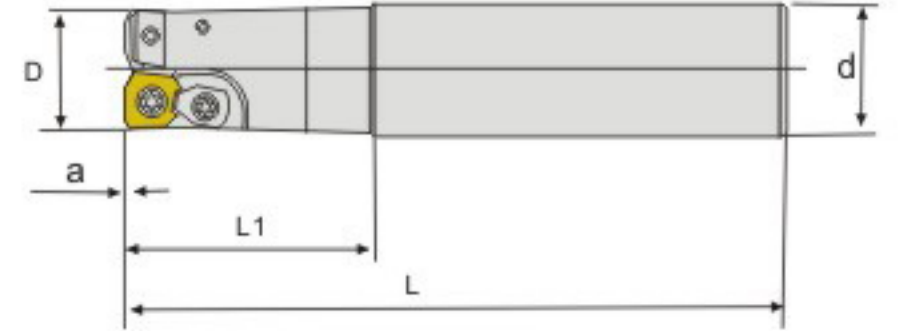
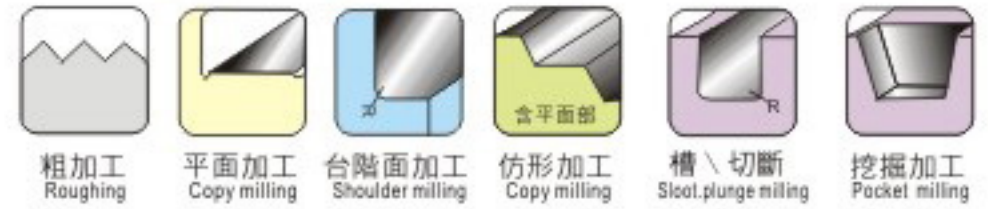


# AJX 大進給立銑刀

## ROUGH FEED END MILLS



| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |    |     |     |                | 刀片型號<br>Insert | 螺絲<br>Screw | 壓板<br>Clamp | 扳手<br>Wrench   |       |      |     |
|---------------------|-------------|--------------|----|-----|-----|----------------|----------------|-------------|-------------|----------------|-------|------|-----|
|                     |             | D            | d  | A   | L1  | L              |                |             |             |                |       |      |     |
| AJX C20-20-130      | 2           | 20           | 20 | 1.5 | 50  | 130            | JOMT080320ZZSR | M3X7        | Y-4R        | T8             |       |      |     |
| C20-22-130          |             | 22           |    |     | 30  |                |                |             |             |                |       |      |     |
| C20-20-180          |             | 20           |    |     | 100 |                |                |             |             |                |       |      |     |
| C20-22-180          |             | 22           |    |     | 30  |                |                |             |             |                |       |      |     |
| C20-20-250          |             | 20           |    |     | 130 |                |                |             |             |                |       |      |     |
| C20-22-250          |             | 22           |    |     | 30  |                |                |             |             |                |       |      |     |
| C25-25-140          | 2           | 25           | 25 | 2   | 60  | 140            | JOMW09T320ZDSR | M3.5X9      | Y-4R        | T15            |       |      |     |
| C25-26-140          |             | 26           |    |     | 40  |                |                |             |             |                |       |      |     |
| C25-25-200          |             | 25           |    |     | 120 |                |                |             |             |                |       |      |     |
| C25-26-200          |             | 26           |    |     | 40  |                |                |             |             |                |       |      |     |
| C25-25-250          |             | 25           |    |     | 130 |                |                |             |             |                |       |      |     |
| C25-26-250          |             | 26           |    |     | 40  |                |                |             |             |                |       |      |     |
| C32-30-150          | 2           | 30           | 32 | 2   | 70  | 150            | JOMW120420ZDSR | M4X10       | Y-4R        | T15            |       |      |     |
| C32-30-200          | 2           | 30           | 32 |     | 120 | 200            |                |             |             |                |       |      |     |
| C32-30-250          | 2           | 30           | 32 |     | 130 | 300            |                |             |             |                |       |      |     |
| C32-32-150          | 2           | 32           | 32 |     | 70  | 150            |                |             |             |                |       |      |     |
| C32-32-200          | 2           | 32           | 32 |     | 120 | 200            |                |             |             |                |       |      |     |
| C32-32-250          | 2           | 32           | 32 |     | 130 | 250            |                |             |             |                |       |      |     |
| C32-35-150          | 2           | 35           | 32 | 70  | 150 | JOMW140520ZDSR | M5X11          | Y-4R        | T20         |                |       |      |     |
| C32-35-200          | 2           | 35           | 32 | 70  | 200 |                |                |             |             |                |       |      |     |
| C32-35-250          | 2           | 35           | 32 | 70  | 250 |                |                |             |             |                |       |      |     |
| C32-40-200          | 3           | 40           | 32 | 70  | 200 |                |                |             |             |                |       |      |     |
| C32-40-250          | 3           | 40           | 32 | 70  | 250 |                |                |             |             |                |       |      |     |
| C32-40-300          | 3           | 40           | 32 | 70  | 300 |                |                |             |             |                |       |      |     |
| C42-40-200          | 3           | 40           | 42 | 2   | 120 | 200            | M5X11          | Y-4R        | T20         |                |       |      |     |
| C42-40-250          | 3           | 40           | 42 |     | 130 | 250            |                |             |             |                |       |      |     |
| C42-40-300          | 3           | 40           | 42 |     | 180 | 300            |                |             |             |                |       |      |     |
| C42-50-200          | 3           | 50           | 42 |     | 2   | 200            |                |             |             | JOMW140520ZDSR | M5X11 | Y-4R | T20 |
| C42-63-200          | 4           | 63           |    |     |     | 200            |                |             |             |                |       |      |     |
| C42-50-250          | 3           | 50           |    |     |     | 250            |                |             |             |                |       |      |     |
| C42-63-250          | 4           | 63           |    | 250 |     |                |                |             |             |                |       |      |     |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

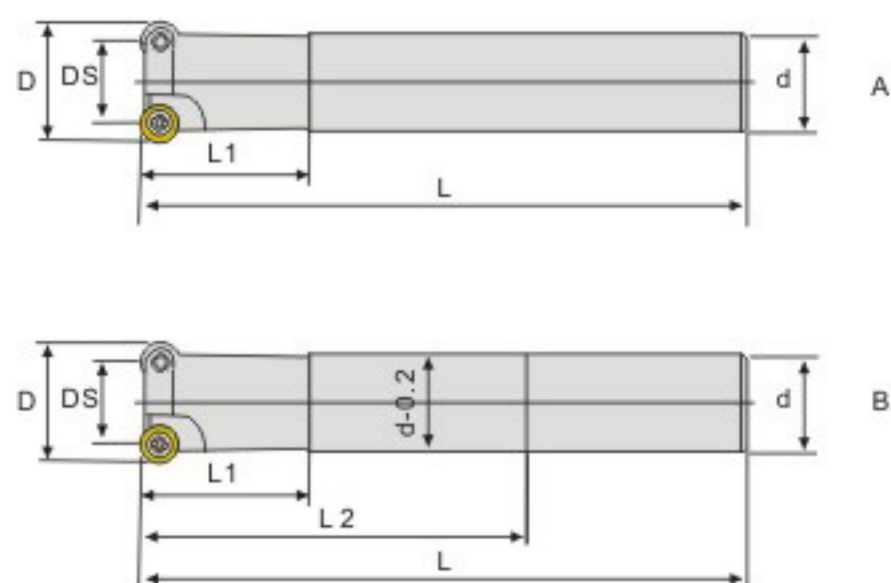
### 特點/Feature

- 最適合大進給切削。 -Use suitable on high speed feed cutting.
- 採用錐型設計，抗台鋼性極高。 -Use taper design, high rigidity that avoid buckler.



# JRC 舍棄式端銑刀

## CORNER ROUNDING END MILLS



| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-------------------------|-------------|--------------|--------------|----|----|----|-----|-----|----------------|-------------|--------------|
|                         |             |              | D            | DS | d  | L1 | L2  | L   |                |             |              |
| <b>JRC</b> C20-5R25-150 |             | A            |              |    | 20 | 40 | -   | 150 | RC*T10T3       | M3.5X7      | T8           |
| C20-5R25-200            |             | A            |              |    | 20 | 40 | -   | 200 |                |             |              |
| C25-5R25-150            |             | A            |              |    | 25 | 60 | -   | 150 |                |             |              |
| C25-5R25-200            | 2           | B            | 25           | 15 | 25 | 70 | 100 | 200 |                |             |              |
| C25-5R25-250            |             | B            |              |    | 25 | 60 | 115 | 250 |                |             |              |
| C25-5R25-200            |             | B            |              |    | 25 | 70 | 100 | 200 |                |             |              |
| C25-5R25-250            |             | B            |              |    | 25 | 80 | 115 | 250 |                |             |              |
| C25-6R32-150            | 2           |              | 32           | 20 | 25 | 50 |     | 150 | RC*T1204       | M3.5X7      | T8           |
| C25-6R32-200            | 2           |              | 32           | 20 | 25 | 50 |     | 200 |                |             |              |
| C25-6R32-250            | 2           |              | 32           | 20 | 25 | 50 |     | 250 |                |             |              |
| C32-6R40-150            | 3           |              | 40           | 28 | 32 | 60 |     | 150 |                |             |              |
| C32-6R40-200            | 3           | A            | 40           | 28 | 32 | 60 | -   | 200 |                |             |              |
| C32-6R40-250            | 3           |              | 40           | 28 | 32 | 60 |     | 250 |                |             |              |
| C32-6R40-300            | 3           |              | 40           | 28 | 32 | 60 |     | 300 |                |             |              |
| C32-6R50-200            | 4           |              | 50           | 38 | 32 | 60 |     | 200 |                |             |              |
| C32-6R50-250            | 4           |              | 50           | 38 | 32 | 60 |     | 250 |                |             |              |

適用SUITABLE: 山特維克刀片 SANDVIK INSERT

### 特殊型號 Special Specification

| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |    |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-------------------------|-------------|--------------|--------------|----|----|----|----|-----|----------------|-------------|--------------|
|                         |             |              | D            | DS | d  | L1 | L2 | L   |                |             |              |
| <b>JRC</b> C24-5R25-150 |             |              |              |    |    | 60 |    | 150 | RC*T10T3       | M3.5X7      | T15          |
| C24-5R25-200            | 2           | A            | 25           | 15 | 24 | 70 | -  | 200 |                |             |              |
| C24-5R25-250            |             |              |              |    |    | 80 |    | 250 |                |             |              |
| C25-5R26-150            |             |              |              |    |    | 60 |    | 150 | RC*T10T3       | M3.5X7      | T15          |
| C25-5R26-200            | 2           | A            | 26           | 16 | 25 | 70 | -  | 200 |                |             |              |
| C25-5R26-250            |             |              |              |    |    | 80 |    | 250 |                |             |              |

適用SUITABLE: 山特刀片SECOINSERT

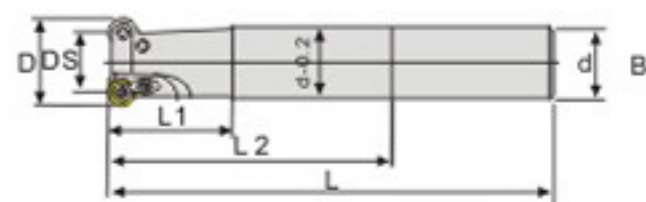
### 特點/Feature

- 適配山特維克精磨刀片，精度更高，精加工效果更佳。
- 刀體整體預熱后硬度達到HRC50度，再進精磨。避免二次熱處理使刀體產生變形，從而確保了精確的公差範圍和超強的鋼性。(本冊所有刀具同原理)
- Use Sandvik Coromill high precession insert, more efficiency on finish machining.
- After Heat treatment, rigidity on HRC50°. That can avoid tooling body distortion after heat treatment. It ensure the exact tolerance and the higher rigidity.



# EMR 舍弃式端铣刀

## CORNER ROUNDING END MILLS



| 型號<br>Specification      | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |     |    |     |     | 刀片型號<br>Insert | 螺絲<br>Screw         | 壓板<br>Clamp | 扳手<br>Wrench |
|--------------------------|-------------|--------------|--------------|----|-----|----|-----|-----|----------------|---------------------|-------------|--------------|
|                          |             |              | D            | DS | d   | L1 | L2  | L   |                |                     |             |              |
| <b>EMRC10-2.5R10-120</b> |             |              | 10           | 5  | 10  | 20 |     |     |                |                     |             |              |
| C10-2.5R12-120           | 2           | A            | 12           | 5  | 10  | 20 | -   | 120 | RPMW0517MOE    | (刀片Screw)<br>M2X4.5 | -           | T6           |
| C12-2.5R12-120           |             |              | 12           | 7  | 12  | 20 |     |     |                |                     |             |              |
| C12-4R12-130             | 1           | B            | 12           | 4  | 12  | 30 | -   | 130 |                |                     |             |              |
| C16-4R16-150             | 2           | A            | 16           | 8  | 16  | 40 |     | 150 |                | (刀片Screw)<br>M3X6   |             |              |
| C16-4R16-200             | 2           | B            | 16           | 8  | 16  | 40 | 100 | 200 | RPMW0802MOE    | (壓板Clamp)<br>M3X7   | Y-4R        | T8           |
| C20-4R20-150             | 2           | A            | 20           | 12 | 20  | 60 | -   | 150 |                |                     |             |              |
| C20-4R20-200             | 2           | B            | 20           | 12 | 20  | 70 | 100 | 200 |                |                     |             |              |
| C20-5R20-150             | 2           | A            | 20           | 12 | 20  | 60 | -   | 150 |                | (刀片Screw)M4X8       |             |              |
| C20-5R20-200             | 2           | B            | 20           | 12 | 20  | 70 | 100 | 200 | RPMW1003MOE    | (壓板Clamp)M3.5X8     | Y-5R-2      | T15          |
| C20-5R25-150             | 2           | B            | 25           | 15 | 20  | 40 | -   | 150 |                |                     |             |              |
| C20-5R25-160             | 2           | B            | 25           | 15 | 20  | 40 | -   | 160 |                |                     |             |              |
| C20-5R25-200             | 2           | B            | 25           | 15 | 20  | 40 | -   | 200 |                | (刀片Screw)<br>M4X8   |             |              |
| C25-5R25-150             | 2           | B            | 25           | 15 | 25  | 60 | -   | 150 | RPMW1003MOE    | (壓板Clamp)<br>M4X9   | Y-5R        | T15          |
| C25-5R25-170             | 2           | A            | 25           | 15 | 25  | 60 | 90  | 170 |                |                     |             |              |
| C25-5R25-200             | 2           | A            | 25           | 15 | 25  | 70 | 100 | 200 |                |                     |             |              |
| C25-5R25-250             | 2           | A            | 25           | 15 | 25  | 80 | 115 | 250 |                |                     |             |              |
| C3/4-5R30-110            | 2           | A            | 30           | 20 | 3/4 | 30 |     | 110 |                |                     |             |              |
| C20-5R30-110             | 2           | A            | 30           | 20 | 20  | 30 |     |     |                |                     |             |              |
| C25-5R30-150             | 2           | A            | 30           | 20 | 25  | 35 |     | 150 |                |                     |             |              |
| C25-5R30-200             | 2           | A            | 30           | 20 | 25  | 35 |     | 200 |                |                     |             |              |
| C25-5R30-250             | 2           | A            | 30           | 20 | 25  | 35 |     | 250 |                |                     |             |              |
| C32-5R35-150             | 2           | A            | 35           | 25 | 32  | 48 |     | 150 |                |                     |             |              |
| C32-5R35-200             | 2           | A            | 35           | 25 | 32  | 48 |     | 200 |                | (刀片Screw)<br>M4X9   |             |              |
| C32-5R35-250             | 2           | A            | 35           | 25 | 32  | 48 | -   | 250 | RPMW1003MOE    | (壓板Clamp)<br>M4X9   | Y-5R        | T15          |
| C32-5R35-300             | 2           | A            | 35           | 25 | 32  | 48 |     | 300 |                |                     |             |              |
| C32-5R35-350             | 2           | A            | 35           | 25 | 32  | 48 |     | 350 |                |                     |             |              |
| C32-5R35-150             | 3           | A            | 35           | 25 | 32  | 48 |     | 150 |                |                     |             |              |
| C32-5R35-200             | 3           | A            | 35           | 25 | 32  | 48 |     | 200 |                |                     |             |              |
| C32-5R35-250             | 3           | A            | 35           | 25 | 32  | 48 |     | 250 |                |                     |             |              |
| C32-5R35-300             | 3           | A            | 35           | 25 | 32  | 48 |     | 300 |                |                     |             |              |
| C32-5R35-350             | 3           | A            | 35           | 25 | 32  | 48 |     | 350 |                |                     |             |              |
| C25-6R32-150             | 2           | A            | 32           | 20 | 25  | 42 |     | 150 |                |                     |             |              |
| C25-6R32-200             | 2           | A            | 32           | 20 | 25  | 42 |     | 200 |                |                     |             |              |
| C25-6R32-250             | 2           | A            | 32           | 28 | 32  | 42 |     | 250 |                |                     |             |              |
| C32-6R40-150             | 3           | A            | 40           | 28 | 32  | 48 |     | 150 |                | (刀片Screw)<br>M4X9   |             |              |
| C32-6R40-200             | 3           | A            | 40           | 28 | 32  | 48 |     | 200 |                |                     |             |              |
| C32-6R40-250             | 3           | A            | 40           | 28 | 32  | 48 | -   | 250 | RPMW1204MOE    | (壓板Clamp)<br>M4X9   | Y-6R        | T15          |
| C32-6R40-300             | 3           | A            | 40           | 28 | 32  | 48 |     | 300 |                |                     |             |              |
| C32-6R50-150             | 4           | A            | 50           | 38 | 32  | 48 |     | 150 |                |                     |             |              |
| C32-6R50-200             | 4           | A            | 50           | 38 | 32  | 48 |     | 200 |                |                     |             |              |
| C32-6R50-250             | 4           | A            | 50           | 38 | 32  | 48 |     | 250 |                |                     |             |              |

適用SUITABLE: 三菱刀片 MITSUBISHI INSERT



# EMR 舍棄式端銑刀

## CORNER ROUNDING END MILLS



### 特殊型號 Special Specification

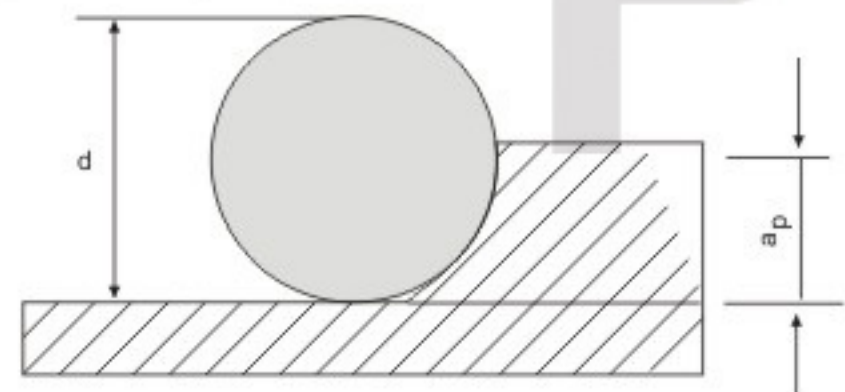
| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     | 刀片型號<br>Insert | 螺絲<br>Screw                            | 壓板<br>Clamp | 扳手<br>Wrench |
|-------------------------|-------------|--------------|--------------|----|----|----|-----|----------------|--|-------------|--------------|
|                         |             |              | D            | DS | d  | L1 | L   |                |  |             |              |
| <b>EMR</b> C15-4R16-150 | 2           | A            | 16           | 8  | 15 | 40 | 150 | RPMW0803MOE    | (刀片Screw)<br>M3X6<br>(壓板Clamp)<br>M3X7 | Y-4R        | T8           |
| C15-4R16-200            |             |              | 16           | 8  | 15 | 40 | 200 |                |  |             |              |
| C16-4R17-150            |             |              | 17           | 8  | 16 | 40 | 150 |                |  |             |              |
| C16-4R17-200            |             |              | 17           | 8  | 16 | 40 | 200 |                |  |             |              |
| C19-4R20-150            |             |              | 20           | 12 | 20 | 60 | 150 |                |  |             |              |
| C19-4R20-200            |             |              | 20           | 12 | 20 | 70 | 200 |                |  |             |              |
| C20-4R21-150            |             |              | 21           | 12 | 19 | 60 | 150 |                |  |             |              |
| C20-4R21-200            |             |              | 21           | 12 | 19 | 70 | 200 |                |  |             |              |
| C24-5R25-150            | 2           | A            | 25           | 15 | 24 | 60 | 150 | RPMW1003MOE    | (刀片Screw)<br>M4X8<br>(壓板Clamp)<br>M4X9 | Y-5R        | T15          |
| C24-5R25-170            |             |              | 25           | 15 | 24 | 60 | 170 |                |  |             |              |
| C24-5R25-200            |             |              | 25           | 15 | 24 | 70 | 200 |                |  |             |              |
| C24-5R25-250            |             |              | 25           | 15 | 24 | 80 | 250 |                |  |             |              |
| C25-5R26-150            |             |              | 26           | 16 | 25 | 60 | 150 |                |  |             |              |
| C25-5R26-200            |             |              | 26           | 16 | 25 | 70 | 200 |                |  |             |              |
| C25-5R26-250            |             |              | 26           | 16 | 25 | 80 | 250 |                |  |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

### 推荐切削條件 Suggest Cutting Data

| 切削速度Cutting Speed<br>被削材<br>Cutting Material | 硬度<br>HB                             | 塗層Coated |         | 硬質合金Carbide |
|--|--------------------------------------|----------|---------|-------------|
|  |                                      | F7030    | VP15TF  | UT120T      |
| 軟鋼Mild steel                                 | <180HB                               | 200-300  | 200-300 | 100-200     |
| 碳素鋼Carbon                                    | HB180-280                            | 130-200  | 130-200 | 100-160     |
| 合金鋼Alloy steel                               | HB280-380                            | 110-180  | 110-180 | 70-120      |
| 不鏽鋼Stainless steel                           | HRC35-45                             | 80-140   | 80-140  | 60-100      |
| 高合金鋼High alloy steel                         | 300HB                                | 90-160   | 90-160  | 70-120      |
| 調質鋼Hardened steel                            | 45-60HRC                             | -        | 50-100  | 40-70       |
| SUS420                                       | <260HB                               | 130-220  | 130-220 | 100-170     |
| 普通鑄鐵Common castiron                          | Strength<br>350N/mm <sup>2</sup>     | -        | 130-220 | 100-170     |
| 鑄鐵Castiron                                   | Strength<br>360-500N/mm <sup>2</sup> | -        | 100-180 | 80-140      |
|  | Strength<br>500-800N/mm <sup>2</sup> | -        | 80-140  | 70-110      |

| 每刃進給量(mm/Tooth) |        |      |      |      |      |      |      |      |
|-----------------|--------|------|------|------|------|------|------|------|
| 刀片<br>直徑        | 切深(mm) |      |      |      |      |      |      |      |
|                 | 1      | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
| 08              | 0.40   | 0.30 | 0.20 | 0.10 | -    | -    | -    | -    |
| 10              | 0.40   | 0.35 | 0.30 | 0.20 | 0.10 | -    | -    | -    |
| 12              | 0.50   | 0.40 | 0.30 | 0.25 | 0.23 | 0.20 | -    | -    |
| 16              | 0.60   | 0.50 | 0.45 | 0.40 | 0.33 | 0.30 | 0.25 | 0.20 |



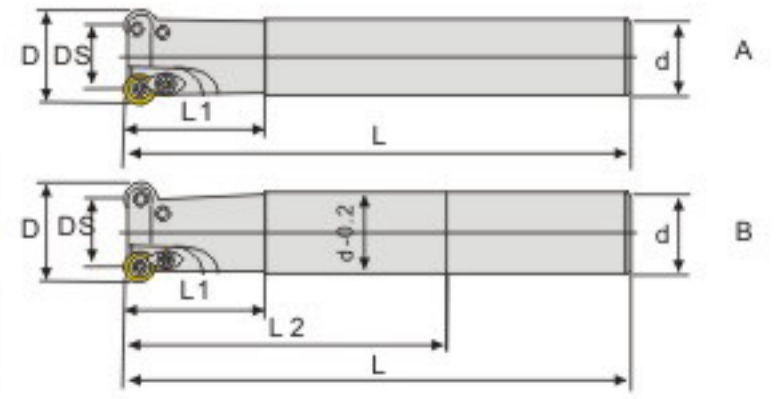
EMR規格刀杆的頁面底部加: 主軸轉速 =  $\frac{100 \times \text{切削速度}}{3.14 \times \text{刀具直徑}}$

進給量 = FZ X 刀具刃數 X S



# EMRT 舍棄式端銑刀

## CORNER ROUNDING END MILLS



| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |     |    |     |     | 刀片型號<br>Insert  | 螺絲<br>Screw       | 壓板<br>Clamp | 扳手<br>Wrench |               |                   |      |     |
|-------------------------|-------------|--------------|--------------|----|-----|----|-----|-----|-----------------|-------------------|-------------|--------------|---------------|-------------------|------|-----|
|                         |             |              | D            | DS | d   | L1 | L2  | L   |                 |                   |             |              |               |                   |      |     |
| <b>EMRTC12-4R12-130</b> | 1           | A            | 12           | 4  | 12  | 30 | -   | 130 | RPMT08T2MOE     | (刀片Screw)<br>M3X6 | Y-4R        | T8           |               |                   |      |     |
| C16-4R16-150            | 2           | A            | 16           | 8  | 16  | 40 | -   | 150 |                 | (壓板Clamp)<br>M3X7 |             |              |               |                   |      |     |
| C16-4R16-200            | 2           | B            | 16           | 8  | 16  | 40 | 100 | 200 |                 |                   |             |              |               |                   |      |     |
| C20-4R20-150            | 2           | A            | 20           | 12 | 20  | 60 | -   | 150 |                 |                   |             |              |               |                   |      |     |
| C20-4R20-200            | 2           | B            | 20           | 12 | 20  | 70 | 100 | 200 |                 |                   |             |              |               |                   |      |     |
| C20-5R20-150            | 2           | A            | 20           | 12 | 20  | 60 | -   | 150 |                 | RPMT10T3MOD       |             |              | (刀片Screw)M4X8 | Y-5R-2            | T15  |     |
| C20-5R20-200            | 2           | B            | 20           | 12 | 20  | 70 | 10  | 200 | (壓板Clamp)M3.5X8 |                   | Y-5R        |              |               |                   |      |     |
| C20-5R25-150            | 2           | A            | 25           | 15 | 20  | 40 | -   | 150 | RPMT10T3MOD     | (刀片Screw)         | Y-5R        | T15          |               |                   |      |     |
| C20-5R25-200            | 2           | A            | 25           | 15 | 20  | 40 | -   | 200 |                 | (壓板Clamp)         |             |              |               |                   |      |     |
| C25-5R25-150            | 2           | A            | 25           | 15 | 25  | 60 | -   | 150 |                 | M4X8              |             |              |               |                   |      |     |
| C25-5R25-170            | 2           | B            | 25           | 15 | 25  | 60 | 90  | 170 |                 | (壓板Clamp)         |             |              | Y-5R          |                   |      |     |
| C25-5R25-200            | 2           | B            | 25           | 15 | 25  | 70 | 100 | 200 |                 | M4X9              |             |              | Y-5R          |                   |      |     |
| C25-5R25-250            | 2           | B            | 25           | 15 | 25  | 80 | 115 | 250 |                 | Y-5R              |             |              |               |                   |      |     |
| C3/4-5R30-110           | 2           | A            | 30           | 20 | 3/4 | 30 | -   | 110 | RPMT10T3MOD     | (刀片Screw)<br>M4X9 | Y-5R        | T15          |               |                   |      |     |
| C20-5R30-110            | 2           |              | 30           | 20 | 20  | 30 | -   | 110 |                 |                   |             |              |               |                   |      |     |
| C25-5R30-150            | 2           |              | 30           | 20 | 25  | 35 | -   | 150 |                 |                   |             |              |               |                   |      |     |
| C25-5R30-200            | 2           |              | 30           | 20 | 25  | 35 | -   | 200 |                 |                   |             |              |               |                   |      |     |
| C25-5R30-250            | 2           |              | 30           | 20 | 25  | 35 | -   | 250 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-150            | 2           |              | 35           | 25 | 32  | 48 | -   | 150 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-200            | 2           |              | 35           | 25 | 32  | 48 | -   | 200 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-250            | 2           |              | 35           | 25 | 32  | 48 | -   | 250 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-300            | 2           |              | 35           | 25 | 32  | 48 | -   | 300 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-350            | 2           |              | 35           | 25 | 32  | 48 | -   | 350 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-150            | 3           |              | 35           | 25 | 32  | 48 | -   | 150 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-200            | 3           |              | 35           | 25 | 32  | 48 | -   | 200 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-250            | 3           |              | 35           | 25 | 32  | 48 | -   | 250 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-300            | 3           |              | 35           | 25 | 32  | 48 | -   | 300 |                 |                   |             |              |               |                   |      |     |
| C32-5R35-350            | 3           |              | 35           | 25 | 32  | 48 | -   | 350 |                 |                   |             |              |               |                   |      |     |
| C25-6R32-150            | 2           |              | 32           | 20 | 25  | 42 | -   | 150 |                 |                   |             |              | RPMT1204MOE   | (刀片Screw)<br>M4X9 | Y-6R | T15 |
| C25-6R32-200            | 2           |              | 32           | 20 | 25  | 42 | -   | 200 |                 |                   |             |              |               |                   |      |     |
| C25-6R32-250            | 2           |              | 32           | 20 | 25  | 42 | -   | 250 |                 |                   |             |              |               |                   |      |     |
| C32-6R40-150            | 3           | 40           | 28           | 32 | 48  | -  | 150 |     |                 |                   |             |              |               |                   |      |     |
| C32-6R40-200            | 3           | 40           | 28           | 32 | 48  | -  | 200 |     |                 |                   |             |              |               |                   |      |     |
| C32-6R40-250            | 3           | 40           | 28           | 32 | 48  | -  | 250 |     |                 |                   |             |              |               |                   |      |     |
| C32-6R40-300            | 3           | 40           | 28           | 32 | 48  | -  | 300 |     |                 |                   |             |              |               |                   |      |     |
| C32-6R50-150            | 4           | 50           | 38           | 32 | 48  | -  | 150 |     |                 |                   |             |              |               |                   |      |     |
| C32-6R50-200            | 4           | 50           | 38           | 32 | 48  | -  | 200 |     |                 |                   |             |              |               |                   |      |     |
| C32-6R50-250            | 4           | 50           | 38           | 32 | 48  | -  | 250 |     |                 |                   |             |              |               |                   |      |     |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT



# EMRT 舍弃式端铣刀

## CORNER ROUNDING END MILLS



### 特殊型號 Special Specification

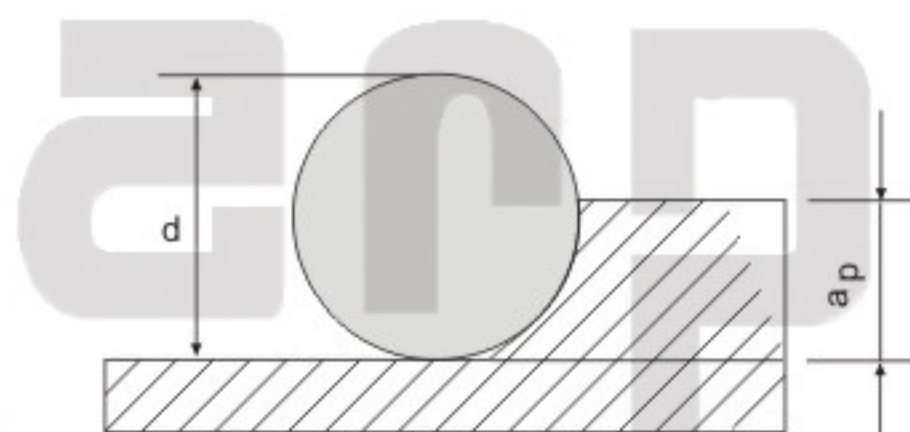
| 型號<br>Specification      | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     | 刀片型號<br>Insert | 螺絲<br>Screw                            | 壓板<br>Clamp | 扳手<br>Wrench |
|--------------------------|-------------|--------------|--------------|----|----|----|-----|----------------|--|-------------|--------------|
|                          |             |              | D            | DS | d  | L1 | L   |                |  |             |              |
| <b>EMRT</b> C15-4R16-150 | 2           | A            | 16           | 8  | 15 | 40 | 150 | RPMT0802MOE    | (刀片Screw)<br>M3X6<br>(壓板Clamp)<br>M3X7 | Y-4R        | T8           |
| C15-4R16-200             |             |              | 16           | 8  | 15 | 40 | 200 |                |  |             |              |
| C16-4R17-150             |             |              | 17           | 8  | 16 | 40 | 150 |                |  |             |              |
| C16-4R17-200             |             |              | 17           | 8  | 16 | 40 | 200 |                |  |             |              |
| C19-4R20-150             |             |              | 20           | 12 | 20 | 60 | 150 |                |  |             |              |
| C19-4R20-200             |             |              | 20           | 12 | 20 | 70 | 200 |                |  |             |              |
| C20-4R21-150             |             |              | 21           | 12 | 19 | 60 | 150 |                |  |             |              |
| C20-4R21-200             |             |              | 21           | 12 | 19 | 70 | 200 |                |  |             |              |
| C24-5R25-150             | 2           | A            | 25           |    | 24 | 60 | 150 | RPMT1003MOE    | (刀片Screw)<br>M4X8<br>(壓板Clamp)<br>M4X9 | Y-5R        | T15          |
| C24-5R25-170             |             |              | 25           |    | 24 | 60 | 170 |                |  |             |              |
| C24-5R25-200             |             |              | 25           | 15 | 24 | 70 | 200 |                |  |             |              |
| C24-5R25-250             |             |              | 25           |    | 24 | 80 | 250 |                |  |             |              |
| C25-5R26-150             |             |              | 26           |    | 25 | 60 | 150 |                |  |             |              |
| C25-5R26-200             |             |              | 26           |    | 25 | 70 | 200 |                |  |             |              |
| C25-5R26-250             |             |              | 26           |    | 25 | 80 | 250 |                |  |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

### 推荐切削條件 Suggest Cutting Data

| 切削速度Cutting Speed<br>被削材<br>Cutting Material | 硬度<br>HB                             | 塗層Coated |         | 硬質合金Carbide |
|--|--------------------------------------|----------|---------|-------------|
|  |                                      | F7030    | VP15TF  | UT120T      |
| 軟鋼Mild steel                                 | <180HB                               | 200-300  | 200-300 | 100-200     |
| 碳素鋼Carbon                                    | HB180-280                            | 130-200  | 130-200 | 100-160     |
| 合金鋼Alloy steel                               | HB280-380                            | 110-180  | 110-180 | 70-120      |
| 不鏽鋼Stainless steel                           | HRC35-45                             | 80-140   | 80-140  | 60-100      |
| 高合金鋼High alloy steel                         | 300HB                                | 90-160   | 90-160  | 70-120      |
| 調質鋼Hardened steel                            | 45-60HRC                             | -        | 50-100  | 40-70       |
| SUS420                                       | <260HB                               | 130-220  | 130-220 | 100-170     |
| 普通鑄鐵Common castiron                          | Strength<br>350N/mm <sup>2</sup>     | -        | 130-220 | 100-170     |
| 鑄鐵Castiron                                   | Strength<br>360-500N/mm <sup>2</sup> | -        | 100-180 | 80-140      |
|  | Strength<br>500-800N/mm <sup>2</sup> | -        | 80-140  | 70-110      |

| 刀片直徑 | 每刃進給量(mm/Tooth) |      |      |      |      |      |      |      |
|------|-----------------|------|------|------|------|------|------|------|
|      | 切深(mm)          |      |      |      |      |      |      |      |
|      | 1               | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
| 08   | 0.40            | 0.30 | 0.20 | 0.10 | -    | -    | -    | -    |
| 10   | 0.40            | 0.35 | 0.30 | 0.20 | 0.10 | -    | -    | -    |
| 12   | 0.50            | 0.40 | 0.30 | 0.25 | 0.23 | 0.20 | -    | -    |
| 16   | 0.60            | 0.50 | 0.45 | 0.40 | 0.33 | 0.30 | 0.25 | 0.20 |



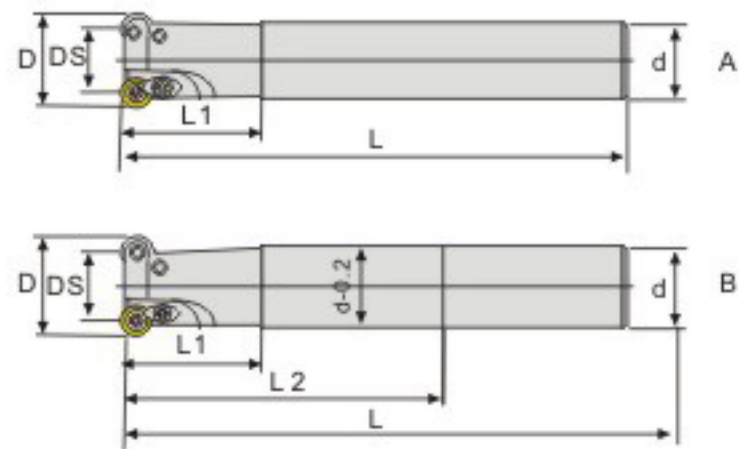
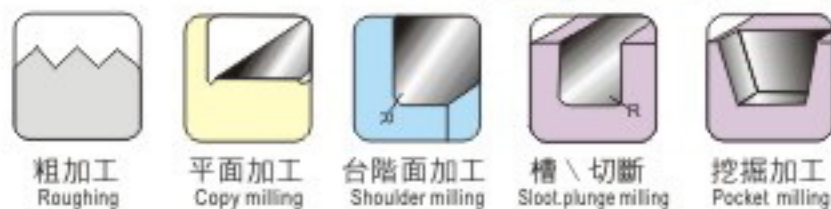
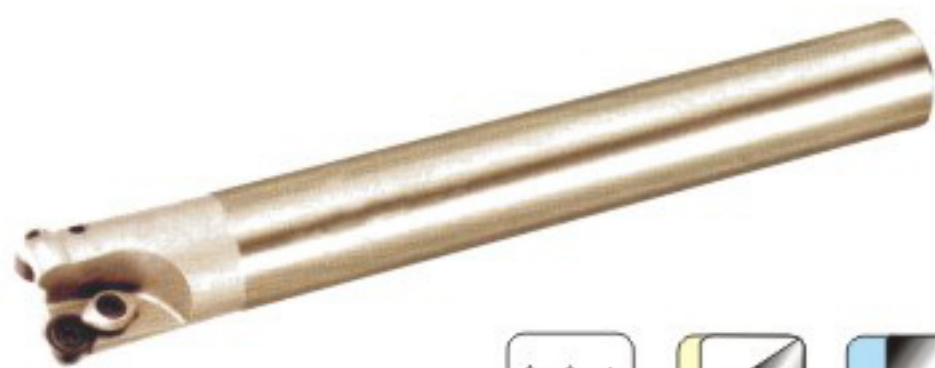
EMR規格刀杆的頁面底部加: 主軸轉速 =  $\frac{100 \times \text{切削速度}}{3.14 \times \text{刀具直徑}}$

進給量 = FZ X 刀具刃數 X S



# TRS 舍弃式端铣刀

## CORNER ROUNDING END MILLS



| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     |     | 刀片型號<br>Insert | 螺絲<br>Screw                            | 壓板<br>Clamp | 扳手<br>Wrench |
|-------------------------|-------------|--------------|--------------|----|----|----|-----|-----|----------------|--|-------------|--------------|
|                         |             |              | D            | DS | d  | L1 | L2  | L   |                |  |             |              |
| <b>TRS</b> C12-4R12-130 | 1           | A            | 12           | 4  | 12 | 35 | -   | 130 | RPMT08T2MOE    | (刀片Screw)<br>M3X6<br>(壓板Clamp)<br>M3X7 | Y-4R        | T8           |
| C16-4R16-150            | 2           | A            | 16           | 8  | 16 | 50 | -   | 150 |                |  |             |              |
| C16-4R16-200            | 2           | B            | 16           | 8  | 16 | 50 | 100 | 200 |                |  |             |              |
| C20-4R20-150            | 2           | A            | 20           | 12 | 20 | 60 | -   | 150 |                |  |             |              |
| C20-4R20-200            | 2           | B            | 20           | 12 | 20 | 70 | 100 | 200 |                |  |             |              |
| C20-5R20-150            | 2           | A            | 20           | 10 | 20 | 60 | -   | 150 | RPMT10T3MOD    | (刀片Screw)M4X8<br>(壓板Clamp)M3.5X8       | Y-5R-2      | T15          |
| C20-5R20-200            | 2           | B            | 20           | 10 | 20 | 70 | 100 | 200 |                |  |             |              |
| C20-5R25-150            | 2           | A            | 25           | 15 | 20 | 40 | -   | 150 | RPMT10T3MOD    | (刀片Screw)<br>M4X8<br>(壓板Clamp)<br>M4X9 | Y-5R        | T15          |
| C20-5R25-200            | 2           | A            | 25           | 15 | 20 | 40 | -   | 200 |                |  |             |              |
| C25-5R25-150            | 2           | A            | 25           | 15 | 25 | 60 | -   | 150 |                |  |             |              |
| C25-5R25-200            | 2           | B            | 25           | 15 | 25 | 70 | 100 | 200 |                |  |             |              |
| C25-5R25-250            | 2           | B            | 25           | 15 | 25 | 80 | 150 | 250 |                |  |             |              |
| C25-5R30-150            | 2           | A            | 30           | 20 | 25 | 40 | -   | 150 | RPMT10T3MOD    | (刀片Screw)<br>M4X9<br>(壓板Clamp)<br>M4X9 | Y-5R        | T15          |
| C25-5R30-200            | 2           |              | 30           | 20 | 25 | 40 | -   | 200 |                |  |             |              |
| C25-5R30-250            | 2           |              | 30           | 20 | 25 | 40 | -   | 250 |                |  |             |              |
| C32-5R35-150            | 2           |              | 35           | 25 | 32 | 48 | -   | 150 |                |  |             |              |
| C32-5R35-200            | 2           |              | 35           | 25 | 32 | 48 | -   | 200 |                |  |             |              |
| C32-5R35-250            | 2           |              | 35           | 25 | 32 | 48 | -   | 250 |                |  |             |              |
| C32-5R35-300            | 2           |              | 35           | 25 | 32 | 48 | -   | 300 |                |  |             |              |
| C32-5R35-350            | 2           |              | 35           | 25 | 32 | 48 | -   | 350 |                |  |             |              |
| C32-5R35-150            | 2           |              | 35           | 25 | 32 | 48 | -   | 150 |                |  |             |              |
| C32-5R35-200            | 2           |              | 35           | 25 | 32 | 48 | -   | 200 |                |  |             |              |
| C32-5R35-250            | 2           | 35           | 25           | 32 | 48 | -  | 250 |     |                |  |             |              |
| C32-5R35-300            | 2           | 35           | 25           | 32 | 48 | -  | 300 |     |                |  |             |              |
| C32-5R35-350            | 2           | 35           | 25           | 32 | 48 | -  | 350 |     |                |  |             |              |
| C32-5R40-150            | 3           | A            | 40           | 30 | 32 | 48 | -   | 150 | RPMT1204MOE    | (刀片Screw)<br>M4X9<br>(壓板Clamp)<br>M4X9 | Y-6R        | T15          |
| C32-5R40-200            | 3           |              | 40           | 30 | 32 | 48 | -   | 200 |                |  |             |              |
| C32-5R40-250            | 3           |              | 40           | 30 | 32 | 48 | -   | 250 |                |  |             |              |
| C32-5R40-300            | 3           | 40           | 30           | 32 | 48 | -  | 300 |     |                |  |             |              |
| C25-6R32-150            | 3           | A            | 32           | 20 | 25 | 48 | -   | 150 | RPMT1204MOE    | (刀片Screw)<br>M4X9<br>(壓板Clamp)<br>M4X9 | Y-6R        | T15          |
| C25-6R32-200            | 3           |              | 32           | 20 | 25 | 48 | -   | 200 |                |  |             |              |
| C25-6R32-250            | 3           |              | 32           | 20 | 32 | 48 | -   | 250 |                |  |             |              |
| C32-6R40-150            | 3           |              | 40           | 28 | 32 | 48 | -   | 150 |                |  |             |              |
| C32-6R40-200            | 3           |              | 40           | 28 | 32 | 48 | -   | 200 |                |  |             |              |
| C32-6R40-250            | 3           |              | 40           | 28 | 32 | 48 | -   | 250 |                |  |             |              |
| C32-6R50-150            | 3           |              | 40           | 38 | 32 | 48 | -   | 150 |                |  |             |              |
| C32-6R50-200            | 3           |              | 40           | 38 | 32 | 48 | -   | 200 |                |  |             |              |
| C32-6R50-250            | 3           |              | 40           | 38 | 32 | 48 | -   | 250 |                |  |             |              |

適用SUITABLE: 日立刀片HITACHI INSERT



# TRS 舍棄式端銑刀

## CORNER ROUNDING END MILLS



### 特殊型號 Special Specification

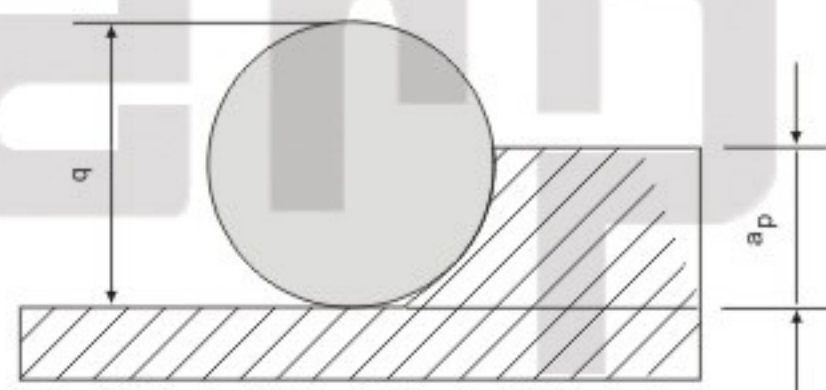
| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |     |            | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-------------------------|-------------|--------------|--------------|----|----|-----|------------|----------------|-------------|--------------|
|                         |             |              | D            | DS | d  | L1  | L          |                |             |              |
| <b>TRS</b> C15-4R16-150 | 1           | A            | 16           | 8  | 15 | 50  | 150        | RDMT08T2MO     | Y-4R        | T8           |
| C15-4R16-150            | 2           |              | 16           | 8  | 15 | 50  | 150        |                |             |              |
| C15-4R16-200            | 2           |              | 16           | 8  | 15 | 50  | 200        |                |             |              |
| C16-4R17-150            | 2           |              | 17           | 9  | 16 | 50  | 150        |                |             |              |
| C16-4R17-200            | 2           |              | 17           | 9  | 16 | 50  | 200        |                |             |              |
| C19-4R20-150            | 2           |              | 20           | 12 | 19 | 60  | 150        |                |             |              |
| C20-4R20-200            | 2           |              | 20           | 12 | 19 | 70  | 200        |                |             |              |
| C20-4R21-150            | 2           |              | 21           | 13 | 20 | 60  | 150        |                |             |              |
| C20-4R21-200            | 2           | 21           | 13           | 20 | 70 | 200 | RDMT10T3MO | Y-5R           | T15         |              |
| C24-5R25-150            | 2           | A            | 25           | 15 | 24 | 60  |            |                |             | 150          |
| C24-5R25-200            |             |              | 25           | 15 | 24 | 70  |            |                |             | 200          |
| C24-5R25-250            |             |              | 25           | 15 | 24 | 80  |            |                |             | 250          |
| C25-5R26-150            |             |              | 26           | 16 | 25 | 60  |            |                |             | 150          |
| C25-5R26-200            |             |              | 26           | 16 | 25 | 70  |            |                |             | 200          |
| C25-5R26-250            |             |              | 26           | 16 | 25 | 80  |            |                |             | 250          |

適用SUITABLE: 日立刀片HITACHI INSERT

### 推荐切削條件 Suggest Cutting Data

| 切削速度Cutting Speed           |  | 刀片材質 Insert material |         |      |         |         |              |
|-----------------------------|--|----------------------|---------|------|---------|---------|--------------|
| 被削材<br>Cutting Material     | 硬度<br>HB                                 | CY150                | CY250   | CY25 | CF30    | CY100H  | WH10         |
| 一般鋼Steel                    | <200HB                                   | -                    | 150-250 | -    | -       | -       | -            |
| 碳素鋼Carbon<br>合金鋼Alloy steel | <30HRC                                   | -                    | 120-230 | -    | -       | -       | -            |
|                             | 30-40HRC                                 | -                    | 100-200 | -    | -       | -       | -            |
|                             | 35-40HRC                                 | -                    | 60-150  | -    | -       | -       | -            |
|                             | 45-55HRC                                 | 60-100               | -       | -    | -       | -       | -            |
| 不鏽鋼Stainless steel          | Extend intension<br>350N/mm <sup>2</sup> | -                    | 150-240 | -    | 150-240 | -       | -            |
| 普通鑄鐵<br>Common castiron     | FC<br>FCD                                | -                    | -       | -    | -       | 100-220 | -<br>100-220 |

| 每刃進給量(mm/Tooth) |        |      |      |      |      |      |      |      |
|-----------------|--------|------|------|------|------|------|------|------|
| 刀片直徑            | 切深(mm) |      |      |      |      |      |      |      |
|                 | 1      | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
| 08              | 0.40   | 0.30 | 0.20 | 0.10 | -    | -    | -    | -    |
| 10              | 0.40   | 0.35 | 0.30 | 0.20 | 0.10 | -    | -    | -    |
| 12              | 0.50   | 0.40 | 0.30 | 0.25 | 0.23 | 0.20 | -    | -    |
| 16              | 0.60   | 0.50 | 0.45 | 0.40 | 0.33 | 0.30 | 0.25 | 0.20 |



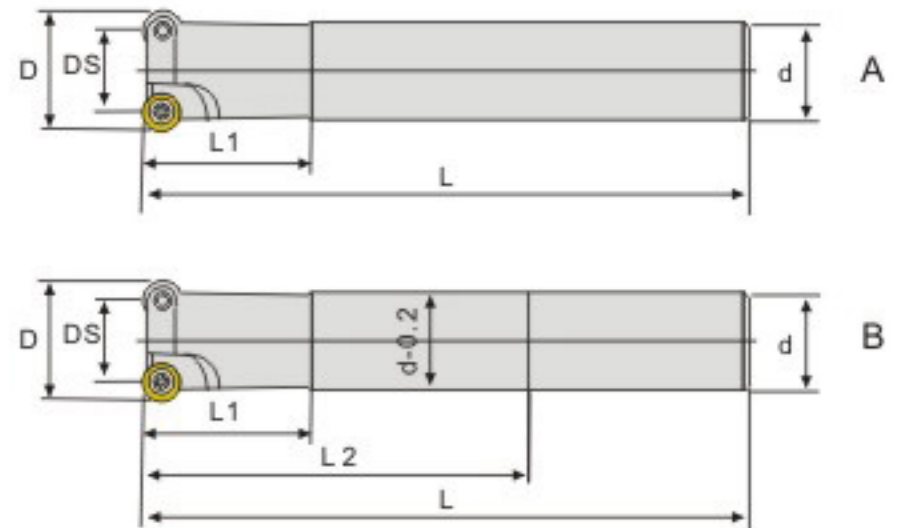
TRS規格刀杆的頁面底部加: 主軸轉速 =  $\frac{100 \times \text{切削速度}}{3.14 \times \text{刀具直徑}}$

進給量 = FZ X 刀具刃數 X S



# JRD 圓刀刃端銑刀

## CORNER ROUNDING END MILLS



| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |         |      |     |
|-------------------------|-------------|--------------|--------------|----|----|----|-----|-----|----------------|-------------|--------------|---------|------|-----|
|                         |             |              | D            | DS | d  | L1 | L2  | L   |                |             |              |         |      |     |
| <b>JRD</b> C12-4R12-130 | 1           | A            | 12           | 4  | 12 | 30 | -   | 130 | RD*0803        | M2.5X6      | T8           |         |      |     |
| C16-4R16-150            | 2           | A            | 16           | 8  | 16 | 40 | -   | 150 |                |             |              |         |      |     |
| C20-4R20-150            | 2           | A            | 20           | 12 | 20 | 60 | -   | 150 |                |             |              |         |      |     |
| C20-4R20-200            | 2           | B            | 20           | 12 | 20 | 70 | 100 | 200 |                |             |              |         |      |     |
| C20-5R25-150            | 2           | A            | 25           | 15 | 20 | 40 | -   | 150 | RD*10T3        | M3X7        | T8           |         |      |     |
| C20-5R25-200            | 2           | A            | 25           | 15 | 20 | 40 | -   | 200 |                |             |              |         |      |     |
| C25-5R25-150            | 2           | A            | 25           | 15 | 25 | 60 | 100 | 150 |                |             |              |         |      |     |
| C25-5R25-200            | 2           | B            | 25           | 15 | 25 | 70 | 115 | 200 |                |             |              |         |      |     |
| C25-5R25-250            | 2           | B            | 25           | 15 | 25 | 80 | -   | 250 |                |             |              |         |      |     |
| C25-5R30-150            | 2           | A            | 30           | 20 | 25 | 35 | -   | 150 |                |             |              |         |      |     |
| C25-5R30-200            | 2           | A            | 30           | 20 | 25 | 35 | -   | 200 |                |             |              |         |      |     |
| C32-5R35-150            | 3           | A            | 35           | 25 | 32 | 35 | -   | 150 |                |             |              |         |      |     |
| C32-5R35-200            | 3           | A            | 35           | 25 | 32 | 35 | -   | 200 |                |             |              |         |      |     |
| C32-5R35-250            | 3           | A            | 35           | 25 | 32 | 35 | -   | 250 |                |             |              |         |      |     |
| C32-5R35-300            | 3           | A            | 35           | 25 | 32 | 35 | -   | 300 |                |             |              |         |      |     |
| C25-6R32-200            | 2           | A            | 32           | 20 | 25 | 35 | -   | 200 |                |             |              |         |      |     |
| C25-6R32-250            | 2           | A            | 32           | 20 | 25 | 35 | -   | 250 |                |             |              |         |      |     |
| C32-6R40-150            | 3           | A            | 40           | 28 | 32 | 35 | -   | 150 |                |             |              | RD*1204 | M4X8 | T15 |
| C32-6R40-200            | 3           |              | 200          |    |    |    |     |     |                |             |              |         |      |     |
| C32-6R40-250            | 3           |              | 250          |    |    |    |     |     |                |             |              |         |      |     |
| C32-6R40-300            | 3           |              | 300          |    |    |    |     |     |                |             |              |         |      |     |
| C32-6R50-200            | 4           |              | 200          |    |    |    |     |     |                |             |              |         |      |     |
| C32-6R50-250            | 4           | 250          |              |    |    |    |     |     |                |             |              |         |      |     |

適用SUITABLE: 山高刀片SECOINSERT

### 特殊型號 Special Specification

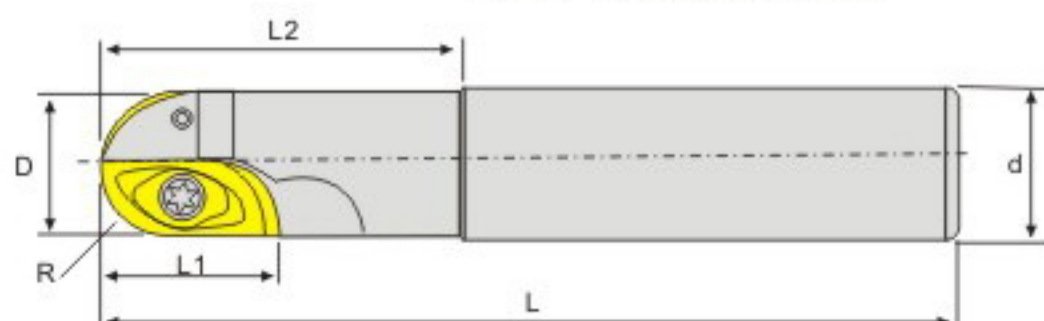
| 型號<br>Specification     | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     |         | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-------------------------|-------------|--------------|--------------|----|----|----|-----|---------|----------------|-------------|--------------|
|                         |             |              | D            | DS | d  | L1 | L   |         |                |             |              |
| <b>JRD</b> C15-4R16-150 | 2           | A            | 16           | 8  | 15 | 40 | 150 | RD*0803 | M2.5X6         | T8          |              |
| C15-4R16-200            |             |              | 16           | 8  | 15 | 60 | 200 |         |                |             |              |
| C19-4R20-150            |             |              | 20           | 12 | 19 | 60 | 150 |         |                |             |              |
| C19-4R20-200            |             |              | 20           | 12 | 19 | 70 | 200 |         |                |             |              |
| C24-5R25-150            | 2           | A            | 25           | 15 | 24 | 60 | 150 | RD*10T3 | M3X7           | T8          |              |
| C24-5R25-200            |             |              |              |    |    | 70 | 200 |         |                |             |              |
| C24-5R25-250            |             |              |              |    |    | 80 | 250 |         |                |             |              |

適用SUITABLE: 山高刀片SECOINSERT



# RCF 球形中粗刀

## BALL ROUGH END MILLS



| 型號<br>Specification    | 刃數<br>Teeth | 外形尺寸(mm)Size |    |    |    |     |     | 刀片型號<br>Insert         |
|------------------------|-------------|--------------|----|----|----|-----|-----|------------------------|
|                        |             | R            | D  | d  | L1 | L2  | L   |                        |
| <b>RCF</b> C20-10R-150 | 2           | 10           | 20 | 20 | 18 | 60  | 150 | ZCEW100CE<br>ZCEW100SE |
| C20-10R-200            |             |              |    | 20 |    | 70  | 200 |                        |
| C25-10R-150            |             |              |    | 25 |    | 60  | 150 |                        |
| C25-10R-200            |             |              |    | 25 |    | 70  | 200 |                        |
| C25-10R-250            |             |              |    | 25 |    | 80  | 250 |                        |
| C32-10R-250            |             |              |    | 32 |    | 90  | 250 |                        |
| C32-10R-300            |             |              |    | 32 |    | 110 | 300 |                        |
| C25-12.5R-150          | 2           | 12.5         | 25 | 25 | 23 | 60  | 150 | ZCEW125CE<br>ZCEW125SE |
| C25-12.5R-200          |             |              |    | 25 |    | 70  | 200 |                        |
| C32-12.5R-200          |             |              |    | 32 |    | 80  | 200 |                        |
| C32-12.5R-250          |             |              |    | 32 |    | 90  | 250 |                        |
| C32-12.5R-300          |             |              |    | 32 |    | 110 | 300 |                        |
| C32-15R-150            | 2           | 15           | 30 | 28 | 28 | 60  | 150 | ZCEW150CE<br>ZCEW150SE |
| C32-15R-200            |             |              |    | 28 |    | 70  | 200 |                        |
| C32-15R-250            |             |              |    | 28 |    | 80  | 250 |                        |
| C32-15R-300            |             |              |    | 28 |    | 110 | 300 |                        |
| C32-15R-350            |             |              |    | 28 |    | 110 | 350 |                        |

適用SUITABLE: 日立刀片HITACHI INSERT

| 刀片規格<br>Insert Specification | 圖示<br>Figure | 外形尺寸(mm)Size |      |      |      | 螺絲<br>Screw | 扳手<br>Wrench |
|------------------------------|--------------|--------------|------|------|------|-------------|--------------|
|                              |              | R            | A    | B    | T    |             |              |
| ZCEW100CE                    |              | 10           | 18   | 10.3 | 4.74 | M3          | T8           |
| ZCEW100SE                    |              | 10           | 16.6 | 8.3  | 4.24 | M3          | T8           |
| ZCEW125CE                    |              | 12.5         | 23   | 12.3 | 6.10 | M4          | T15          |
| ZCEW125SE                    |              | 12.5         | 20.8 | 9.3  | 5.40 | M4          | T15          |
| ZCEW150CE                    |              | 15           | 28   | 15.1 | 7.59 | M5          | T20          |
| ZCEW150SE                    |              | 15           | 25.8 | 12.1 | 7.09 | M5          | T20          |

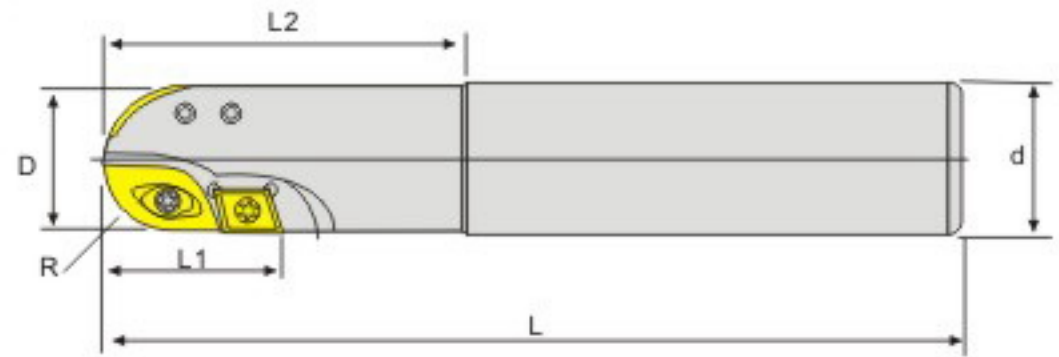
### 特點/Feature

- 採用精密級刀片可得到高精度加工表面。
- 刀片表面凸面設計,不僅刀刃鋒利並可降低切削振動的噪音。
- Use high precision insert can machining high precision surface.
- With convex figure or inserts the sharp blade can reduce the sound of vibration.



# RCFL 球形中粗刀

## BALL ROUGH END MILLS



| 型號<br>Specification     | 刃數<br>Teeth | 外形尺寸(mm)Size |    |    |    |     |     | 刀片型號<br>Insert                       |
|-------------------------|-------------|--------------|----|----|----|-----|-----|--------------------------------------|
|                         |             | R            | D  | d  | L1 | L2  | L   |                                      |
| <b>RCFL</b> C20-10R-150 | 2           | 10           | 20 | 20 | 18 | 60  | 150 | ZCEW100CE<br>ZCEW100SE<br>CPMT080204 |
| C20-10R-200             |             |              |    | 20 |    | 70  | 200 |                                      |
| C25-10R-150             |             |              |    | 25 |    | 60  | 150 |                                      |
| C25-10R-200             |             |              |    | 25 |    | 70  | 200 |                                      |
| C25-10R-250             |             |              |    | 25 |    | 80  | 250 |                                      |
| C32-10R-250             |             |              |    | 32 |    | 90  | 250 |                                      |
| C32-10R-300             |             |              |    | 32 |    | 110 | 300 |                                      |
| C25-12.5R-150           | 2           | 12.5         | 25 | 25 | 23 | 60  | 150 | ZCEW125CE<br>ZCEW125SE<br>CPMT090308 |
| C25-12.5R-200           |             |              |    | 25 |    | 70  | 200 |                                      |
| C32-12.5R-150           |             |              |    | 32 |    | 70  | 150 |                                      |
| C32-12.5R-200           |             |              |    | 32 |    | 80  | 200 |                                      |
| C32-12.5R-250           |             |              |    | 32 |    | 90  | 250 |                                      |
| C32-12.5R-300           |             |              |    | 32 |    | 110 | 300 |                                      |
| C32-15R-150             | 2           | 15           | 30 | 32 | 28 | 60  | 150 | ZCEW150CE<br>ZCEW150SE<br>CPMT090308 |
| C32-15R-200             |             |              |    |    |    | 70  | 200 |                                      |
| C32-15R-250             |             |              |    |    |    | 80  | 250 |                                      |
| C32-15R-300             |             |              |    |    |    | 110 | 300 |                                      |
| C32-15R-350             |             |              |    |    |    | 110 | 350 |                                      |

適用SUITABLE: 日立刀片HITACHI INSERT

| 刀片規格<br>Insert Specification | 圖示<br>Figure | 外形尺寸(mm)Size |       |      |      | 螺絲<br>Screw | 扳手<br>Wrench |
|------------------------------|--------------|--------------|-------|------|------|-------------|--------------|
|                              |              | R            | A     | B    | T    |             |              |
| ZCEW100CE                    |              | 10           | 18    | 10.3 | 4.74 | M3          | T8           |
| ZCEW100SE                    |              | 10           | 16.6  | 8.3  | 4.24 | M3          | T8           |
| ZCEW125CE                    |              | 12.5         | 23    | 12.3 | 6.10 | M4          | T15          |
| ZCEW125SE                    |              | 12.5         | 20.8  | 9.3  | 5.40 | M4          | T15          |
| ZCEW150CE                    |              | 15           | 28    | 15.1 | 7.59 | M5          | T20          |
| ZCEW150SE                    |              | 15           | 25.8  | 12.1 | 7.09 | M5          | T20          |
| CPMT080204                   |              | 0.4          | 7.94  | -    | 2.38 | M2.5        | T8           |
| CPMT090308                   |              | 0.5          | 9.525 | -    | 3.18 | M4          | T15          |

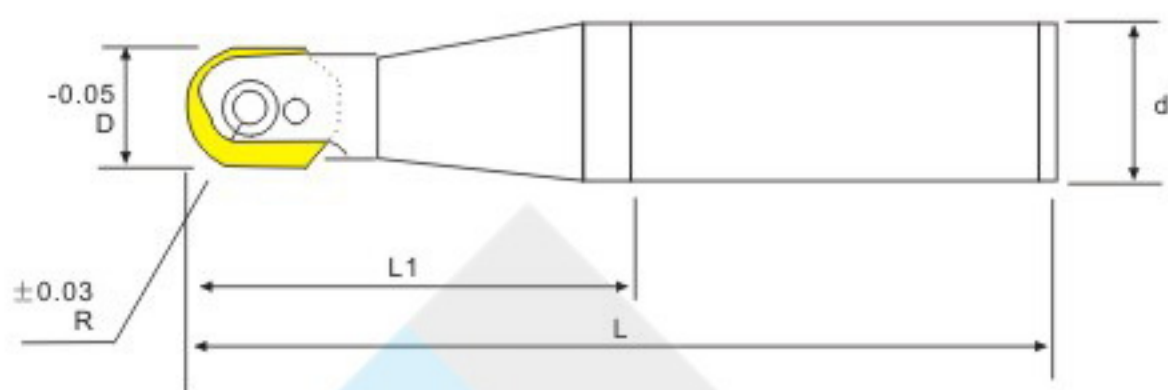
### 特點/Feature

- 采用精密級刀片可得到高精度加工表面。
- 刀片表面凸面設計,不僅刀刃鋒利並可降低切削振動的噪音。
- Use high precision insert can machining high precision surface.
- With convex figure or inserts the sharp blade can reduce the sound of vibration.



# ABP 球型精銑刀

## BALL PRECISION END MILLS



| ITEM CODE  | D  | L1  | L   | d  | T | Insert  | Screw             | Wrench |
|------------|----|-----|-----|----|---|---------|-------------------|--------|
| ABP1616016 | 16 | 40  | 160 | 16 | 1 | ZPFW160 | A-M5<br>(S3501-1) | T15    |
| ABP1618020 |    | 40  | 180 | 20 |   |         |                   |        |
| ABP1620020 |    | 40  | 200 | 20 |   |         |                   |        |
| ABP1621016 |    | 50  | 210 | 16 |   |         |                   |        |
| ABP1620025 |    | 50  | 200 | 25 |   |         |                   |        |
| ABP2017020 | 20 | 40  | 170 | 20 | 1 | ZPFW200 | A-M5<br>(S5003-2) | T20    |
| ABP2018025 |    | 45  | 180 | 25 |   |         |                   |        |
| ABP2020025 |    | 75  | 200 | 25 |   |         |                   |        |
| ABP2023020 |    | 50  | 230 | 20 |   |         |                   |        |
| ABP2025025 |    | 90  | 250 | 25 |   |         |                   |        |
| ABP2518025 | 25 | 45  | 180 | 25 | 1 | ZPFW250 | A-M5<br>(S5003-2) | T20    |
| ABP2520025 |    | 45  | 200 | 25 |   |         |                   |        |
| ABP2520032 |    | 50  | 200 | 32 |   |         |                   |        |
| ABP2525025 |    | 50  | 250 | 25 |   |         |                   |        |
| ABP2525032 |    | 90  | 250 | 32 |   |         |                   |        |
| ABP2530032 |    | 120 | 300 | 32 |   |         |                   |        |
| ABP3018032 | 30 | 50  | 180 | 32 | 1 | ZPFW300 | A-M6<br>(S6004)   | T20    |
| ABP3025032 |    | 70  | 250 | 32 |   |         |                   |        |
| ABP3030032 |    | 90  | 300 | 32 |   |         |                   |        |
| ABP3035032 |    | 90  | 350 | 32 |   |         |                   |        |
| ABP3042032 |    | 90  | 420 | 32 |   |         |                   |        |

適用SUITABLE: 日立刀片HITACHI INSERT

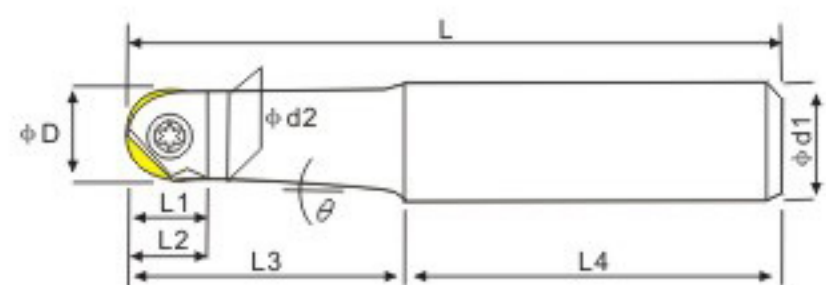
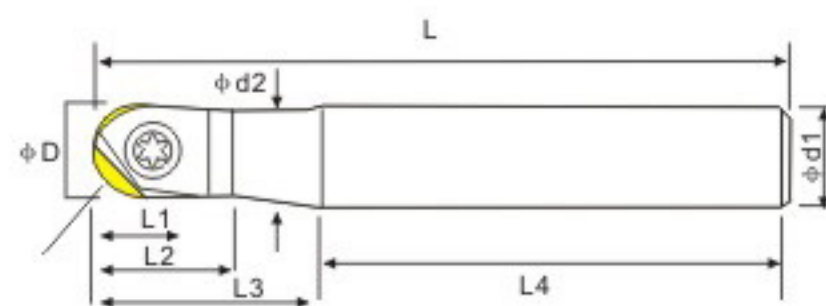
特點/Feature:

- 切削能力及精準度均優。 -排屑良好，高速切削亦即安定。 -模具三次及圓弧加工。
- Good cutting capacity and precision.
- Good capacity for removing the metal chips and cutting steadily with high speed.
- Processed for three-dimension mould and circularizing to an arc.



# ABPF 球型精銑刀

## BALL PRECISION END MILLS



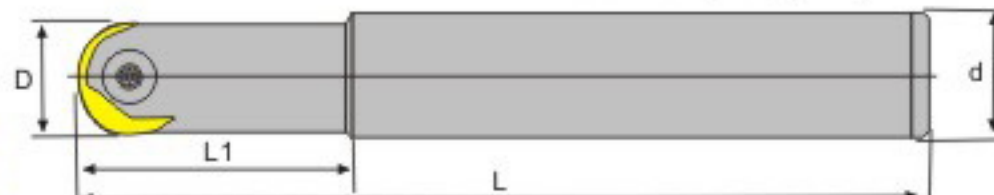
| ITEM CODE    | D  | R    | L   | L1   | L2 | L3  | L4  | d1 | d2   | Insert  | Screw | Driver |     |     |    |
|--------------|----|------|-----|------|----|-----|-----|----|------|---------|-------|--------|-----|-----|----|
| ABPF 0812012 | 08 | 4    | 120 | 5    | 10 | 30  | 90  | 12 | 7.5  | ZPFG080 | 5008F | T8     |     |     |    |
| ABPF 0815012 |    |      | 150 |      |    |     |     |    |      |         |       |        |     |     |    |
| ABPF 1012012 | 10 | 5    | 120 | 7    | 13 | 40  | 110 | 12 | 9.5  | ZPFG100 | 5010F | T10    |     |     |    |
| ABPF 1015012 |    |      | 150 |      |    |     |     |    |      |         |       |        |     |     |    |
| ABPF 1018016 |    |      | 180 |      |    |     |     |    |      |         |       |        |     |     |    |
| ABPF 1215012 | 12 | 6    | 150 | 8    | 15 | 50  | 110 | 16 | 11.5 | ZPFG120 | 5012F | T20    |     |     |    |
| ABPF 1215016 |    |      | 160 |      |    |     |     |    |      |         |       |        |     |     |    |
| ABPF 1220016 |    |      | 200 |      |    |     |     |    |      |         |       |        |     |     |    |
| ABPF 1616016 | 16 | 8    | 160 | 10   | 19 | 40  | 160 | 16 | 15.5 | ZPFG160 | 5016F | T20    |     |     |    |
| ABPF 1620016 |    |      | 200 |      |    |     |     |    |      |         |       |        |     |     |    |
| ABPF 1618020 |    |      | 180 |      |    |     |     |    |      |         |       |        |     |     |    |
| ABPF 2017020 | 20 | 10   | 170 | 12.5 | 22 | 40  | 130 | 20 | 19.5 | ZPFG200 | 5020F | T25    |     |     |    |
| ABPF 2020025 |    |      | 200 |      |    | 70  | 130 | 25 |      |         |       |        |     |     |    |
| ABPF 2023020 |    |      | 230 |      |    | 40  | 190 | 20 |      |         |       |        |     |     |    |
| ABPF 2025025 |    |      | 250 |      |    | 80  | 170 | 25 |      |         |       |        |     |     |    |
| ABPF 2518025 | 25 | 12.5 | 180 | 15   | 25 | 90  | 110 | 32 | 24.5 | ZPFG250 | 5025F | T30    |     |     |    |
| ABPF 2523025 |    |      | 230 |      |    |     |     |    |      |         |       |        | 50  | 180 | 25 |
| ABPF 2520032 |    |      | 200 |      |    |     |     |    |      |         |       |        | 100 | 150 | 32 |
| ABPF 2525032 |    |      | 250 |      |    |     |     |    |      |         |       |        | 110 | 190 | 32 |
| ABPF 2530032 |    |      | 300 |      |    |     |     |    |      |         |       |        | 110 | 190 | 32 |
| ABPF 3018032 | 30 | 15   | 180 | 18   | 30 | 80  | 100 | 32 | 29.5 | ZPFG300 | 5030F | T30    |     |     |    |
| ABPF 3025032 |    |      | 250 |      |    | 100 | 150 |    |      |         |       |        | 32  |     |    |
| ABPF 3030032 |    |      | 300 |      |    | 110 | 190 |    |      |         |       |        |     |     |    |
| ABPF 3035032 |    |      | 350 |      |    | 110 | 240 |    |      |         |       |        |     |     |    |
| ABPF 3042032 |    |      | 420 |      |    | 110 | 310 |    |      |         |       |        |     |     |    |
| ABPF 3218032 | 32 | 16   | 180 | 19   | 30 | 80  | 100 | 32 | 31.5 | ZPFG320 | 5030F | T30    |     |     |    |
| ABPF 3225032 |    |      | 250 |      |    | 100 | 150 |    |      |         |       |        |     |     |    |
| ABPF 3230032 |    |      | 300 |      |    | 110 | 190 |    |      |         |       |        |     |     |    |
| ABPF 3235032 |    |      | 350 |      |    | 110 | 240 |    |      |         |       |        |     |     |    |
| ABPF 3242032 |    |      | 420 |      |    | 110 | 310 |    |      |         |       |        |     |     |    |

適用SUITABLE: 日立刀片HITACHI INSERT



# T2139BF 球型精銑刀

## BALL PRECISION END MILLS



| 型號<br>Specification       | 外形尺寸(mm)Size |     |     |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |     |
|---------------------------|--------------|-----|-----|-----|----------------|-------------|--------------|-----|
|                           | D            | d   | L1  | L   |                |             |              |     |
| <b>T2139BF</b> C12-4R-100 | 8            | 12  | 28  | 100 | P3200-D08      | BF-D08      | T8           |     |
| C12-4R-130                |              |     | 50  | 130 |                |             |              |     |
| C12-4R-140                |              |     | 65  | 140 |                |             |              |     |
| C12-4R-150                |              |     | 65  | 150 |                |             |              |     |
| C10-5R-100                | 10           | 10  | 28  | 100 | P3200-D10      | BF-D10      | T15          |     |
| C10-5R-110                |              |     | 28  | 110 |                |             |              |     |
| C12-5R-130                |              |     | 32  | 130 |                |             |              |     |
| C12-5R-150                |              |     | 32  | 150 |                |             |              |     |
| C12-6R-120                | 12           | 12  | 32  | 120 | P3200-D12      | BF-D12      | T20          |     |
| C12-6R-130                |              |     |     | 130 |                |             |              |     |
| C12-6R-150                |              |     |     | 150 |                |             |              |     |
| C12-6R-160                |              |     |     | 160 |                |             |              |     |
| C16-6R-150                |              |     |     | 150 |                |             |              |     |
| C16-8R-120                | 16           | 16  | 65  | 120 | P3200-D16      | BF-D16      | T20          |     |
| C16-8R-150                |              |     |     | 150 |                |             |              |     |
| C16-8R-180                |              |     |     | 180 |                |             |              |     |
| C16-8R-200                |              |     |     | 200 |                |             |              |     |
| C20-10R-150               |              |     |     | 20  |                |             |              | 20  |
| C20-10R-200               | 200          |     |     |     |                |             |              |     |
| C25-10R-150               | 100          | 150 |     |     |                |             |              |     |
| C25-10R-200               | 100          | 200 |     |     |                |             |              |     |
| C25-10R-250               | 100          | 250 |     |     |                |             |              |     |
| C25-12.5R-150             | 25           | 25  | 45  | 150 | P3200-D25      | BF-D25      | T20          |     |
| C25-12.5R-200             |              |     |     | 100 |                |             |              | 200 |
| C25-12.5R-250             |              |     |     | 100 |                |             |              | 250 |
| C32-12.5R-200             |              |     |     | 100 |                |             |              | 200 |
| C32-12.5R-250             |              |     |     | 100 |                |             |              | 250 |
| C32-16R-200               | 32           | 32  | 100 | 200 | P3200-D32      | BF-D32      | T30          |     |
| C32-16R-250               |              |     |     | 250 |                |             |              |     |
| C32-16R-300               |              |     |     | 300 |                |             |              |     |

適用SUITABLE: 瓦爾特刀片WALTER INSERT

| 工作材料<br>Workpiece Material   | 工作材質<br>Insert Material | 切削速度<br>Cutting Speed | 進給量Feed<br>FZ(mm/tool) | ap(mm)  |
|------------------------------|-------------------------|-----------------------|------------------------|---------|
| 軟鋼 Mild steel<200HB          | WAK15、WAP25             | 60-180                | 0.10-0.25              | 0.5-1.0 |
| 合金鋼 Alloy steel<30HRC        |                         | 60-180                | 0.10-0.25              |         |
| 合金鋼 Alloy steel30-40HRC      | WAP35、WXM254            | 50-120                | 0.10-0.20              | 0.5-1.0 |
| 不鏽鋼 Stainless steel sus      | WXK15                   | 50-120                | 0.10-0.25              |         |
| 鑄鐵 Castiron SUS              | WAK21、WTA51             | 80-180                | 0.10-0.4               | 0.5-1.0 |
| 鋁合金 Aluminum&alloys 銅 Copper | WEC20、WPM               | 200-400               |                        |         |

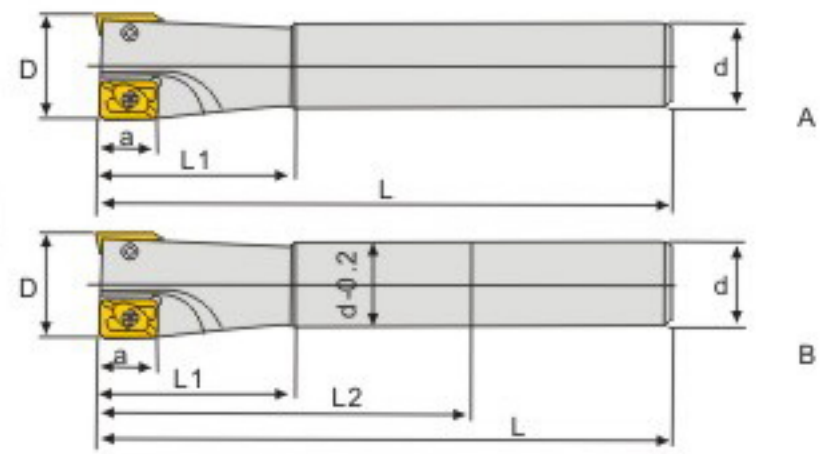
### 特點/Feature

- 切削能力及精準度均佳，排屑良好，高速切削亦穩定，同一片有很寬的應用範圍。它鋒利的切削刃很容易切削淬硬到HRC60鋼以及不鏽鋼、球墨鑄鐵、鋁、鋅合金和石墨，應用於造模具用的材料的精加工以及航空工業內的燃汽輪機葉片的製造。  
 - Good cutting capability and precision, Good capability for removing the metal chips and cutting. Steadily with high speed. One insert can using in vast area. The sharp blade easy to cutting steel, stainless steel, cast iron, aluminum, zine&alloy, black lead. Rigidity at HRC60. Developed in precesion machining on mould producing material. Like aviation industry of gas turbine vane making.



# BAP 300R/400R 直角高速端銑刀

## HIGH SPEED END MILLS



| 型號<br>Specification    | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     |     | 刀片型號<br>Insert | 螺絲<br>Screw  | 扳手<br>Wrench |
|------------------------|-------------|--------------|--------------|----|----|----|-----|-----|----------------|--------------|--------------|
|                        |             |              | D            | d  | a  | L1 | L2  | L   |                |              |              |
| <b>300R</b> C10-10-100 | 1           | A            | 10           | 10 |    | 25 | -   | 100 | APMT1135PDER   | M2.5X5       | T8           |
| <b>BAP</b> C12-12-130  | 1           | A            | 12           | 12 |    | 25 | -   | 130 |                | M2.5X5       |              |
| C16-16-120             | 2           | A            | 16           | 16 |    | 40 | -   | 120 |                | M2.5X6       |              |
| C16-16-160             | 2           | A            | 16           | 16 |    | 50 | -   | 160 |                | M2.5X6       |              |
| C16-16-180             | 2           | B            | 16           | 16 | 9  | 60 | 90  | 180 |                | M2.5X6       |              |
| C16-16-200             | 2           | B            | 16           | 16 |    | 60 | 100 | 200 |                | M2.5X6       |              |
| C20-20-120             | 2           | A            | 20           | 20 |    | 50 | -   | 120 |                | M2.5X6       |              |
| C20-20-160             | 2           | A            | 20           | 20 |    | 60 | -   | 160 |                | M2.5X6       |              |
| C20-20-200             | 2           | B            | 20           | 20 |    | 70 | 100 | 200 |                | M2.5X6       |              |
| <b>400R</b> C25-25-160 | 2           | A            | 25           | 25 |    | 70 | -   | 160 |                | APMT1604PDER |              |
| <b>BAP</b> C25-25-200  | 2           | B            | 25           | 25 |    | 70 | 100 | 200 |                |              |              |
| C25-25-250             | 2           | B            | 25           | 25 |    | 80 | 115 | 250 |                |              |              |
| C25-25-300             | 2           | B            | 25           | 25 |    | 80 | 165 | 300 |                |              |              |
| C32-32-160             | 2           | A            | 32           | 32 |    | 48 | -   | 160 |                |              |              |
| C32-32-200             | 2           | B            | 32           | 32 |    | 48 | 100 | 200 |                |              |              |
| C32-32-250             | 2           | B            | 32           | 32 |    | 48 | 115 | 250 |                |              |              |
| C32-35-160             | 2           | A            | 35           | 32 |    | 48 | -   | 160 |                |              |              |
| C32-35-200             | 2           | A            | 35           | 32 |    | 48 | -   | 200 |                |              |              |
| C32-35-250             | 2           | A            | 35           | 32 |    | 60 | -   | 250 |                |              |              |
| C32-35-300             | 2           | A            | 35           | 32 |    | 60 | -   | 300 |                |              |              |
| C32-35-350             | 2           | A            | 35           | 32 |    | 60 | -   | 350 |                |              |              |
| C32-35-400             | 2           | A            | 35           | 32 | 14 | 60 | -   | 400 |                |              |              |
| C32-35-450             | 2           | A            | 35           | 32 |    | 60 | -   | 450 |                |              |              |
| C32-35-500             | 2           | A            | 35           | 32 |    | 60 | -   | 500 |                |              |              |
| C32-35-160             | 3           | A            | 35           | 32 |    | 60 | -   | 160 |                |              |              |
| C32-35-200             | 3           | A            | 35           | 32 |    | 60 | -   | 200 |                |              |              |
| C32-35-250             | 3           | A            | 35           | 32 |    | 60 | -   | 250 |                |              |              |
| C32-35-300             | 3           | A            | 35           | 32 |    | 60 | -   | 300 |                |              |              |
| C32-35-350             | 3           | A            | 35           | 32 |    | 60 | -   | 350 |                |              |              |
| C32-35-400             | 3           | A            | 35           | 32 |    | 60 | -   | 400 |                |              |              |
| C32-35-450             | 3           | A            | 35           | 32 |    | 60 | -   | 450 |                |              |              |
| C32-35-500             | 3           | A            | 35           | 32 |    | 60 | -   | 500 |                |              |              |
| C32-40-200             | 3           | A            | 40           | 32 |    | 60 | -   | 200 |                |              |              |
| C32-40-250             | 3           | A            | 40           | 32 |    | 60 | -   | 250 |                |              |              |
| C32-40-300             | 3           | A            | 40           | 32 |    | 60 | -   | 300 |                |              |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

**特點/Feature**

- 本刀適合于強力切削。 -Fit for strength cutting.
- 回轉及進刀量多于一一般銑刀3倍。 -R.P.M and feeding speed are three times more than the general cutter.



# BAP 300R/400R 直角高速端銑刀

## HIGH SPEED END MILLS



### 特殊型號 Special Specification

| 型號<br>Specification    | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |      |    |    |     | 刀片型號<br>Insert   | 螺絲<br>Screw | 扳手<br>Wrench |
|------------------------|-------------|--------------|--------------|------|----|----|-----|------------------|-------------|--------------|
|                        |             |              | D            | d    | a  | L1 | L   |                  |             |              |
| <b>300R</b> C12-13-130 | 1           |              | 13           | 12   |    | 25 | 130 |                  | M2.5X5      |              |
| <b>BAP</b> C15-16-120  | 2           |              | 16           | 15   |    | 40 | 120 |                  | M2.5X6      |              |
| C15-16-160             | 2           |              | 16           | 15   |    | 40 | 160 |                  | M2.5X6      |              |
| C15-16-180             | 2           |              | 16           | 16   |    | 40 | 180 |                  | M2.5X6      |              |
| C15-16-200             | 2           |              | 16           | 16   |    | 40 | 200 |                  | M2.5X6      |              |
| C15.6-16-160           | 2           |              | 16           | 15.6 |    | 50 | 160 |                  | M2.5X6      |              |
| C15.6-16-200           | 2           |              | 16           | 15.6 |    | 50 | 200 |                  | M2.5X6      |              |
| C16-17-120             | 2           | A            | 17           | 16   | 9  | 50 | 120 | APMT1135<br>PDER | M2.5X6      | T8           |
| C16-17-160             | 2           |              | 17           | 16   |    | 50 | 160 |                  | M2.5X6      |              |
| C16-17-180             | 2           |              | 17           | 16   |    | 50 | 180 |                  | M2.5X6      |              |
| C16-17-200             | 2           |              | 17           | 16   |    | 50 | 200 |                  | M2.5X6      |              |
| C19-20-160             | 2           |              | 20           | 19   |    | 50 | 160 |                  | M2.5X6      |              |
| C19-20-200             | 2           |              | 20           | 19   |    | 50 | 200 |                  | M2.5X6      |              |
| C20-21-160             | 2           |              | 21           | 20   |    | 50 | 160 |                  | M2.5X6      |              |
| C20-21-200             | 2           |              | 21           | 20   |    | 50 | 200 |                  | M2.5X6      |              |
| <b>400R</b> C24-25-160 |             |              | 25           | 24   |    |    | 150 |                  |             |              |
| <b>BAP</b> C24-25-200  |             |              | 25           | 24   |    |    | 200 |                  |             |              |
| C24-25-250             | 2           | A            | 25           | 24   | 14 | 50 | 250 | APMT1604<br>PDER | M4X8        | T15          |
| C25-26-160             |             |              | 26           | 25   |    |    | 150 |                  |             |              |
| C25-26-200             |             |              | 26           | 25   |    |    | 200 |                  |             |              |
| C25-26-250             |             |              | 26           | 25   |    |    | 250 |                  |             |              |

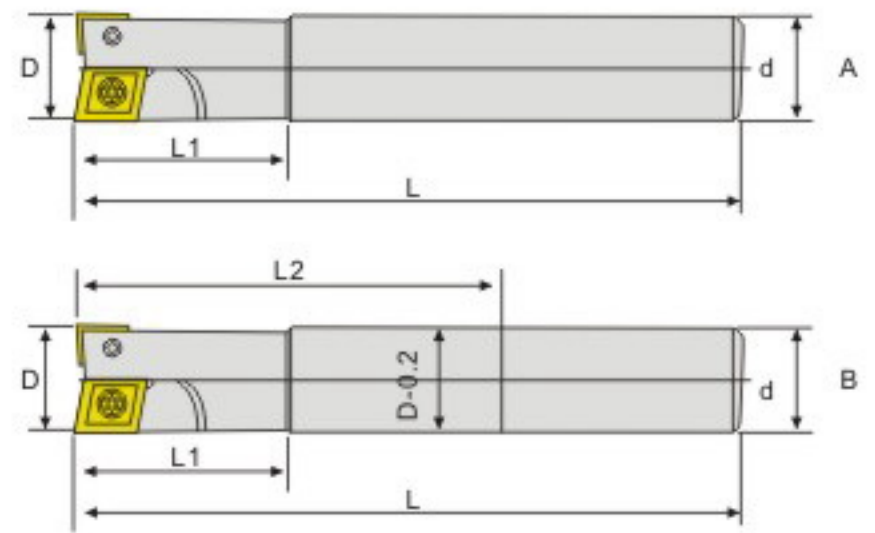
適用SUITABLE: 三菱刀片MITSUBISHI INSERT

| 被削材<br>Cutting Material | 硬度<br>HB                                    | 切削速度<br>Cutting Speed | 每齒進給量FZ(mm/齒)<br>Feed |
|-------------------------|---|-----------------------|-----------------------|
| 軟鋼Mild steel            | <180HB                                      | 120-200               | 0.05-0.2              |
| 碳素鋼 Carbon              | 180-280HB                                   | 100-200               | 0.05-0.25             |
| 合金鋼 Alloy steel         | 280-350HB                                   | 80-160                | 0.05-0.25             |
| 高硬度鋼 Hardened steel     | >40HRC                                      | 50-100                | 0.05-0.15             |
| 不鏽鋼 Stainless steel     | <200HB以下                                    | 80-160                | 0.05-0.25             |
| 普通鑄鐵 FC250              | 伸張強度 Flex strength <350N/mm <sup>2</sup>    | 100-160               | 0.1-0.25              |
| <FCD450 鑄鐵              | 伸張強度 Flex strength <450N/mm <sup>2</sup>    | 80-140                | 0.1-0.25              |
| <FCD500 Castiron        | 伸張強度 Flex strength 500-800N/mm <sup>2</sup> | 60-120                | 0.05-0.25             |



# TJU 過中心鑽銑刀

## RILLING END MILLS



| 型號<br>Specification   | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |     |     |        |      | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |      |
|-----------------------|-------------|--------------|--------------|----|----|-----|-----|--------|------|----------------|-------------|--------------|------|
|                       |             |              | D            | d  | L1 | L2  | L   | A      | B    |                |             |              |      |
| <b>TJU</b> C08-08-100 | 1           | A            | 8            | 8  | 30 | -   | 100 | 6.35   | 2.38 | CCMT060204     | M2.5        | T8           |      |
| C10-10-100            |             |              | 10           | 10 |    |     | 100 |        |      |                |             |              |      |
| C10-10-130            |             |              | 10           | 10 |    |     | 130 |        |      |                |             |              |      |
| C12-12-130            | 1           | A            | 12           | 12 | 30 | -   | 130 | 7.94   | 2.38 | CPMT080204Z    | M2.5        | T8           |      |
| C16-16-120            | 2           | A            | 16           | 16 | 35 | -   | 120 | -      | 2.38 | CCMT060204     | M2.5        | T8           |      |
| C16-16-150            |             | A            |              |    | 35 | -   | 150 | 6.35   |      |                |             |              |      |
| C16-16-180            |             | B            |              |    | 35 | 90  | 180 | 7.94   |      |                |             |              |      |
| C16-16-200            |             | B            |              |    | 40 | 100 | 200 | -      |      |                |             |              |      |
| C20-20-150            | 2           | A            | 20           | 20 | 50 | -   | 150 | 6.35   | 2.38 | CCMT060204     | M2.5        | T8           |      |
| C20-20-200            |             | B            |              |    | 60 | 100 | 200 | 9.525  |      |                |             |              |      |
| C25-25-150            | 2           | A            | 25           | 25 | 60 | -   | 150 | 9.525  | 3.18 | CPMT090308     | M4          | T15          |      |
| C25-25-200            |             | B            |              |    | 70 | 100 | 200 |        |      |                |             |              | 12.7 |
| C25-25-250            |             | B            |              |    | 80 | 115 | 250 |        |      |                |             |              | 12.7 |
| C32-32-200            | 2           | B            | 32           | 32 | 60 | 100 | 200 | 12.7   | 4.76 | CPMT120408     | M5          | T20          |      |
| C32-32-250            |             |              |              |    | 70 | 115 | 250 | 15.875 |      |                |             |              |      |
| C32-32-300            |             |              |              |    | 80 | 165 | 300 | 15.875 |      |                |             |              |      |
| C32-32-200            | 2           | A            | 40           | 40 | 50 | -   | 200 | 15.875 | 4.76 | CPMT160408Z    | M5          | T20          |      |
| C32-40-250            |             |              |              |    |    |     | 250 | 19.05  |      |                |             |              |      |
| C32-40-300            |             |              |              |    |    |     | 300 | 19.05  |      |                |             |              |      |
| C32-50-200            | 3           | A            | 50           | 50 | 50 | -   | 200 | 9.525  | 3.18 | CPMT090308     | M3.5        | T15          |      |
| C32-50-250            |             |              |              |    |    |     | 250 | 12.7   |      |                |             |              | 4.76 |
| C32-50-300            |             |              |              |    |    |     | 300 | 15.875 |      |                |             |              | 4.76 |

適用SUITABLE:日立刀片HITACHIINSERT

### 特殊型號 Special Specification

| 型號<br>Specification   | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |   |     |       |      | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-----------------------|-------------|--------------|--------------|----|----|---|-----|-------|------|----------------|-------------|--------------|
|                       |             |              | D            | d  | L1 | L | A   | B     |      |                |             |              |
| <b>TJU</b> C15-16-120 | 2           | A            | 16           | 15 | 40 | - | 120 | 6.35  | 2.38 | CCMT060204     | M2.5        | T8           |
| C15-16-150            |             |              |              |    |    |   | 180 |       |      |                |             |              |
| C15-16-180            |             |              |              |    |    |   | 180 |       |      |                |             |              |
| C15-16-200            | 200         | 7.94         |              |    |    |   |     |       |      |                |             |              |
| C19-20-150            | 2           | A            | 20           | 19 | 35 | - | 120 | 6.35  | 2.38 | CCMT060204     | M2.5        | T8           |
| C19-20-200            |             |              |              |    |    |   | 200 |       |      |                |             |              |
| C24-25-150            | 2           | A            | 25           | 24 | 35 | - | 130 | 9.525 | 2.38 | CPMT090308     | M4          | T15          |
| C24-25-200            |             |              |              |    |    |   | 230 |       |      |                |             |              |
| C24-25-250            |             |              |              |    |    |   | 230 |       |      |                |             |              |

適用SUITABLE:日立刀片HITACHIINSERT

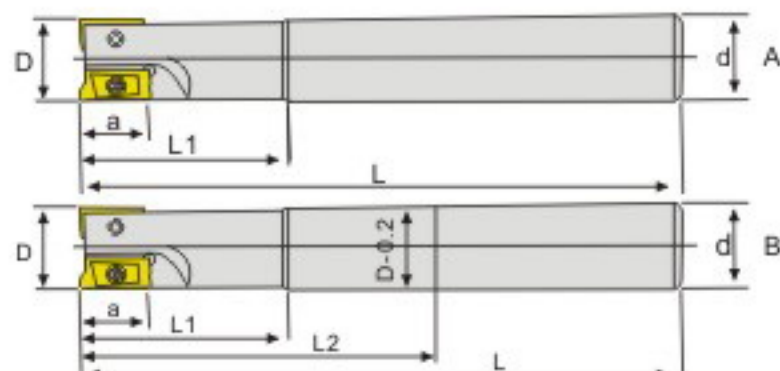
### 特點/Feature

- 從盲孔直式進刀及銑刀橫式進刀加工均無阻力。-使用于模具加工。-切削角=90度。
- Drilling on the plate vertically or milling horizontally processing without obstacle.
- Useful for mould processing.-Angle=90°



# R390 舍弃式端铣刀

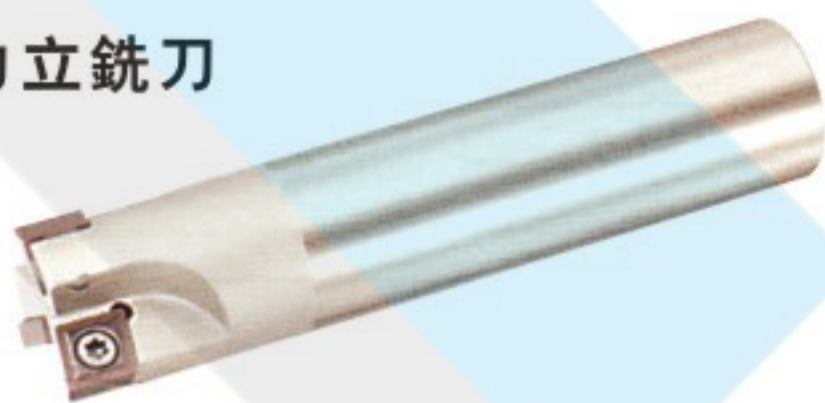
## CORNER ROUNDING END MILLS



| 型號<br>Specification    | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |      |     |     |     |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |     |             |        |     |
|------------------------|-------------|--------------|--------------|------|-----|-----|-----|-----|----------------|-------------|--------------|-----|-------------|--------|-----|
|                        |             |              | D            | d    | a   | L1  | L2  | L   |                |             |              |     |             |        |     |
| <b>R390</b> C15-16-150 | 2           | A            | 16           | 15   | 10  | 25  | -   | 150 | R390-11T308    | M2.5X6      | T8           |     |             |        |     |
| C15-16-180             |             | A            | 16           | 15   |     |     | -   | 180 |                |             |              |     |             |        |     |
| C15.6-16-150           |             | A            | 16           | 15.6 |     |     | -   | 150 |                |             |              |     |             |        |     |
| C15.6-16-180           |             | A            | 16           | 15.6 |     |     | -   | 180 |                |             |              |     |             |        |     |
| C16-16-150             |             | A            | 16           | 16   |     |     | -   | 150 |                |             |              |     |             |        |     |
| C16-16-180             |             | B            | 16           | 16   |     |     | 90  | 180 |                |             |              |     |             |        |     |
| C19-20-150             |             | A            | 20           | 19   |     |     | -   | 150 |                |             |              |     |             |        |     |
| C19-20-180             |             | A            | 20           | 19   |     |     | -   | 180 |                |             |              |     |             |        |     |
| C20-20-150             |             | A            | 20           | 20   |     |     | -   | 150 |                |             |              |     |             |        |     |
| C20-20-200             |             | B            | 20           | 20   |     |     | 100 | 200 |                |             |              |     |             |        |     |
| C25-25-160             |             | A            | 25           | 25   |     |     | 60  | -   |                |             |              | 160 | R390-170408 | M3.5X8 | T15 |
| C25-25-200             |             | B            | 25           | 25   |     |     | 60  | 100 |                |             |              | 200 |             |        |     |
| C25-25-250             | B           | 25           | 25           | 60   | 100 | 250 |     |     |                |             |              |     |             |        |     |
| C24-25-160             | A           | 24           | 24           | 50   | -   | 160 |     |     |                |             |              |     |             |        |     |
| C24-25-200             | A           | 24           | 24           | 50   | -   | 200 |     |     |                |             |              |     |             |        |     |
| C24-25-250             | A           | 24           | 24           | 50   | -   | 250 |     |     |                |             |              |     |             |        |     |

適用SUITABLE: 山特維克刀片 SANDVIK INSERT

## TCP強力立銑刀



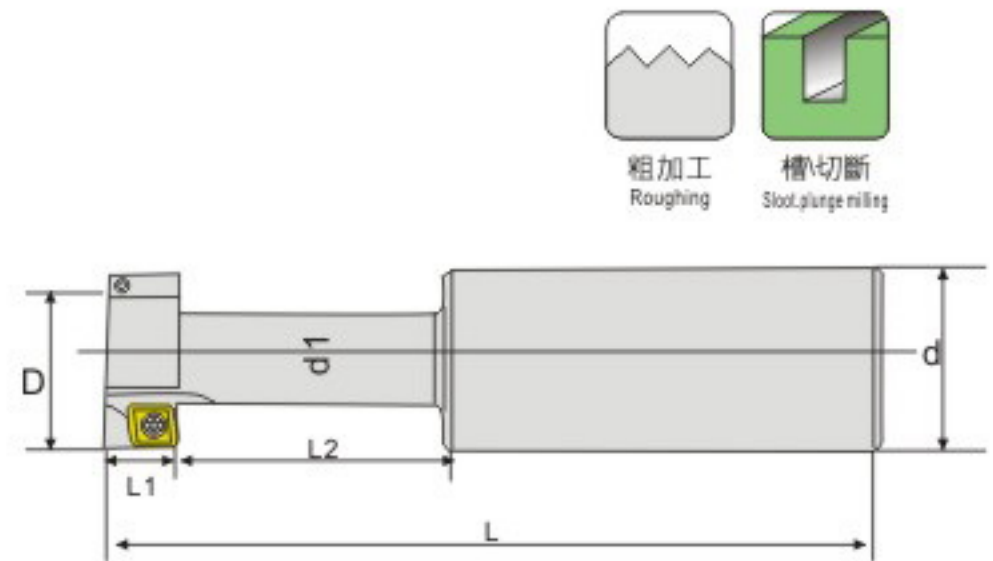
| 型號<br>Specification   | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |    |     |            | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |    |    |    |    |     |            |    |     |
|-----------------------|-------------|--------------|--------------|----|----|----|-----|------------|----------------|-------------|--------------|----|----|----|----|-----|------------|----|-----|
|                       |             |              | D            | d  | a  | L1 | L   |            |                |             |              |    |    |    |    |     |            |    |     |
| <b>TCP</b> C15-16-150 | 2           | A            | 16           | 16 | 6  | 50 | 150 | CCMT060204 | M2.5           | T8          |              |    |    |    |    |     |            |    |     |
| C15-16-200            |             |              |              |    |    | 60 | 200 |            |                |             |              |    |    |    |    |     |            |    |     |
| C20-20-150            | 2           | A            | 20           | 20 | 8  | 60 | 150 | CCMT080204 | M2.5           | T8          |              |    |    |    |    |     |            |    |     |
| C20-20-200            |             |              |              |    |    | 70 | 200 |            |                |             |              |    |    |    |    |     |            |    |     |
| C25-25-150            | 2           | A            | 25           | 25 | 9  | 80 | 150 | CCMT090204 | M4             | T15         |              |    |    |    |    |     |            |    |     |
| C25-25-200            |             |              |              |    |    | 70 | 200 |            |                |             |              |    |    |    |    |     |            |    |     |
| C25-30-150            | 2           | A            | 30           | 25 | 12 | 48 | 150 | CPMT120408 | M5             | T20         |              |    |    |    |    |     |            |    |     |
| C25-30-200            |             |              |              |    |    |    | 200 |            |                |             |              |    |    |    |    |     |            |    |     |
| C25-30-250            |             |              |              |    |    |    | 250 |            |                |             |              |    |    |    |    |     |            |    |     |
| C32-32-150            |             |              |              |    |    |    | 150 |            |                |             |              |    |    |    |    |     |            |    |     |
| C32-32-200            |             |              |              |    |    |    | 200 |            |                |             |              |    |    |    |    |     |            |    |     |
| C32-32-250            |             |              |              |    |    |    | 250 |            |                |             |              |    |    |    |    |     |            |    |     |
| C32-35-150            |             |              |              |    |    |    | 150 |            |                |             |              |    |    |    |    |     |            |    |     |
| C32-35-200            |             |              |              |    |    |    | 200 |            |                |             |              |    |    |    |    |     |            |    |     |
| C32-35-250            |             |              |              |    |    |    | 250 |            |                |             |              |    |    |    |    |     |            |    |     |
| C32-35-150            |             |              |              |    |    |    | 3   |            |                |             | A            | 35 | 32 | 12 | 48 | 150 | CPMT120408 | M5 | T20 |
| C32-35-200            |             |              |              |    |    |    |     |            |                |             |              |    |    |    |    | 200 |            |    |     |
| C32-35-250            |             |              |              |    |    |    |     |            |                |             |              |    |    |    |    | 250 |            |    |     |

適用SUITABLE: 日立刀片 HITACHI INSERT



# ATS T型槽端銑刀

## T-SLOT END MILLS

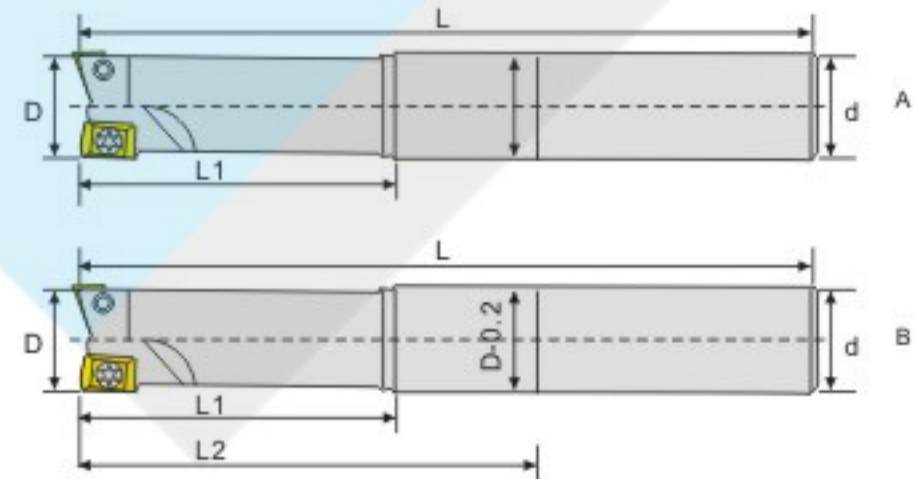
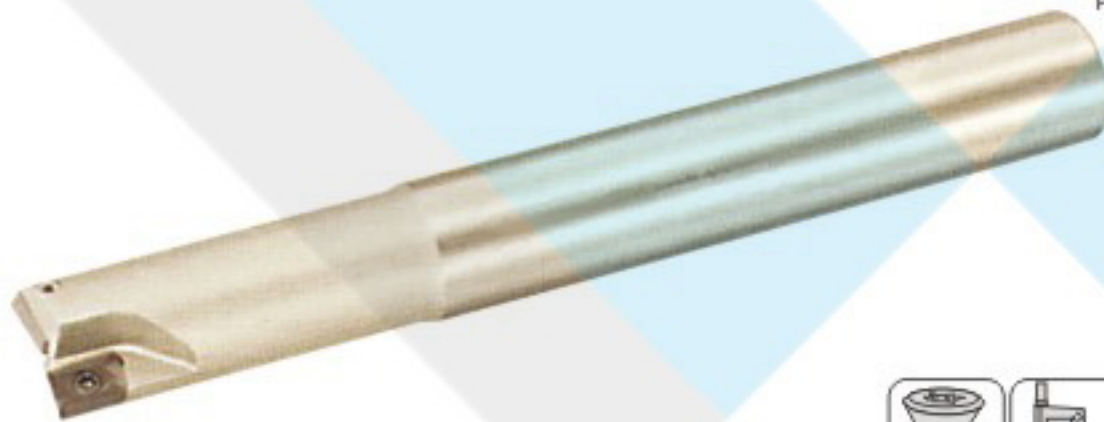


| 型號<br>Specification      | 刃數<br>Teeth | 外形尺寸(mm)Size |    |      |    |    |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|--------------------------|-------------|--------------|----|------|----|----|-----|----------------|-------------|--------------|
|                          |             | D            | d  | d1   | L1 | L2 | L   |                |             |              |
| <b>ATS</b> C25-25-11-110 | 2           | 25           | 25 | 12.5 | 11 | 21 | 110 | CCMT060204     | M2.5        | T8           |
| C32-32-14-120            | 2           | 32           | 32 | 16   | 14 | 30 | 120 | CCMT080204     | M2.5        | T8           |
| C32-40-18-130            | 4           | 40           | 40 | 20   | 18 | 32 | 130 | CCMT090204     | M4          | T15          |
| C32-50-22-140            | 4           | 50           | 50 | 26   | 22 | 39 | 140 | CCMT120204     | M5          | T20          |

適用SUITABLE:日立刀片HITACHIINSERT

| 刀片材質<br>Insert material | 主要切削用途鑄鐵castiron                  |
|-------------------------|-----------------------------------|
| MP37                    | 不鏽鋼stainless steel 合金鋼alloy steel |
| NL92                    |                                   |

## ASL鑽銑共用型銑刀 (短刃型)



| 型號<br>Specification   | 刃數<br>Teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |     |             | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-----------------------|-------------|--------------|--------------|----|----|-----|-------------|----------------|-------------|--------------|
|                       |             |              | D            | d  | L1 | L2  | L           |                |             |              |
| <b>ASL</b> C20-20-150 | 2           | A            | 20           | 20 | 35 | -   | 150         | ACMT100308R    | M2.5        | T8           |
| C20-20-200            | 2           | B            | 20           | 20 | 35 | 100 | ADMT100308L |                |             |              |
| C25-25-150            | 2           | A            | 25           | 25 | 40 | 1   | 150         | APMT12T308R    | M3          | T8           |
| C25-25-200            |             | B            |              |    |    | 100 | ADMT12T308L |                |             |              |
| C25-25-250            |             | 115          |              |    |    | 250 |             |                |             |              |
| C32-32-150            | 2           | A            | 32           | 32 | 50 | -   | 150         | APMT150408R    | M4          | T15          |
| C32-32-200            | 2           | B            | 32           | 32 | 50 | 100 | ADMT160408L |                |             |              |

適用SUITABLE:日立刀片HITACHIINSERT

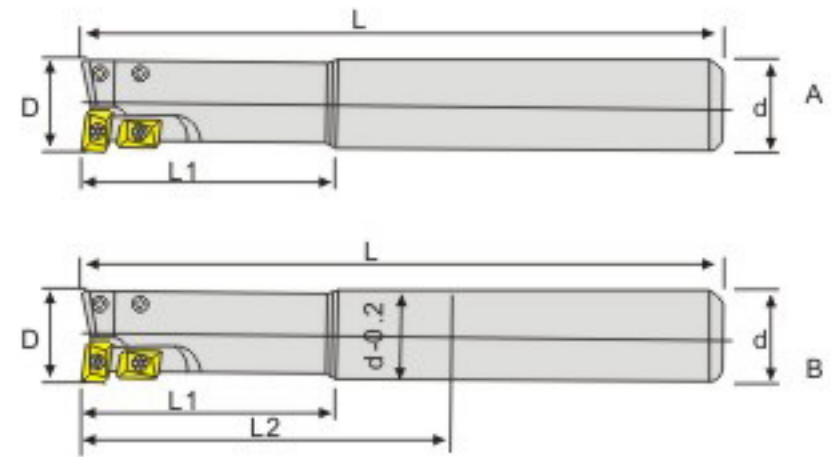
### 特點/Feature

- 從盲孔直式鑽或橫式切削。 -Drilling on the plate vertically or cutting horizontally.
- 底刃刀片角度較大，加工陰力輕。 -The end of cutting edge angle is bigger.Processing drag light.



# ASJ 鑽銑共用型銑刀 (短刃型)

## DRILLING MILLS



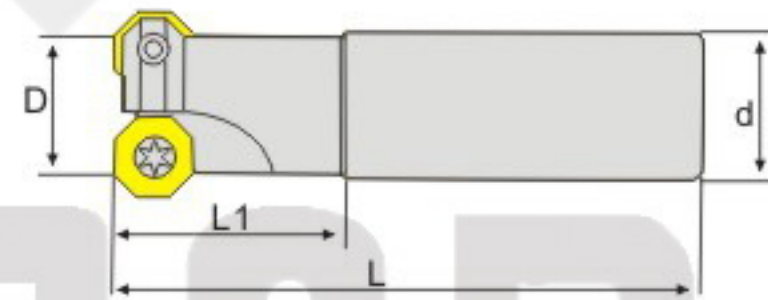
| 型號<br>Specification   | 橫刃<br>Cross teeth | 豎刃<br>Vertical teeth | 圖示<br>Figure | 外形尺寸(mm)Size |    |    |     |     | 橫刀片<br>Cross Insert | 豎刀片<br>Vertical Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-----------------------|-------------------|----------------------|--------------|--------------|----|----|-----|-----|---------------------|------------------------|-------------|--------------|
|                       |                   |                      |              | D            | d  | L1 | L2  | L   |                     |                        |             |              |
| <b>ASJ</b> C20-20-150 |                   |                      | A            |              |    |    |     |     |                     |                        |             |              |
| C20-20-200            | 1                 | 3                    | B            | 20           | 20 | 35 | 100 | 200 | ADMT100308L         | ACMT100308R            | M2.5        | T8           |
| C20-20-220            |                   |                      | B            |              |    |    | 110 | 220 |                     |                        |             |              |
| C25-25-150            |                   |                      | A            |              |    |    |     |     |                     |                        |             |              |
| C25-25-200            | 1                 | 3                    | B            | 25           | 25 | 40 | 100 | 200 | ADMT12T308L         | APMT12T308R            | M3          | T8           |
| C25-25-250            |                   |                      | B            |              |    |    | 115 | 250 |                     |                        |             |              |
| C25-25-300            |                   |                      | B            |              |    |    | 165 | 300 |                     |                        |             |              |
| C32-32-150            |                   |                      | A            |              |    |    |     |     |                     |                        |             |              |
| C32-32-200            | 1                 | 3                    | B            | 32           | 32 | 50 | 100 | 200 | APMT160408L         | APMT150408R            | M4          | T15          |
| C32-32-250            |                   |                      | B            |              |    |    | 115 | 250 |                     |                        |             |              |
| C32-32-300            |                   |                      | B            |              |    |    | 165 | 300 |                     |                        |             |              |
| C32-32-350            |                   |                      | B            | 32           |    |    | 165 | 350 |                     |                        |             |              |
| C32-35-150            |                   |                      | A            | 35           |    |    |     |     |                     |                        |             |              |
| C32-35-200            | 1                 | 3                    | A            | 35           | 32 | 50 |     | 200 | APMT170408L         | APMT150408R            | M4          | T15          |
| C32-35-250            |                   |                      | A            | 35           |    |    |     | 250 |                     |                        |             |              |
| C32-35-300            |                   |                      | A            | 35           |    |    |     | 300 |                     |                        |             |              |
| C40-40-150            |                   |                      | A            |              |    |    |     |     |                     |                        |             |              |
| C40-40-200            | 1                 | 4                    | B            | 40           | 40 | 55 | 100 | 200 | APMT190508L         | APMT150408R            | M4          | T15          |
| C40-40-300            |                   |                      | B            |              |    |    | 165 | 300 |                     |                        |             |              |
| C40-40-400            |                   |                      | B            |              |    |    | 165 | 400 |                     |                        |             |              |

適用SUITABLE:日立刀片HITACHIINSERT

### 特點/Feature

- 從盲孔直式鑽或橫式切削。 -底刃刀片角度較大，加工阻力輕。 -刀片為四刃，可做深粗銑加工。
- Drilling on the plate vertically or cutting horizontally. -The end of cutting edge angle is bigger.Processing drag loght.
- With 4 blades inserts,able to do deep and rough processing.

## SKM高速面銑刀



| 型號<br>Specification   | 刃數<br>Teeth | 外形尺寸(mm)Size |    |    |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|-----------------------|-------------|--------------|----|----|-----|----------------|-------------|--------------|
|                       |             | D            | d  | L1 | L   |                |             |              |
| <b>SKM</b> C20-25-120 | 2           | 25           | 20 | 40 |     |                |             |              |
| C25-25-120            | 2           | 25           | 25 | 40 |     |                |             |              |
| C25-32-120            | 3           | 32           | 25 | 40 | 120 | ODMT040408     | M4          | T15          |
| C32-32-120            | 3           | 32           | 32 | 40 |     |                |             |              |
| C32-40-120            | 4           | 40           | 32 | 50 |     |                |             |              |

適用SUITABLE:使特拉姆STEELRAM IINSERT

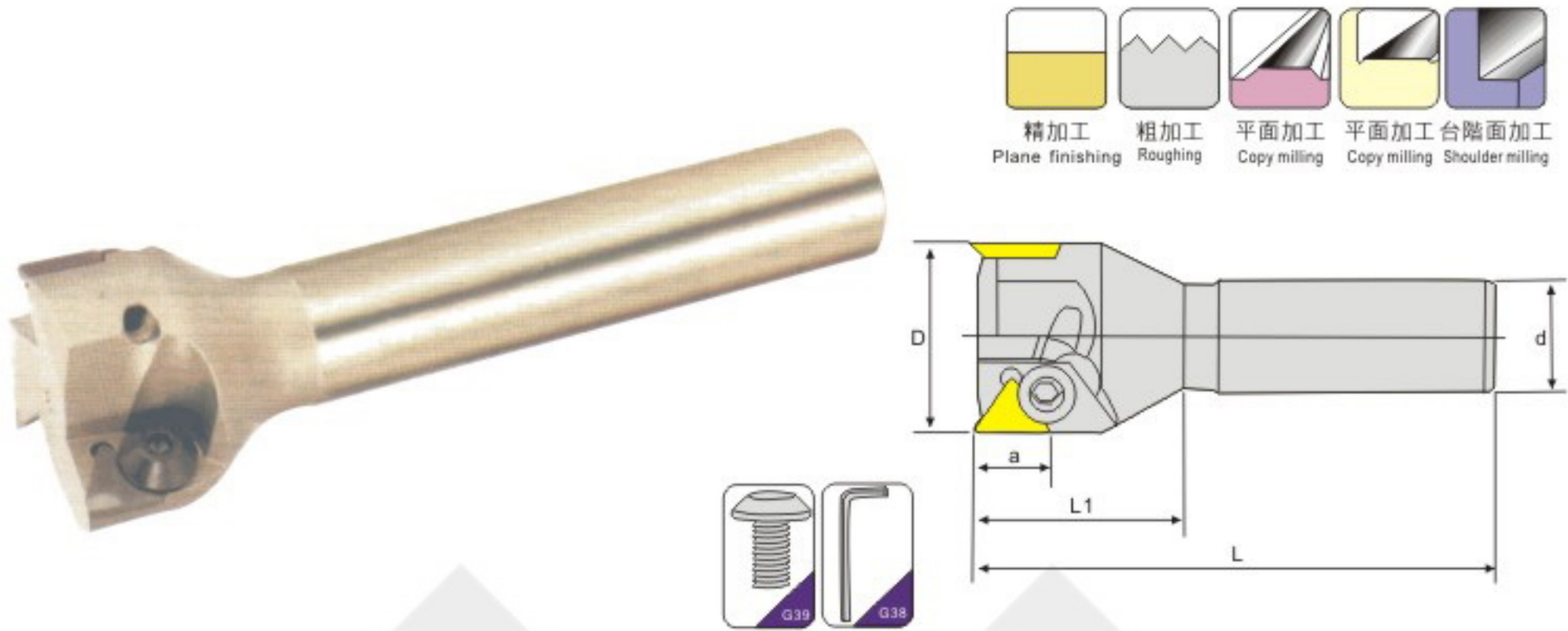
### 特點/Feature

- 刀片設計為八面，使用經濟高效，也可當倒角用。
- The inserts blade by eight face designs,high economical benefit,also can use for chamfering.



# TP 舍弃式直角铣刀

## THROW-AWAY SQUARE MILLS



| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |    |    |    |     | 刀片型號<br>Insert | 傘形壓板<br>Umbrella Clamp | 扳手<br>Wrench |
|---------------------|-------------|--------------|----|----|----|-----|----------------|------------------------|--------------|
|                     |             | D            | D  | a  | L1 | L   |                |                        |              |
| <b>TP</b> C20-20-90 | 2           | 20           | 20 | 9  | 30 | 90  | TPMN110304     | M5                     | L3           |
| C20-25-100          | 2           | 25           | 20 | 9  | 30 | 100 |                |                        |              |
| C20-32-130          | 2           | 32           | 20 | 9  | 30 | 130 |                |                        |              |
| C20-35-130          | 2           | 35           | 20 | 14 | 40 | 130 |                |                        |              |
| C20-35-150          | 2           | 35           | 25 | 14 | 40 | 150 |                |                        |              |
| C20-35-200          | 2           | 35           | 25 | 14 | 40 | 200 |                |                        |              |
| C25-35-150          | 2           | 35           | 25 | 14 | 40 | 150 |                |                        |              |
| C25-35-200          | 2           | 35           | 25 | 14 | 40 | 200 |                |                        |              |
| C32-35-150          | 2           | 35           | 32 | 14 | 40 | 150 |                |                        |              |
| C32-35-200          | 2           | 35           | 32 | 14 | 40 | 200 |                |                        |              |
| C20-40-150          | 3           | 40           | 20 | 14 | 40 | 150 | TPMN160308     | M6                     | L4           |
| C25-40-130          | 3           | 40           | 25 | 14 | 40 | 130 |                |                        |              |
| C25-40-150          | 3           | 40           | 25 | 14 | 40 | 150 |                |                        |              |
| C25-40-200          | 3           | 40           | 25 | 14 | 40 | 200 |                |                        |              |
| C32-40-150          | 3           | 40           | 32 | 14 | 40 | 150 |                |                        |              |
| C32-40-200          | 3           | 40           | 32 | 14 | 40 | 200 |                |                        |              |
| C20-50-150          | 3           | 50           | 20 | 14 | 40 | 150 |                |                        |              |
| C25-50-150          | 3           | 50           | 25 | 14 | 40 | 150 |                |                        |              |
| C25-50-200          | 3           | 50           | 25 | 14 | 40 | 200 |                |                        |              |
| C32-50-150          | 3           | 50           | 32 | 14 | 40 | 150 |                |                        |              |
| C32-50-200          | 3           | 50           | 32 | 14 | 40 | 200 |                |                        |              |
| C20-63-150          | 4           | 63           | 20 | 20 | 40 | 150 | TPMN220412     | M8                     | L5           |
| C25-63-150          |             |              | 25 |    | 40 | 150 |                |                        |              |
| C32-63-150          |             |              | 32 |    | 40 | 150 |                |                        |              |
| C32-63-200          |             |              | 32 |    | 45 | 200 |                |                        |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

### 特點/Feature

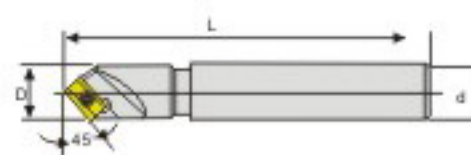
- 有效加工磨具底部，加工便利。 -Useful for the processing of mould bottom.
- 用于溝切削，直角肩型切削。 -Slotting and square shoulder cutting.
- 隅角90度。 -Angle:90°



# 舍弃式倒角刀

## THROW-AWAY CHAMFER MILLS

### SSK45° 舍弃式倒角刀 SSK45° THROW-AWAY CHAMFER MILLS



粗加工  
Roughing

槽切斷  
Slot plunge milling

倒角加工  
Chamfering processing

| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |    |     | 倒角範圍<br>Chanfering range | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|----|-----|--------------------------|----------------|-------------|--------------|
|                     |             | D            | d  | L   |                          |                |             |              |
| SSK C20-20-130      | 1           | 20           | 20 | 130 | 3-20                     | ADNT160308     | M4          | T15          |

適用SUITABLE:日立刀片HITACHIINSERT

#### 特點/Feature

- 本銼刀可45度切削，亦可做倒角。 -For cutting by 45° and chamfering.
- 適合一般銼床，綜合切削中心機。 -For general milling machine and machine center.

### SSP45° 定位倒角刀 SSP45° SPOT CHAMFER MILLS



粗加工  
Roughing

槽切斷  
Slot plunge milling

倒角加工  
Chamfering processing

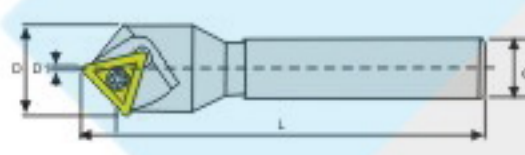
| 型號<br>Specification | 外形尺寸(mm)Size |    |    |      |    |     | 倒角範圍<br>Chanfering range | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|--------------|----|----|------|----|-----|--------------------------|----------------|-------------|--------------|
|                     | D            | D1 | d  | a    | L1 | L   |                          |                |             |              |
| SSPC20-20-130       | 20           | 0  | 20 | 11.3 | 20 | 130 | 3-20                     | TCMX16T308     | M4          | T15          |

適用SUITABLE:使特拉姆刀片STEELRAMINSERT

#### 特點/Feature

- 本銼刀可45度切削，亦可做倒角，V槽切削，可中心定位鑽使用。
- 適合一般銼床，CNC銼床，CNC車床，鑽床倒角。
- For cutting by 45° and chamfering.V-slot cutting,center spot drill.
- For general milling machine,CNC milling machine,CNC lathe,chamfering for drill press.

### TCM45° 倒角刀 TCM45° CHAMFER MILLS



粗加工  
Roughing

槽切斷  
Slot plunge milling

倒角加工  
Chamfering processing

| 型號<br>Specification | 外形尺寸(mm)Size |    |    |     | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|--------------|----|----|-----|----------------|-------------|--------------|
|                     | D            | D1 | d  | L   |                |             |              |
| TCM16-20-130        | 20           | 3  | 16 | 110 | TCMT16T304     | M4          | T15          |

適用SUITABLE:三菱刀片 MITSUBISHI INSERT

### SB新型倒角刀 SB NEW CHAMFER MILLS



粗加工  
Roughing

槽切斷  
Slot plunge milling

倒角加工  
Chamfering processing

| 型號<br>Specification | 外形尺寸(mm)(Size) |     |    |     | 倒角範圍<br>Chanfering range | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|----------------|-----|----|-----|--------------------------|----------------|-------------|--------------|
|                     | D              | D1  | d  | L   |                          |                |             |              |
| SBC C16-16-100      | 16             | 1.5 | 16 | 100 | 1.5-16                   | SPMW090304     | M4          | T15          |

適用SUITABLE:三菱刀片 MITSUBISHI INSERT

#### 特點/Feature

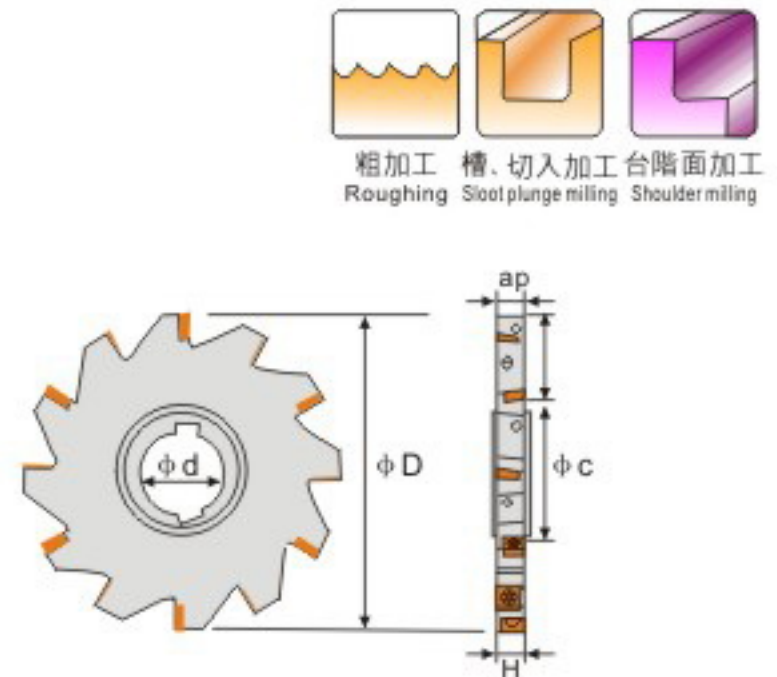
- 每個刀片具有四個刀刃，經濟耐用。 -Each insert have 4 blade that can used urable and much more economy.
- 倒角，切端面槽。 -Chamfering,cut end cover slotl.



# SMP

## 三面刃銑刀(卡口型)

### FACE-SIDES CUTTER-BAYONET TYPE



| 型號<br>Cat.No          | 尺寸 Size |    |    |    |    |    | 齒數<br>Z |
|-----------------------|---------|----|----|----|----|----|---------|
|                       | φD      | φc | φd | ae | ap | H  |         |
| SMP-80X8-K27-10T-06   | 80      | 41 | 27 | 17 | 8  | 12 | 10      |
| SMP-100X8-K32-14T-06  | 100     | 47 | 32 | 25 | 8  | 12 | 14      |
| SMP-100X10-K32-14T-06 | 100     | 47 | 32 | 25 | 10 | 14 | 14      |
| SMP-125X10-K40-16T-06 | 125     | 55 | 40 | 34 | 10 | 14 | 16      |
| SMP-125X12-K40-12T-08 | 125     | 55 | 40 | 34 | 12 | 16 | 12      |
| SMP-160X12-K40-14T-08 | 160     | 62 | 40 | 17 | 12 | 16 | 14      |
| SMP-160X16-K40-12T-12 | 160     | 62 | 40 | 49 | 16 | 20 | 12      |
| SMP-160X20-K40-12T-12 | 160     | 62 | 40 | 49 | 20 | 24 | 12      |
| SMP-200X16-K50-14T-12 | 200     | 72 | 50 | 62 | 16 | 24 | 14      |
| SMP-200X20-K50-14T-12 | 200     | 72 | 50 | 63 | 20 | 26 | 14      |

#### 配件 Mating

| 型號 Cat.No     | 刀片Insert   | 螺絲 Clamp screw | 扳手Wrench |
|---------------|------------|----------------|----------|
| SMP-D80-D125  | MP□T060304 | M2.5X6.5       | T8       |
| SMP-D125-D160 | MP□T080305 | M3X7           | T8       |
| SMP-D160-D200 | MP□T120408 | M5X13          | T20      |

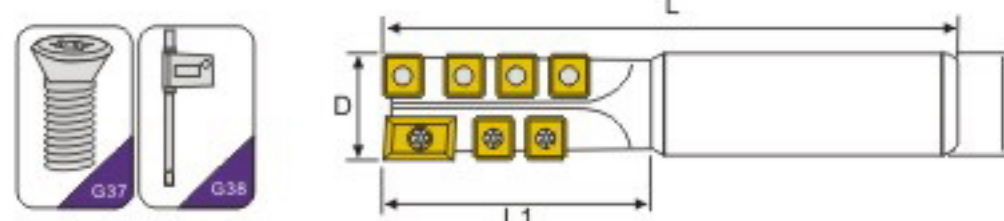
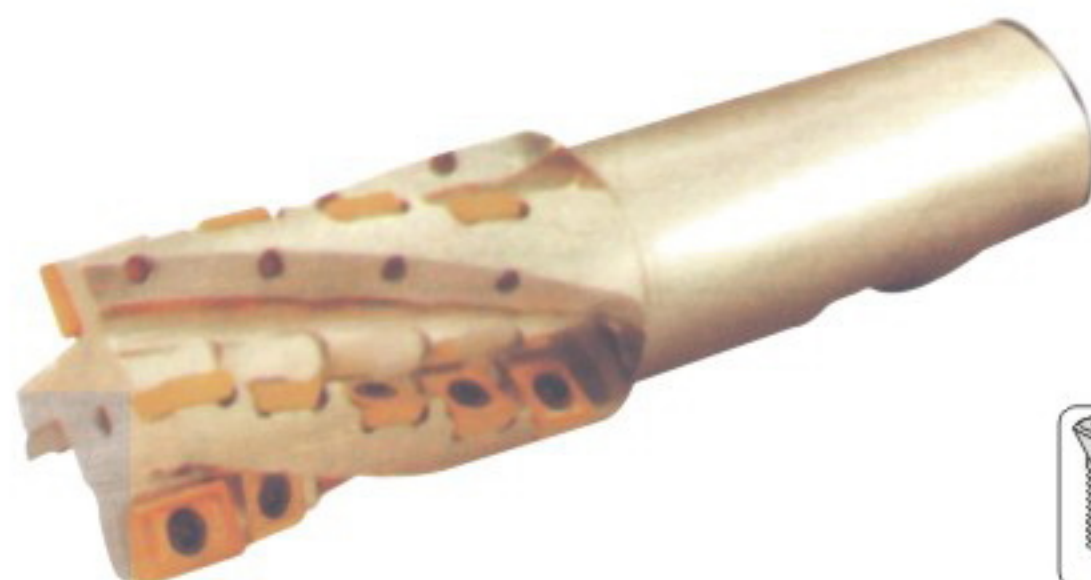
#### 適用刀片 Insert

| 型號 Cat.No     | YBG102 | YBG302 | YBG152 | YBG252 | 刀片形狀<br>Insert shape | 尺寸 Size(mm) |      |            | 排屑槽<br>Chip breaker | MTSUBISHI<br>(三齒) |
|---------------|--------|--------|--------|--------|----------------------|-------------|------|------------|---------------------|-------------------|
|               |        |        |        |        |                      | d           | S1   |            |                     |                   |
| MPHT060304-DM | ●      | ●      | ●      | ●      |                      | 6.35        | 3.18 | 無(without) |                     |                   |
| MPHT080305-DM | ●      | ●      | ●      | ●      |                      | 8.3         | 3.18 | 無(without) |                     |                   |
| MPHT120408-DM | ●      | ●      | ●      | ●      |                      | 12.7        | 4.76 | 無(without) |                     |                   |



# ROUGH CUTTING END MILLS

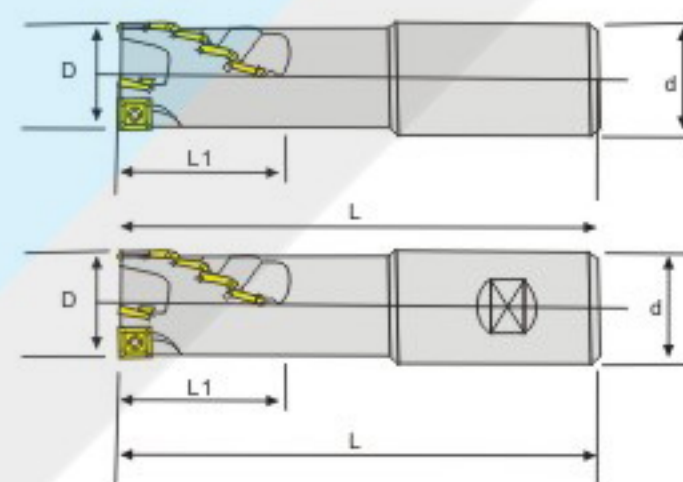
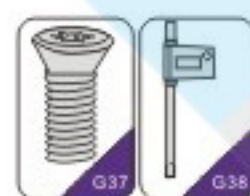
## ■ 粗切削端銑刀-T2038



| 型號<br>Specification | 圖示<br>Figure | 刃數<br>Teeth | 外形尺寸(mm)Size |    |     |     |   | 刀片型號Insert |      | 螺絲<br>Screw | 扳手<br>Wrench |     |
|---------------------|--------------|-------------|--------------|----|-----|-----|---|------------|------|-------------|--------------|-----|
|                     |              |             | D            | d  | L1  | L   | T | 15         | 9.52 |             |              |     |
| C42-40-180          | A            | 2           | 40           | 42 | 56  | 180 | 1 | LPMT1504   | 5    | SPMT1204    | M5           | T20 |
| C32-40-150          | A            | 4           | 40           | 32 | 50  | 150 | 2 | P272155-3  | 12   | SDMT090308  | M4           | T15 |
| C42-50-200          | B            | 4           | 50           | 42 | 77  | 200 | 2 | LPMT1504   | 14   | SPMT1204    | M5           | T20 |
| C42-50-200          |              |             |              |    | 97  | 200 |   |            | 18   |             |              |     |
| C42-50-250          |              |             |              |    | 158 | 250 |   |            | 30   |             |              |     |
| C42-50-200          | A            | 3           | 50           | 42 | 75  | 200 | - | -          | 21   | SPMT1204    | M5           | T20 |

適有SUITABLE:ISO刀片ISO INSERT

## ■ 玉米立銑刀杆-T2038



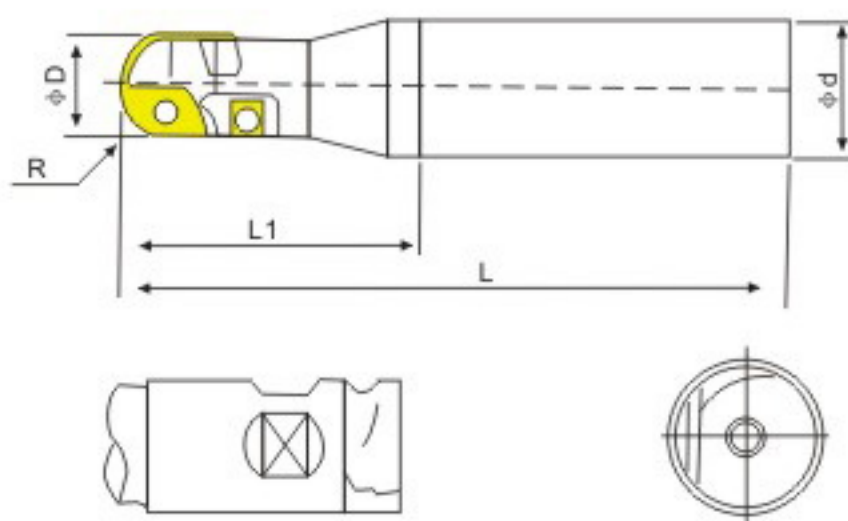
高效型粗銑刀,能加工深孔.  
尺寸可由刀杆隨意變換深度,發揮最大效能.  
High-performance-based rough milling, deep hole can be processed.  
Arbor size can be arbitrarily change the depth of maximum efficiency.

| 型號<br>Cat.No        | 圖示<br>Figure | 刃數<br>Teeth | 外形尺寸(mm)Size |    |    |     |    | 刀片型號Insert |           | 螺釘<br>Clamp<br>screw | 扳手<br>Wrench |     |
|---------------------|--------------|-------------|--------------|----|----|-----|----|------------|-----------|----------------------|--------------|-----|
|                     |              |             | D            | d  | L1 | L   | T  | 15         | 9.52      |                      |              |     |
| T2038-20-120-25-C25 | A            | 2           | 20           | 25 | 25 | 120 | 6  | APLT080304 | P28415-00 | M4                   | T15          |     |
| T2038-25-130-35-C25 | A            | 2           | 25           | 25 | 35 | 130 | 1  | APLT080304 | P28415-0  | M5                   | T20          |     |
| T2038-32-120-50-C32 | B            | 3           | 32           | 32 | 50 | 120 | 11 | P27275-3   | 3         | SPMT09T308           | M4           | T15 |
| T2038-32-160-50-C32 | B            | 3           | 32           | 32 | 50 | 150 | 11 |            | 2         | SPMT090308           | M4           | T15 |
| T2038-38-120-50-C32 |              | 3           | 38           | 32 | 50 | 120 | 11 | P27275-3   | 3         | SPMT09T308           | M4           | T15 |
| T2038-38-150-50-C32 |              | 3           | 38           | 32 | 50 | 150 | 11 |            | 3         | SDMT090308           | M4           | T15 |
| T2038-40-155-50-C32 |              | 4           | 40           | 32 | 50 | 155 | 2  |            | P28495-1  | M4                   |              |     |
| T2038-40-173-56-C42 |              | 2           | 40           | 42 | 56 | 173 | 1  |            | P28495-1  | M4                   |              |     |



# RCU 球型粗銑刀

## BALL NOSE ROUGHING MILL



| ITEM CODE      | D   | L1   | L    | d    | T | Master Insert   | Slave Insert    | Peripheral Insert | Screw           | Srench |
|----------------|-----|------|------|------|---|-----------------|-----------------|-------------------|-----------------|--------|
| RCF4020042-4   | 40  | 100  | 200  | 42   | 4 | ZCEW<br>200CE   | ZCEW<br>200SE   | CPMT<br>090308    | M4<br>(S4001-3) | T15    |
| RCF4025042-4   |     |      | 250  | 42   |   |                 |                 |                   |                 |        |
| RCF4030042-4   |     |      | 300  | 42   |   |                 |                 |                   |                 |        |
| RCF4035042-4   |     |      | 350  | 42   |   |                 |                 |                   |                 |        |
| RCF4016050.8-4 |     |      | 160  | 42   |   |                 |                 |                   |                 |        |
| RCF4020050.8-4 |     |      | 200  | 50.8 |   |                 |                 |                   |                 |        |
| RCF4025050.8-4 | 250 | 50.8 |      |      |   |                 |                 |                   |                 |        |
| RCF5020042-4   | 50  | 75   | 200  | 42   | 4 | ZCEW<br>250CE   | ZCEW<br>250SE   | CPMT<br>120408    | M5<br>(S5001)   | T20    |
| RCF5025042-4   |     | 75   | 250  | 42   |   |                 |                 |                   |                 |        |
| RCF5035042-4   |     | 90   | 350  | 42   |   |                 |                 |                   |                 |        |
| RCF5040042-4   |     | 100  | 400  | 42   |   |                 |                 |                   |                 |        |
| RCF5020050.8-4 |     | 100  | 200  | 50.8 |   |                 |                 |                   |                 |        |
| RCF5025050.8-4 |     | 100  | 250  | 50.8 |   |                 |                 |                   |                 |        |
| RCF5030050.8-4 | 100 | 300  | 50.8 |      |   |                 |                 |                   |                 |        |
| RCF5035050.8-4 | 100 | 350  | 50.8 |      |   |                 |                 |                   |                 |        |
| RCF5040050.8-4 | 100 | 400  | 50.8 |      |   |                 |                 |                   |                 |        |
| RCU5020042-4   | 50  | 100  | 200  | 42   | 4 | ZCET<br>250CE-N | ZCET<br>250SK-N | CPMT<br>120408    | M5<br>(S5001)   | T20    |
| RCU5025042-4   |     |      | 250  | 42   |   |                 |                 |                   |                 |        |
| RCU5030042-4   |     |      | 300  | 42   |   |                 |                 |                   |                 |        |
| RCU5035042-4   |     |      | 350  | 42   |   |                 |                 |                   |                 |        |
| RCU5040042-4   |     |      | 400  | 42   |   |                 |                 |                   |                 |        |
| RCU5020050.8-4 |     |      | 200  | 50.8 |   |                 |                 |                   |                 |        |
| RCU5025050.8-4 | 250 | 50.8 |      |      |   |                 |                 |                   |                 |        |
| RCU5030050.8-4 | 300 | 50.8 |      |      |   |                 |                 |                   |                 |        |
| RCU5035050.8-4 | 350 | 50.8 |      |      |   |                 |                 |                   |                 |        |
| RCU5040050.8-4 | 400 | 50.8 |      |      |   |                 |                 |                   |                 |        |

適用SUITABLE:日立刀片HITACHIINSERT

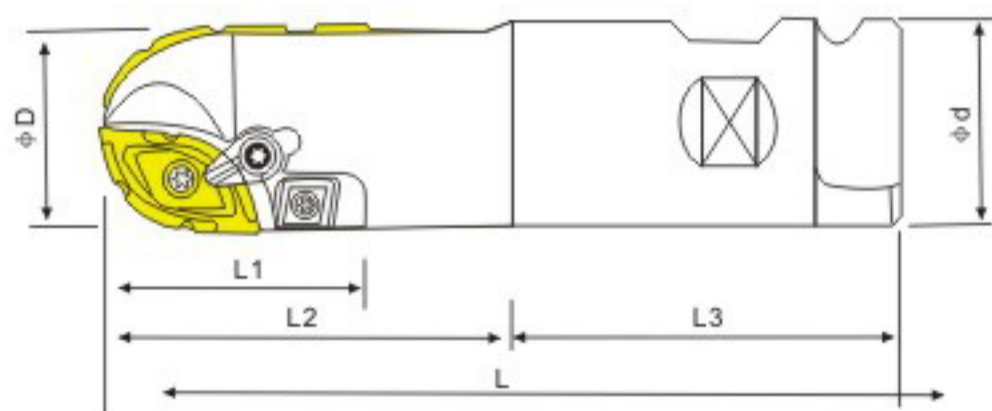
### 特點/Feature:

- 刀片采凸面設計,切削震動音較小
- 刀片后端變鍵溝付固鎖式切削安定
- 重型雕加工用,加工面R精度良好
- 靠模銑削型雕專用
- With convex figure of inserts and cutting in a sound of vibration.
- With two slots in the inserts locked firm,fit for cutting Steady
- Special for milling and cutting in mould.



# ASB 球型粗銑刀

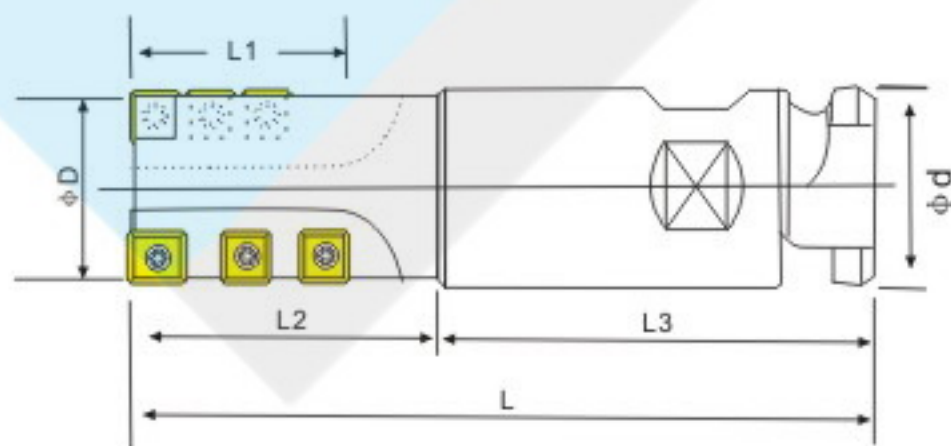
## BALL NOSE ROUGHING MILL



| ITEM CODE     | D  | L1 | L2  | L3  | L   | d    | Master Insert | Slave Insert | Peripheral Insert | Screw           | Wrench |
|---------------|----|----|-----|-----|-----|------|---------------|--------------|-------------------|-----------------|--------|
| ASB 5020050.8 | 50 | 63 | 115 | 85  | 200 | 50.8 | ZPET250CE-N   | ZPET250SK-N  | CPMT120408        | M5.0<br>(S5001) | T20    |
| ASB 5025050.8 |    |    |     | 135 | 250 |      |               |              |                   | M6.0<br>(S6001) | T30    |

## ■ ATC 粗切削端銑刀

### ATC Rough Cutting End Mill



| ITEM CODE          | D  | L1  | L2  | L3 | L   | d    | T | Insert(pcs)                      | Screw     | Wrench |
|--------------------|----|-----|-----|----|-----|------|---|----------------------------------|-----------|--------|
| ATC50-105-220-50.8 |    | 105 | 135 |    | 220 |      |   | APLT120408(20)<br>APLT1504ZZR(2) |           |        |
| ATC50-158-220-50.8 |    | 158 | 190 |    | 275 |      |   | APLT120408(30)<br>APLT1504ZZR(2) | M5.0      |        |
| ATC50-200-300-50.8 | 50 | 200 | 215 | 85 | 300 | 50.8 | 4 | APLT120408(38)<br>APLT1504ZZR(2) | (S5003-2) | T20    |
| ATC50-250-350-50.8 |    | 250 | 265 |    | 350 |      |   | APLT120408(48)<br>APLT1504ZZR(2) |           |        |

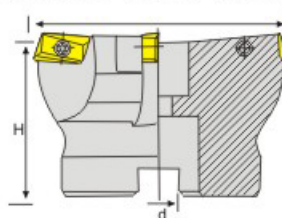


# RAP75° 平面銑刀頭

## SQUARE FACE MILL HEAD



使用APMT1135604  
廢棄刀片 節約成本



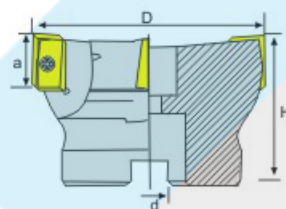
| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |  | H  | 刀片型號<br>Insert | 壓板<br>Clamp | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|--|----|----------------|-------------|--------------|
|                     |             | D            | d     |  |    |                |             |              |
| <b>RAP</b> 63-25.4  | 4           | 63           | 25.4  |  | 50 | APMT1604       | M4          | T15          |
| 80-31.75            | 5           | 80           | 31.75 |  |    |                |             |              |
| 63-22               | 4           | 63           | 22    |  |    |                |             |              |
| 80-27               | 5           | 80           | 27    |  |    |                |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

### 特點/Feature

- 裝400R系列使用后的報廢刀片,刀片損耗成本為零.
- This insert is using abandon insert of 400Rseries,the insert wastage is in zero.

## 400R直角平面銑刀頭



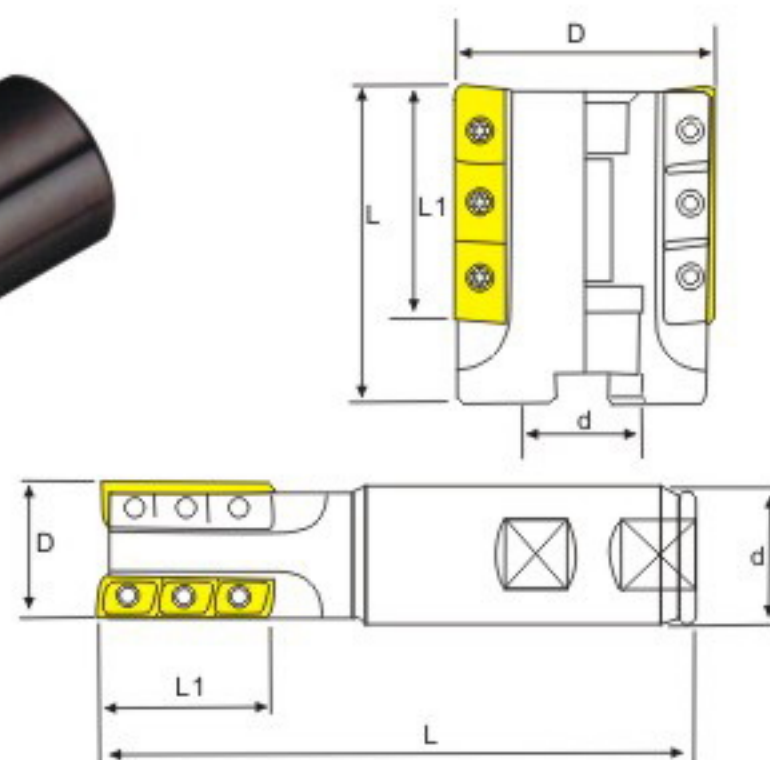
| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |   |    | H            | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|---|----|--------------|----------------|-------------|--------------|
|                     |             | D            | d     | a |    |              |                |             |              |
| <b>400R</b> 50-22   | 3           | 50           | 22    |   | 14 | APMT1604PDER | M4             | T15         |              |
| 50-22               | 4           | 50           | 22    |   |    |              |                |             |              |
| 50-25.4             | 3           | 50           | 25.4  |   |    |              |                |             |              |
| 50-25.4             | 4           | 50           | 25.4  |   |    |              |                |             |              |
| 63-22               | 4           | 63           | 22    |   |    |              |                |             |              |
| 63-22               | 5           | 63           | 22    |   |    |              |                |             |              |
| 63-25.4             | 4           | 63           | 25.4  |   |    |              |                |             |              |
| 63-25.4             | 5           | 63           | 25.4  |   |    |              |                |             |              |
| 80-25.4             | 5           | 80           | 25.4  |   |    |              |                |             |              |
| 80-27               | 5           | 80           | 27    |   |    |              |                |             |              |
| 100-31.75           | 6           | 100          | 31.75 |   |    |              |                |             |              |
| 100-32              | 6           | 100          | 32    |   |    |              |                |             |              |
| 125-38.1            | 8           | 125          | 38.1  |   |    |              |                |             |              |
| 125-40              | 8           | 125          | 40    |   |    |              |                |             |              |
| 160-40              | 8           | 160          | 40    |   |    |              |                |             |              |
| 160-50.8            | 8           | 160          | 50.8  |   |    |              |                |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT



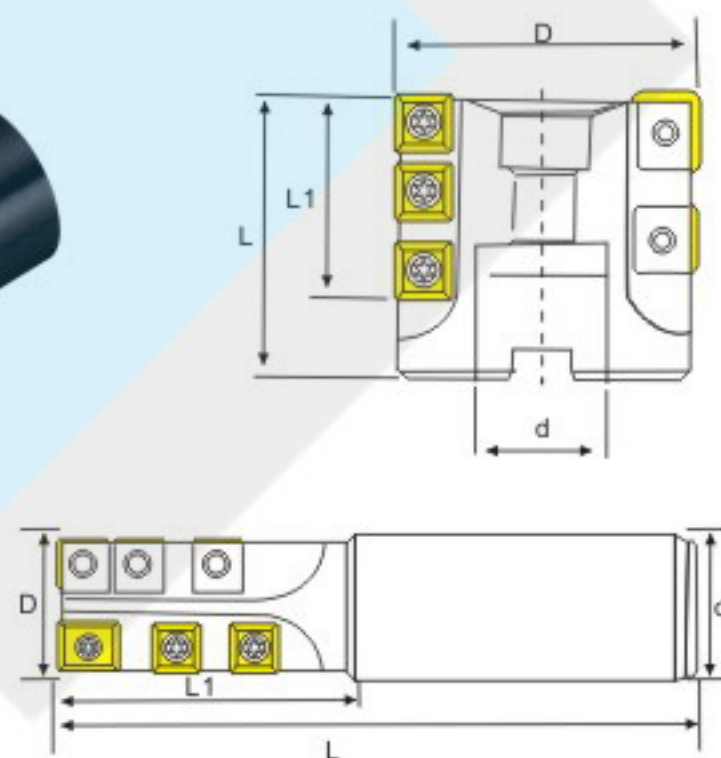
# GTS 粗切削端銑刀

## ROUGH CUTTING END MILL



| ITEM CODE   | D  | L1 | L   | d    | T | Insert(pcs)      | Screw             | Wrench |
|-------------|----|----|-----|------|---|------------------|-------------------|--------|
| GTS2010025  | 20 | 23 | 100 | 25   | 2 | CCMT060204(6)    | M2.5<br>(S2502-1) | T8     |
| GTS2513025  | 25 | 30 | 130 | 25   | 4 | CCMT060204(8)    |                   | T8     |
| GTS3214032  | 32 | 40 | 140 | 32   | 2 | CPMT090308(10)   | M4<br>(S4001-3)   | T15    |
| GTS4020042  | 40 | 77 | 200 | 42   | 3 | APMT1135PDER(27) | M2.5<br>(S2502-1) | T8     |
| GTS-63X25.4 | 63 | 45 | 55  | 25.4 | 4 | APKT1604(12)     | M4<br>(S4001-1)   | T15    |
| GTS-63X27.0 | 63 | 45 | 55  | 27.0 | 4 |                  |                   |        |

## G2038 筒狀粗切削端銑刀

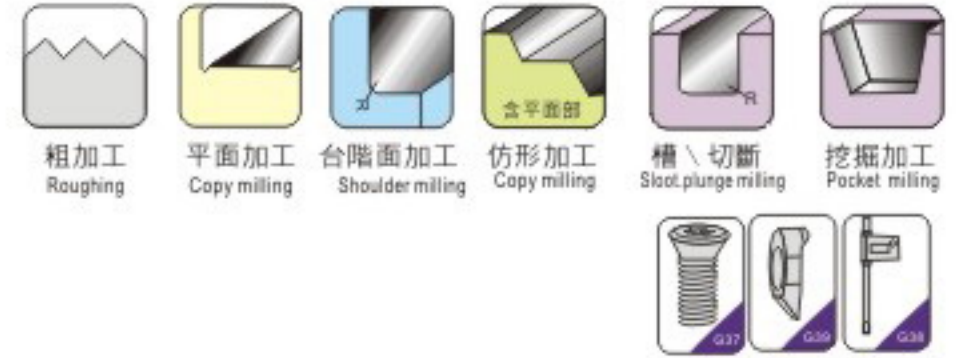
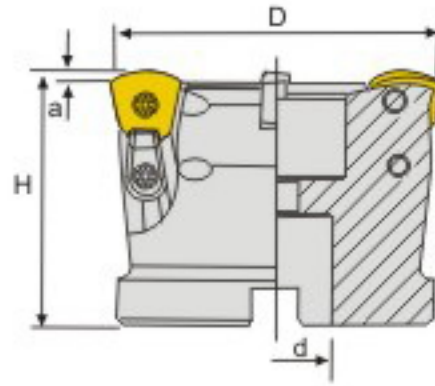


| ITEM CODE          | D  | L1 | L   | d     | T | Insert(pcs)                      | Screw           | Wrench |
|--------------------|----|----|-----|-------|---|----------------------------------|-----------------|--------|
| G2038-32-50-155-32 | 32 | 50 | 155 | 32    | 2 | P28415-0(6)<br>P27215-3R(1)      | M4<br>(S4003-3) | T15    |
| G2038-40-50-155-32 | 40 | 50 | 155 | 32    | 4 | P28415-0(12)<br>P27215-3R(12)    | M4<br>(S4003-3) | T15    |
| G2038-63X25.4      | 63 | 62 | 80  | 25.4  | 4 | SPLT120408(12)<br>APLT1504ZZR(2) | M4<br>(S5003-2) | T20    |
| G2038-80X31.75     | 80 | 67 | 80  | 31.75 | 6 | SPLT120408(18)<br>APLT1504ZZR(3) | M4<br>(S5003-2) | T20    |
| G2038-80X32.0      | 80 | 67 | 80  | 32.0  | 6 |                                  |                 |        |



# AJX

## 大進給面銑刀頭 ROUGH FEED MILL HEAD



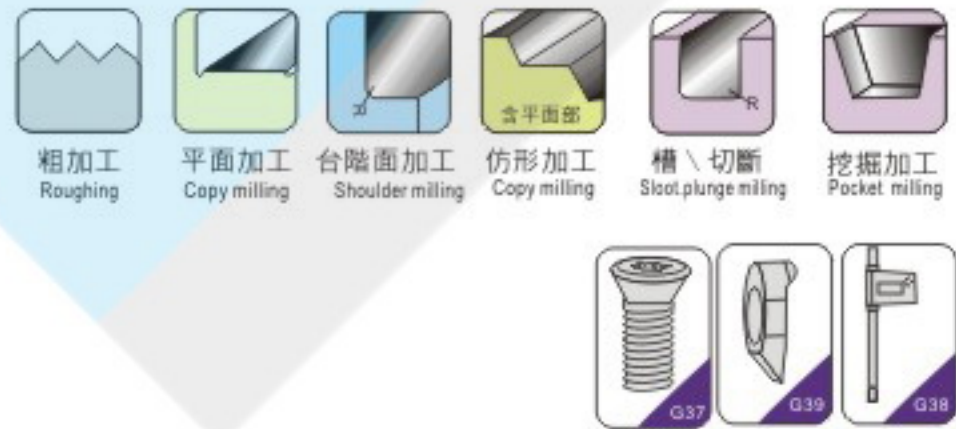
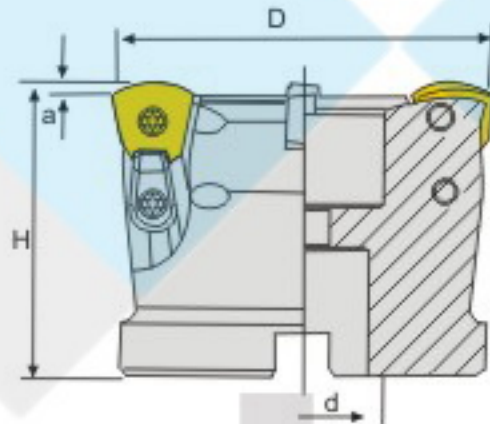
| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |   |    | 刀片型號<br>Insert    | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|---|----|-------------------|-------------|--------------|
|                     |             | D            | d     | a | H  |                   |             |              |
| <b>AJX</b> 50-22    | 3           | 50           | 22    |   |    | JDMW120420EDSR-FT | M4          | T15          |
| 50-22               | 4           | 50           | 22    |   |    |                   |             |              |
| 63-22               | 4           | 63           | 22    | 2 | 50 |                   |             |              |
| 63-22               | 3           | 63           | 22    |   |    |                   |             |              |
| 63-22               | 4           | 63           | 22    |   |    |                   |             |              |
| 80-27               | 4           | 83           | 27    |   |    |                   |             |              |
| 80-27               | 5           | 80           | 27    |   |    | JDMW140520EDSR-FT | M5          | T20          |
| 100-32              | 5           | 100          | 32    | 2 | 50 |                   |             |              |
| 50-25.4             | 3           | 50           | 25.4  |   |    |                   |             |              |
| 50-25.4             | 3           | 50           |       |   |    | JDMW120420EDSR-FT | M4          | T15          |
| 63-25.4             | 4           | 63           | 25.4  | 2 | 50 |                   |             |              |
| 63-25.4             | 5           | 63           |       |   |    |                   |             |              |
| 63-25.4             | 4           | 63           |       |   |    |                   |             |              |
| 80-25.4             | 4           | 80           | 25.4  |   |    | JDMW140520EDSR-FT | M5          | T20          |
| 80-25.4             | 5           | 80           | 25.4  | 2 | 50 |                   |             |              |
| 100-31.75           | 5           | 100          | 31.75 |   |    |                   |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

特點/Feature

- 最適合大進給切削。
- Suitable on high speed feed cutting
- 採用錐型設計, 抗台鋼性極高。
- Use taper design, high rigidity that avoid buckler.

## TXP大進給面銑刀頭 TXP ROUGH FEED MILL HEAD



| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |     |    | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|-----|----|----------------|-------------|--------------|
|                     |             | D            | d     | a   | H  |                |             |              |
| <b>TXP</b> 50-22    | 4           | 50           | 22    | 1.5 | 50 | WPMW06X415ZPR  | M4          | T15          |
| 50-25.4             |             | 50           | 25.4  |     |    |                |             |              |
| 50-22               | 3           | 50           | 22    |     |    | WPMW06X415ZPR  | M4          | T15          |
| 63-22               | 4           | 63           | 22    |     |    |                |             |              |
| 80-27               | 4           | 80           | 27    |     |    |                |             |              |
| 80-27               | 5           | 80           | 27    |     |    |                |             |              |
| 100-32              | 6           | 100          | 32    | 1.5 | 50 |                |             |              |
| 50-25.4             | 3           | 50           | 25.4  |     |    |                |             |              |
| 63-25.4             | 4           | 63           | 25.4  |     |    |                |             |              |
| 80-25.4             | 4           | 80           | 25.4  |     |    |                |             |              |
| 80-25.4             | 5           | 80           | 25.4  |     |    |                |             |              |
| 100-31.75           | 6           | 100          | 31.75 |     |    |                |             |              |

適用SUITABLE: 東芝刀片TOSHIBA INSERT

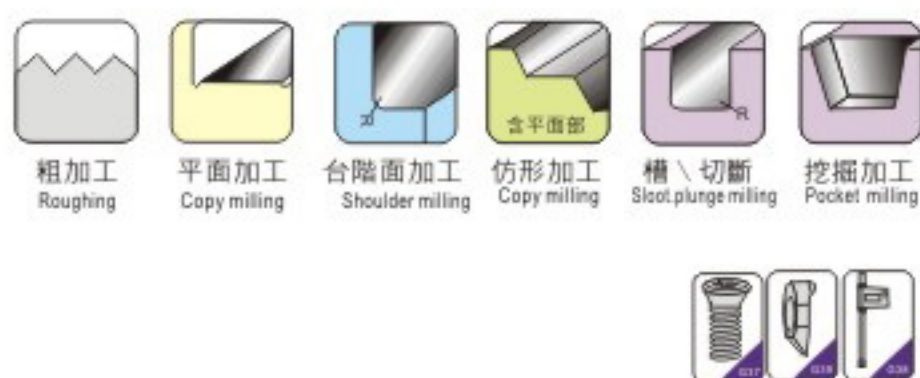
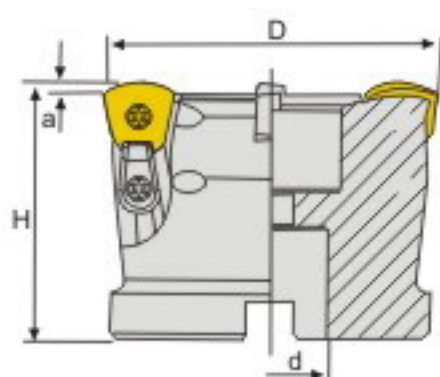
特點/Feature

- 最適合大進給切削。
- Suitable on high speed feed cutting
- 採用錐型設計, 抗台鋼性極高。
- Use taper design, high rigidity that avoid buckler.



# SKS 大進給面銑刀頭

## ROUGH FEED MILL HEAD



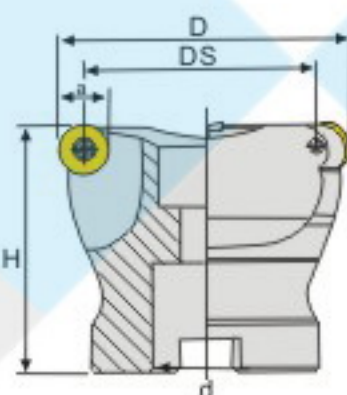
| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |     |    | 刀片型號<br>Insert                                  | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|-----|----|---|-------------|--------------|
|                     |             | D            | d     | a   | H  |   |             |              |
| <b>SKS</b> 50-22    | 3           | 50           | 22    |     |    | WDMW080520ZTR<br>WDMT080520ZER<br>WDHW080520ZTR | M4.5        | T20          |
| 50-22               | 4           | 50           | 22    |     |    |   |             |              |
| 63-22               | 3           | 63           | 22    | 2   | 50 |   |             |              |
| 63-22               | 4           | 63           | 22    |     |    |   |             |              |
| 80-27               | 5           | 80           | 27    |     |    |   |             |              |
| 100-32              | 6           | 100          | 32    |     |    |   |             |              |
| 63-22               | 4           | 63           | 22    | 2.5 | 50 | WDMW10X620ZTR<br>WDMT10X620ZER                  | M4.5        | T20          |
| 80-27               | 5           | 80           | 27    |     |    |   |             |              |
| 100-32              | 6           | 100          | 32    |     |    |   |             |              |
| 63-25.4             | 3           | 63           | 25.4  |     |    | WDMW080520ZTR<br>WDMT080520ZER<br>WDHW080520ZTR | M4.5        | T20          |
| 63-25.4             | 4           | 63           | 25.4  | 2   | 50 |   |             |              |
| 80-25.4             | 5           | 80           | 25.4  |     |    |   |             |              |
| 100-31.75           | 6           | 100          | 31.75 |     |    |   |             |              |
| 63-25.4             | 4           | 63           | 25.4  | 2.5 | 50 | WDMW10X620ZTR<br>WDMT10X620ZER                  | M4.5        | T20          |
| 80-25.5             | 5           | 80           | 25.4  |     |    |   |             |              |
| 100-31.75           | 6           | 100          | 31.75 |     |    |   |             |              |

適用SUITABLE: 黛傑刀片 DIJET INSERT

### 特點/Feature

- 最適合大進給切削。 -Use taper design, high rigidity that avoid buckler.
- Suitable on high speed feed cutting

## JRC圓刀刃平面銑刀頭 ROUGH FACE MILL HEAD



| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |    |      |    |    | 刀片型號<br>Insert | 壓板<br>Clamp | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|----|------|----|----|----------------|-------------|-------------|--------------|
|                     |             | D            | DS | d    | H  | a  |                |             |             |              |
| <b>JRC</b> 5R50-22  | 4           | 50           | 40 | 22   | 50 | 10 | RC*T10T3       | -           | M3.5        | T15          |
| 5R50-25.4           |             |              |    | 25.4 |    |    |                |             |             |              |
| 6R50-22             | 3           |              |    | 22   |    |    |                |             |             |              |
| 6R50-22             | 3           | 50           | 38 | 22   | 50 | 12 | RC*T1204       | Y-6R        | M3.5        | T15          |
| 6R50-22配            | 3           |              |    | 22   |    |    |                |             |             |              |
| 6R50-25.4           | 4           |              |    | 25.4 |    |    |                |             |             |              |
| 5R63-22             | 4           | 63           | 53 | 22   | 50 | 10 | RC*T10T3       | -           | M3.5        | T15          |
| 5R63-25.4           |             |              |    | 25.4 |    |    |                |             |             |              |
| 6R63-22             |             |              |    | 22   |    |    |                |             |             |              |
| 6R63-22配            | 4           | 63           | 51 | 22   | 50 | 12 | RC*T1204       | Y-6R        | M3.5        | T15          |
| 6R63-25.4           |             |              |    | 25.4 |    |    |                |             |             |              |

適用SUITABLE: 山特維克刀片 SANDVIK INSERT

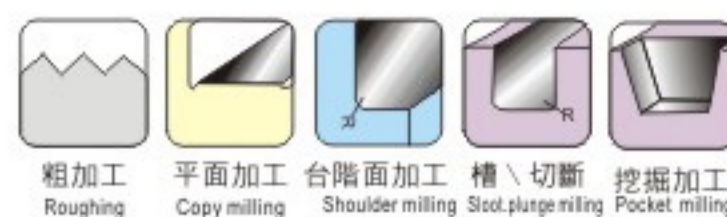
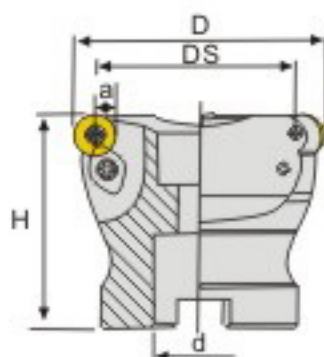
### 特點/Feature

- 適配山特維克精磨刀片，精度更高，精加工效果更佳。
- Use SANDVIK coromill high precision insert, more efficiency on finish machining.



# EMRW 圓刀刃平面銑刀頭

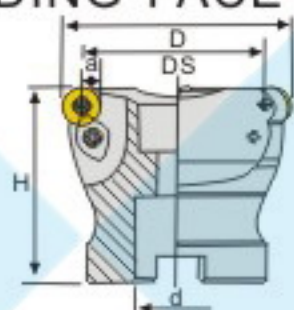
## ROUNDING FACE MILL NEAD



| 型號<br>Specification | 刃數<br>Teeth | D   | 外形尺寸(mm)Size |       |    |    | 刀片型號<br>Insert | 螺絲<br>Screw | 壓板<br>Clamp | 扳手<br>Wrench |
|---------------------|-------------|-----|--------------|-------|----|----|----------------|-------------|-------------|--------------|
|                     |             |     | DS           | d     | H  | a  |                |             |             |              |
| <b>EMRW</b> 5R50-22 | 3           | 50  | 38           | 22    | 50 | 50 | RPMW1003       | 5R          | M4          | T15          |
| 5R50-22             | 4           | 50  | 38           | 22    |    |    |                |             |             |              |
| 5R50-25.4           | 3           | 50  | 38           | 25.4  |    |    |                |             |             |              |
| 5R50-25.4           | 4           | 50  | 38           | 25.4  |    |    |                |             |             |              |
| 5R63-22             | 4           | 63  | 41           | 22    |    |    |                |             |             |              |
| 5R63-22             | 5           | 63  | 41           | 22    |    |    |                |             |             |              |
| 5R63-25.4           | 4           | 63  | 41           | 25.4  |    |    |                |             |             |              |
| 5R63-25.4           | 5           | 63  | 41           | 25.4  |    |    |                |             |             |              |
| 6R50-22             | 3           | 50  | 38           | 22    | 50 | 50 | RPMW1204       | 6R          | M4          | T15          |
| 6R50-22             | 4           | 50  | 38           | 22    |    |    |                |             |             |              |
| 6R50-25.4           | 3           | 50  | 38           | 25.4  |    |    |                |             |             |              |
| 6R50-25.4           | 4           | 50  | 38           | 25.4  |    |    |                |             |             |              |
| 6R63-22             | 4           | 63  | 41           | 22    |    |    |                |             |             |              |
| 6R63-22             | 5           | 63  | 41           | 22    |    |    |                |             |             |              |
| 6R63-25.4           | 4           | 63  | 41           | 25.4  |    |    |                |             |             |              |
| 6R63-25.4           | 5           | 63  | 41           | 25.4  |    |    |                |             |             |              |
| 6R80-27             | 5           | 80  | 68           | 27    |    |    |                |             |             |              |
| 6R80-27             | 6           | 80  | 68           | 27    |    |    |                |             |             |              |
| 6R80-31.75          | 5           | 80  | 68           | 31.75 |    |    |                |             |             |              |
| 6R100-31.75         | 6           | 100 | 68           | 31.75 |    |    |                |             |             |              |
| 6R100-32            | 5           | 100 | 68           | 32    |    |    |                |             |             |              |
| 6R100-32            | 6           | 100 | 68           | 32    |    |    |                |             |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

# ■ TRS圓刀刃平面銑刀頭 TRS ROUNDING FACE MILL NEAD



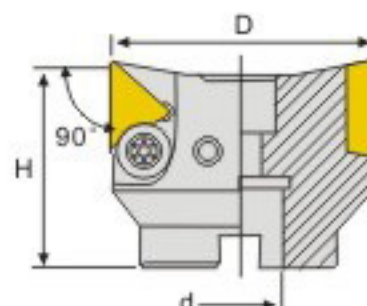
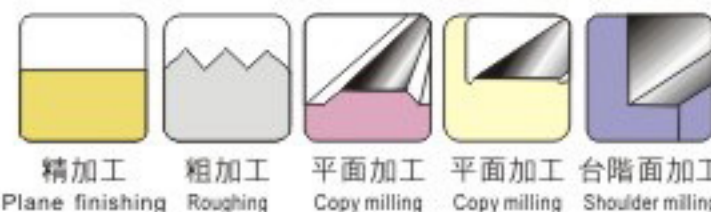
| 型號<br>Specification | 刃數<br>Teeth | D   | 外形尺寸(mm)Size |       |    |          | 刀片型號<br>Insert | 壓板<br>Clamp | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|-----|--------------|-------|----|----------|----------------|-------------|-------------|--------------|
|                     |             |     | DS           | d     | H  |          |                |             |             |              |
| <b>TRS</b> 5R50-22  | 3           | 50  | 40           | 22    | 50 | RDMT10T3 | Y-5R<br>M4     | M4          | T15         |              |
| 5R50-22             | 4           | 50  | 40           | 22    |    |          |                |             |             |              |
| 5R50-25.4           | 3           | 50  | 40           | 25.4  |    |          |                |             |             |              |
| 5R50-25.4           | 4           | 50  | 40           | 25.4  |    |          |                |             |             |              |
| 5R63-22             | 5           | 63  | 53           | 22    |    |          |                |             |             |              |
| 5R63-25.4           | 4           | 63  | 53           | 25.4  |    |          |                |             |             |              |
| 5R63-25.4           | 5           | 63  | 53           | 25.4  |    |          |                |             |             |              |
| 5R63-27             | 5           | 63  | 53           | 27    |    |          |                |             |             |              |
| 6R50-22             | 4           | 50  | 38           | 22    | 50 | RDMT1204 | Y-5R<br>M4     | M4          | T15         |              |
| 6R63-22             | 4           | 63  | 51           | 22    |    |          |                |             |             |              |
| 6R80-27             | 6           | 80  | 68           | 27    |    |          |                |             |             |              |
| 6R100-32            | 6           | 100 | 88           | 32    |    |          |                |             |             |              |
| 8R63-22             | 4           | 63  | 47           | 22    | 50 | RDMX1604 | Y-8R<br>M5     | M5          | T20         |              |
| 8R63-22             | 5           | 63  | 47           | 22    |    |          |                |             |             |              |
| 8R63-25.4           | 3           | 63  | 47           | 25.4  |    |          |                |             |             |              |
| 8R63-25.4           | 4           | 63  | 47           | 25.4  |    |          |                |             |             |              |
| 8R63-27             | 3           | 63  | 47           | 27    |    |          |                |             |             |              |
| 8R63-27             | 4           | 63  | 47           | 27    |    |          |                |             |             |              |
| 8R80-25.4           | 4           | 80  | 64           | 25.4  |    |          |                |             |             |              |
| 8R80-27             | 4           | 80  | 64           | 27    |    |          |                |             |             |              |
| 8R80-27             | 5           | 80  | 64           | 27    |    |          |                |             |             |              |
| 8R100-31.75         | 5           | 100 | 84           | 31.75 |    |          |                |             |             |              |
| 8R100-32            | 4           | 100 | 84           | 32    |    |          |                |             |             |              |
| 8R100-32            | 5           | 100 | 84           | 32    |    |          |                |             |             |              |
| 8R100-32            | 6           | 100 | 84           | 32    |    |          |                |             |             |              |

適用SUITABLE: 日立刀片HITACHI INSERT



# TP90° 直角面銑刀頭

## SQUARE FACE MILL HEAD



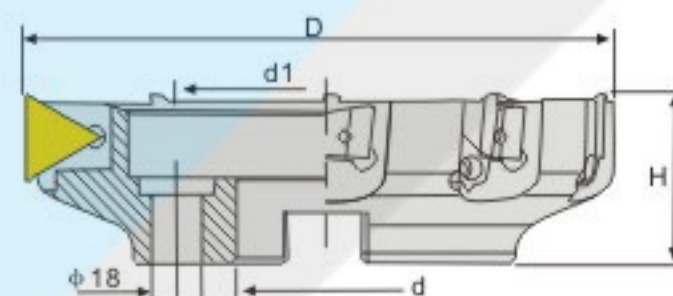
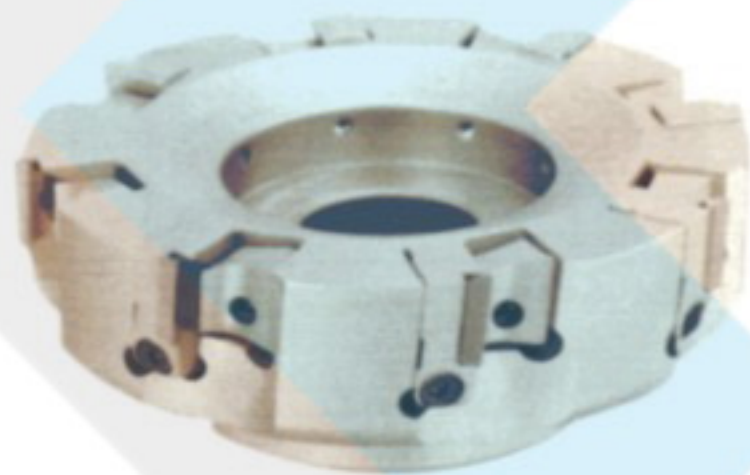
| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |    |    | 刀片型號<br>Insert | 傘形壓板<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|----|----|----------------|---------------|--------------|
|                     |             | D            | d  | H  |                |               |              |
| <b>TP90</b> 50-22   | 3           | 50           | 22 | 50 | TPMN1603       | M6            | WRN-M3T      |
| 63-22               | 3           | 63           | 22 | 50 | TPMN2204       | M8            | WRN-M4T      |
| 80-27               | 4           | 80           | 27 | 50 |                |               |              |
| 100-32              | 4           | 100          | 32 | 63 |                |               |              |
| 125-40              | 6           | 125          | 40 | 63 |                |               |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

### 特點/Feature

- 銑削加工, 小馬力銑床及M/C加工用。 -Fit for high speed processing of cutting and millig machine of machine center with horse power.
- 隅角90度。 -Angle:90°

# TP90° 直角面銑刀頭 SQUARE FACE MILL HEAD



| 型號<br>Specification  | 刃數<br>Teeth | 外形尺寸(mm)Size |        |       |    |
|----------------------|-------------|--------------|--------|-------|----|
|                      |             | D            | d      | D1    | H  |
| <b>TP90</b> 160-50.8 | 8           | 160          | 50.8   | -     | 63 |
| 200-47.625           | 10          | 200          | 47.625 | 101.6 |    |
| 250-47.625           | 12          | 250          | 47.625 | 101.6 |    |
| 300-47.625           | 14          | 300          | 47.625 | 101.6 |    |

| 型號<br>Specification  | 刃數<br>Teeth | 外形尺寸(mm)Size |    |       |    |
|----------------------|-------------|--------------|----|-------|----|
|                      |             | D            | d  | D1    | H  |
| <b>TP90</b> 160-50.8 | 8           | 160          | 40 | -     | 63 |
| 200-47.625           | 10          | 200          | 40 | -     |    |
| 250-47.625           | 12          | 250          | 60 | 101.6 |    |
| 300-47.625           | 14          | 300          | 60 | 101.6 |    |

### 替換零件 Replacing fittings



### 使用刀片規格 Insert specification



注: 只要更換刀片座, 同一個TP刀頭可重複利用。  
NOTICE: If replacing insert sert, the TP head mill can use again.

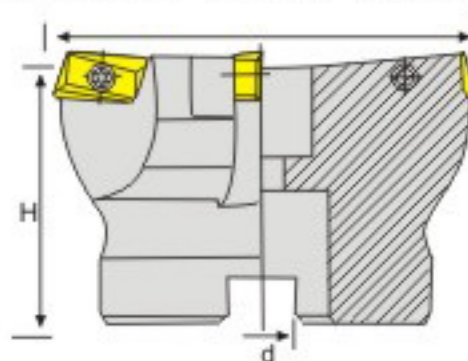
### 特點/Feature

- 銑削加工, 小馬力銑床及M/C加工用。 -Fit for high speed processing of cutting and millig machine of machine center with horse power.
- 隅角90度。 -Angle:90°



# RAP75° 平面銑刀頭

## SQUARE FACE MILL HEAD



使用APMT1135604  
廢棄刀片 節約成本

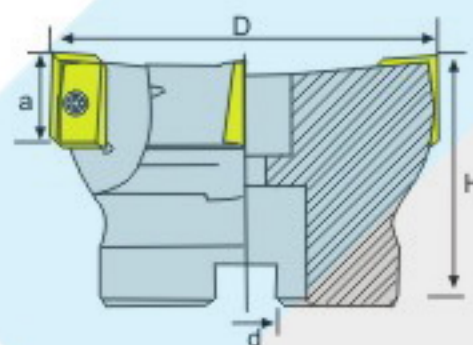
| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |    | 刀片型號<br>Insert | 壓板<br>Clamp | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|----|----------------|-------------|--------------|
|                     |             | D            | d     | H  |                |             |              |
| <b>RAP</b> 63-25.4  | 4           | 63           | 25.4  | 50 | APMT1604       | M4          | T15          |
| 80-31.75            | 5           | 80           | 31.75 |    |                |             |              |
| 63-22               | 4           | 63           | 22    |    |                |             |              |
| 80-27               | 5           | 80           | 27    |    |                |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT

### 特點/Feature

- 裝400R系列使用后的報廢刀片,刀片損耗成本為零.
- This insert is using abandon insert of 400Rseries,the insert wastage is in zero.

## 400R直角平面銑刀頭



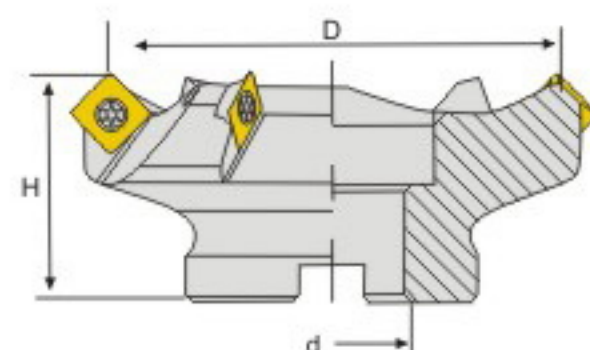
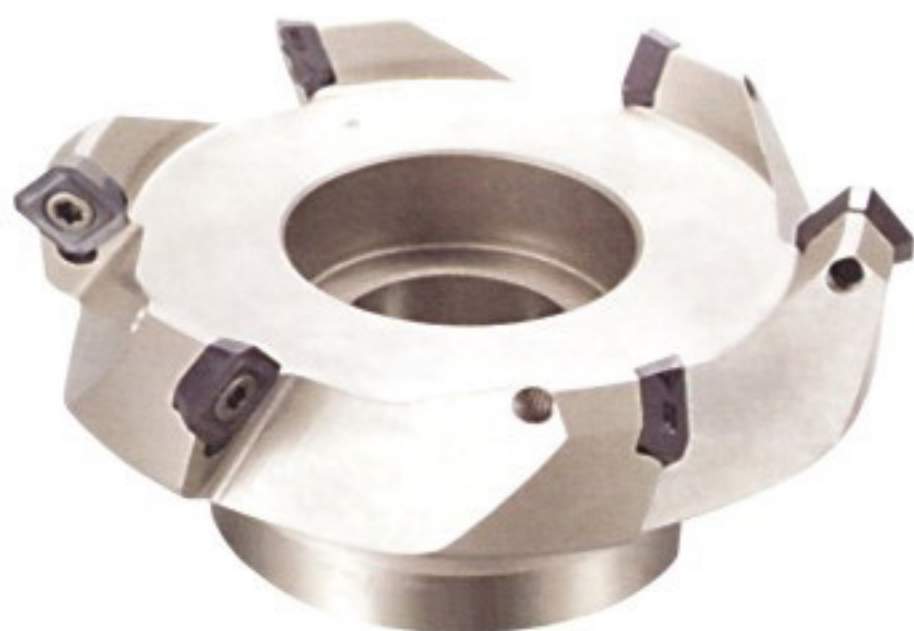
| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |    |    | 刀片型號<br>Insert | 螺絲<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|----|----|----------------|-------------|--------------|
|                     |             | D            | d     | a  | H  |                |             |              |
| <b>400R</b> 50-22   | 3           | 50           | 22    | 14 | 50 | APMT1604PDER   | M4          | T15          |
| 50-22               | 4           | 50           | 22    |    |    |                |             |              |
| 50-25.4             | 3           | 50           | 25.4  |    |    |                |             |              |
| 50-25.4             | 4           | 50           | 25.4  |    |    |                |             |              |
| 63-22               | 4           | 63           | 22    |    |    |                |             |              |
| 63-22               | 5           | 63           | 22    |    |    |                |             |              |
| 63-25.4             | 4           | 63           | 25.4  |    |    |                |             |              |
| 63-25.4             | 5           | 63           | 25.4  |    |    |                |             |              |
| 80-25.4             | 5           | 80           | 25.4  |    |    |                |             |              |
| 80-27               | 5           | 80           | 27    |    |    |                |             |              |
| 100-31.75           | 6           | 100          | 31.75 |    |    |                |             |              |
| 100-32              | 6           | 100          | 32    |    |    |                |             |              |
| 125-38.1            | 8           | 125          | 38.1  | 14 | 63 | APMT1604PDER   | M4          | T15          |
| 125-40              | 8           | 125          | 40    |    |    |                |             |              |
| 160-40              | 8           | 160          | 40    |    |    |                |             |              |
| 160-50.8            | 8           | 160          | 50.8  |    |    |                |             |              |
|                     |             |              |       |    |    |                |             |              |

適用SUITABLE: 三菱刀片MITSUBISHI INSERT



# KM12 高速平面銑刀頭

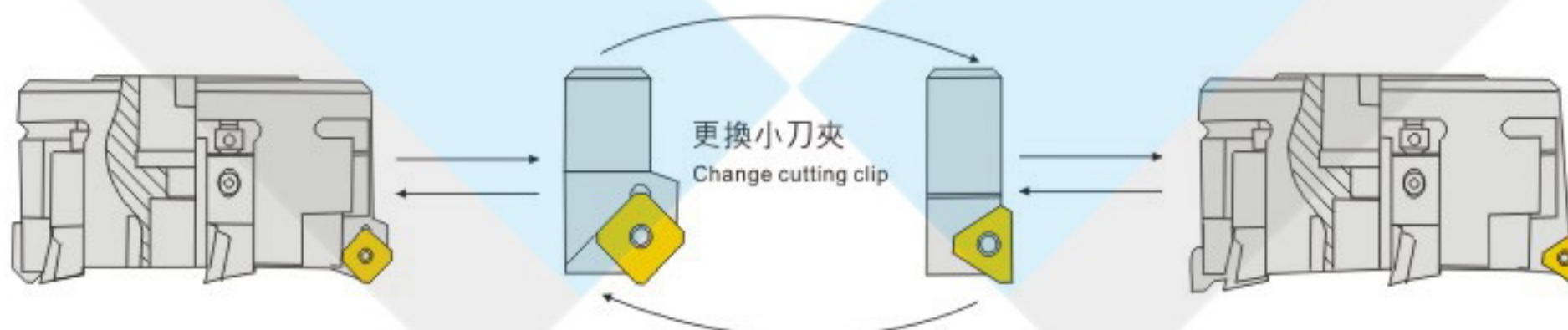
## HIGH SPEED FACE MILL HEAD



| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |       |    | 刀片型號<br>Insert | 傘形壓板<br>Screw | 扳手<br>Wrench |
|---------------------|-------------|--------------|-------|----|----------------|---------------|--------------|
|                     |             | D            | d     | H  |                |               |              |
| <b>KM12</b> 50-22   | 4           | 50           | 22    | 50 | SEKT1204       | M5            | T20          |
| 63-22               | 5           | 63           | 22    | 50 |                |               |              |
| 63-25.4             | 5           | 63           | 25.4  | 50 |                |               |              |
| 80-27               | 5           | 80           | 27    | 50 |                |               |              |
| 80-31.75            | 5           | 80           | 31.75 | 50 |                |               |              |
| 100-32.75           | 6           | 100          | 31.75 | 50 |                |               |              |
| 100-32              | 6           | 100          | 32    | 50 |                |               |              |
| 125-38.1            | 6           | 125          | 38.1  | 63 |                |               |              |
| 125-40              | 6           | 125          | 40    | 63 |                |               |              |

適用SUITABLE: 斯特拉姆或克洛依刀片 STEELRAM OR KORLOY INSERT

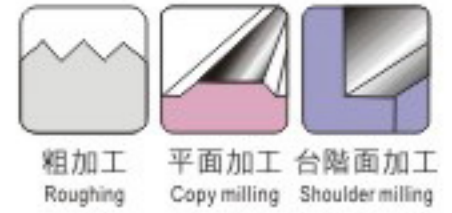
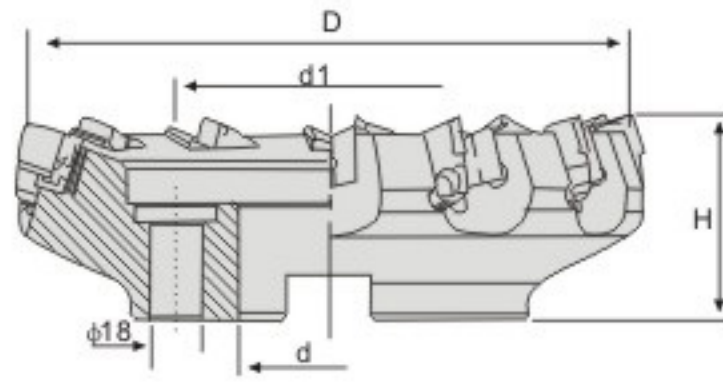
## FP 鋁合金平面銑刀頭 ALUMINUM ALLOY OF FACE MILL HEAD



- 大前角構設計，切削輕快，最適合有色金屬精加工。
- 刀片採用螺釘式壓緊結構，容屑空間大，排屑流暢。
- 有動平衡調節結構。
- 刀體採用輕合金材料，在滿足刀體強度時，刀具重量較輕，適合準高速銑削加工。
- 45度主偏角和90度主偏角鋁合金面銑刀的基體相同，通過更換刀夾滿足不同主偏角加工的需要。
- 可轉位鋁合金面銑刀也適用灰鑄鐵的精加工。
- The structural design is large anterior horn;easily for cutting,and well suited to the finish-cutting for nonferrous metals.
- The inserts use compress structure of screw-type,there will be larger chip space and more fluent chip removal.
- Having a dynamic balancing adjust structure.
- The light alloy materials are adopted;so the cutting tools feel light when the knife strength is satisfied,it is good for the quasi high speed milling process.
- Whether the main declinator is 45° or90° ,the matrix of face milling of aluminum alloy is the same,It can meet the demands of different main declination by replacing tooling holder.
- Indexable aluminum alloy milling cutter is also suited to finish machining of the gray castiron.



# FP45° 直角面銑刀頭 FACE MILL HEAD



| 型號<br>Specification  | 刃數<br>Teeth | 外形尺寸(mm)Size |        |       |    |
|----------------------|-------------|--------------|--------|-------|----|
|                      |             | D            | d      | d1    | H  |
| <b>FP45-</b> 80-25.4 | 5           | 80           | 25.4   | -     | 50 |
| 100-31.75            |             | 100          | 31.75  | -     |    |
| 125-38.1             | 6           | 125          | 38.1   | -     | 63 |
| 160-50.8             |             |              |        |       |    |
| 200-47.625           | 10          | 200          | 47.625 | 101.6 | 63 |
| 250-47.625           | 12          | 250          | 47.625 | 101.6 |    |
| 300-47.625           | 14          | 300          | 47.625 | 101.6 |    |

| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |    |       |    |
|---------------------|-------------|--------------|----|-------|----|
|                     |             | D            | d  | d1    | H  |
| <b>FP45-</b> 80-27  | 5           | 80           | 27 | -     | 50 |
| 100-32              |             | 100          | 32 | -     |    |
| 125-40              | 6           | 125          | 40 | -     | 63 |
| 160-40              |             |              |    |       |    |
| 200-60              | 10          | 200          | 60 | 101.6 | 63 |
| 250-60              | 12          | 250          | 60 | 101.6 |    |
| 300-60              | 14          | 300          | 60 | 101.6 |    |

### 替換零件 Replacing fittings



M5\*16



FC2550

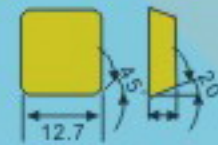


SV-128170-15

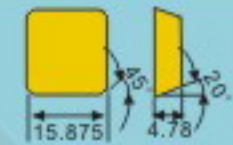


TH-40

### 使用刀片規格 Insert specification



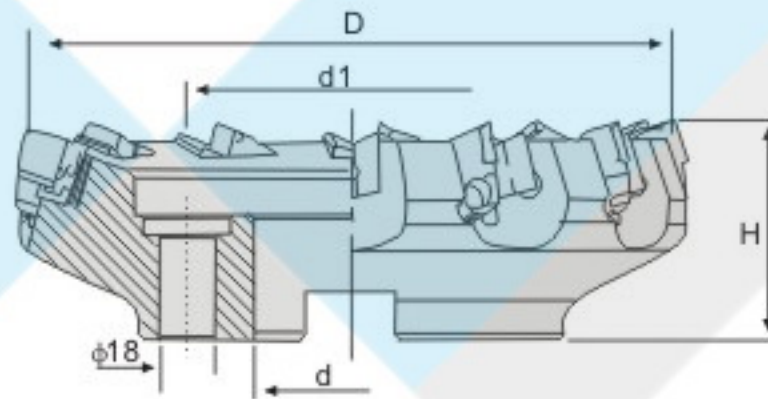
SEKN1203



SEKN1504

注:只要更換刀片座,同一個FP規格刀頭可使用權SEKN1203,SEKN1504二種刀片。  
NOTICE:If replacing insert seat,the FP head mill can use SEKN1203 and SEKN1504.

# FP75° 平面銑刀頭 FACE MILL HEAD



| 型號<br>Specification  | 刃數<br>Teeth | 外形尺寸(mm)Size |        |       |    |
|----------------------|-------------|--------------|--------|-------|----|
|                      |             | D            | d      | d1    | H  |
| <b>FP75-</b> 80-25.4 | 5           | 80           | 25.4   | -     | 50 |
| 100-31.75            |             | 100          | 31.75  | -     |    |
| 125-38.1             | 8           | 125          | 38.1   | -     | 63 |
| 160-50.8             |             |              |        |       |    |
| 200-47.625           | 12          | 200          | 47.625 | 101.6 | 63 |
| 250-47.625           | 14          | 250          | 47.625 | 101.6 |    |
| 300-47.625           | 16          | 300          | 47.625 | 101.6 |    |

| 型號<br>Specification | 刃數<br>Teeth | 外形尺寸(mm)Size |    |       |    |
|---------------------|-------------|--------------|----|-------|----|
|                     |             | D            | d  | d1    | H  |
| <b>FP75-</b> 80-27  | 5           | 80           | 27 | -     | 50 |
| 100-32              |             | 100          | 32 | -     |    |
| 125-40              | 8           | 125          | 40 | -     | 63 |
| 160-40              |             |              |    |       |    |
| 200-60              | 12          | 200          | 60 | 101.6 | 63 |
| 250-60              | 14          | 250          | 60 | 101.6 |    |
| 300-60              | 16          | 300          | 60 | 101.6 |    |

### 替換零件 Replacing fittings



M5\*16



FC2550

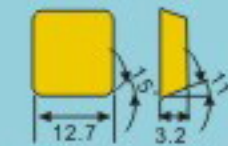


SV-128170-15

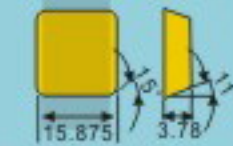


TH-40

### 使用刀片規格 Insert specification



SEKN120308



SEKN1504EDTR-20

注:只要更換刀片座,同一個FP規格刀頭可使用權SEKN1203,SEKN1504二種刀片。  
NOTICE:If replacing insert seat,the FP head mill can use SEKN1203 and SEKN1504.