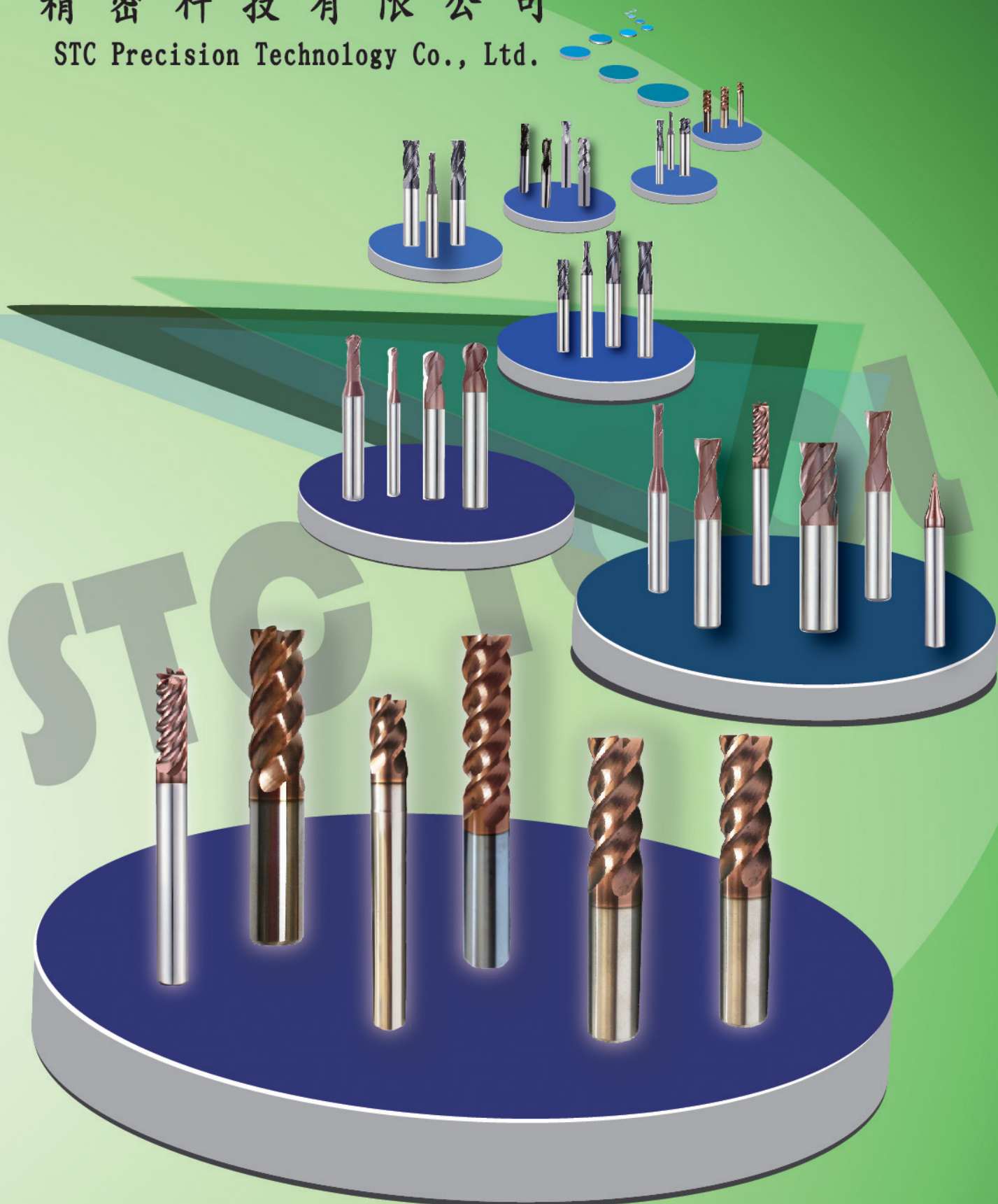


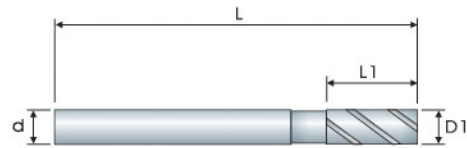
# 新泰鋁

精密科技有限公司

STC Precision Technology Co., Ltd.



### STC EPOCH POWER MILL Regular Type



單位(unit):mm

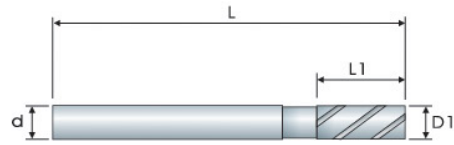
| 型號            | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|---------------|---------|----------|--------------|----------------|------------|--------------|
| MODE          | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| STC-EPM4010-4 | ●       | 1        | 3            | 50             | 4          | 4            |
| STC-EPM4015-4 | ●       | 1.5      | 4            | 50             | 4          | 4            |
| STC-EPM4020-4 | ●       | 2        | 6            | 50             | 4          | 4            |
| STC-EPM4025-4 | ●       | 2.5      | 8            | 50             | 4          | 4            |
| STC-EPM4030-4 | ●       | 3        | 8            | 50             | 4          | 4            |
| STC-EPM4040-4 | ●       | 4        | 11           | 50             | 4          | 4            |
| STC-EPM4020-6 | ●       | 2        | 6            | 50             | 6          | 4            |
| STC-EPM4030-6 | ●       | 3        | 8            | 50             | 6          | 4            |
| STC-EPM4040-6 | ●       | 4        | 11           | 50             | 6          | 4            |
| STC-EPM4050   | ●       | 5        | 13           | 50             | 6          | 4            |
| STC-EPM4060   | ●       | 6        | 16           | 50             | 6          | 4            |
| STC-EPM4080   | ●       | 8        | 20           | 60             | 8          | 4            |
| STC-EPM4100   | ●       | 10       | 30           | 75             | 10         | 4            |
| STC-EPM4120   |         | 12       | 32           | 75             | 12         | 4            |
| STC-EPM4160   | ●       | 16       | 40           | 100            | 16         | 4            |
| STC-EPM4200   | ●       | 20       | 45           | 100            | 20         | 4            |

●印: 標準在庫品.Stocked items

◎ 優Excellent ● 可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             | ●               |               | ●                       | ●               | ●                |





單位(unit):mm

| 型號                   | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|----------------------|---------|----------|--------------|----------------|------------|--------------|
| MODE                 | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| STC-EPM-LS4040-04075 | ●       | 4        | 11           | 75             | 4          | 4            |
| STC-EPM-LS4040-04100 | ●       | 4        | 11           | 100            | 4          | 4            |
| STC-EPM-LS4060-06075 | ●       | 6        | 16           | 75             | 6          | 4            |
| STC-EPM-LS4060-06100 | ●       | 6        | 16           | 100            | 6          | 4            |
| STC-EPM-LS4080-08075 | ●       | 8        | 20           | 75             | 8          | 4            |
| STC-EPM-LS4080-08100 | ●       | 8        | 20           | 100            | 8          | 4            |
| STC-EPM-LS4080-08150 | □       | 8        | 20           | 150            | 8          | 4            |
| STC-EPM-LS4100-10100 | ●       | 10       | 30           | 100            | 10         | 4            |
| STC-EPM-LS4100-10150 | □       | 10       | 30           | 150            | 10         | 4            |
| STC-EPM-LS4120-12100 | ●       | 12       | 32           | 100            | 12         | 4            |
| STC-EPM-LS4120-12150 | □       | 12       | 32           | 150            | 12         | 4            |
| STC-EPM-LS4160-16150 | □       | 16       | 40           | 150            | 16         | 4            |
| STC-EPM-LS4200-20150 | □       | 20       | 45           | 150            | 20         | 4            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             | ●               |               | ●                       | ●               | ●               |

### STC EPOCH POWER MILL Radius

Micro  
MG

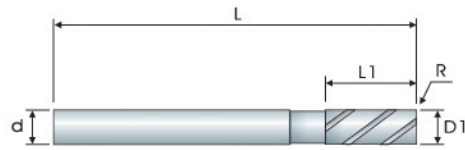
HSN2

HRC  
60

43°

4 Flute

Shank  
h6



單位(unit):mm

| 型號                   | 在庫      | 直徑 D1    | 圓鼻            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|----------------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE                 | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| STC-EPM-RS-4010-02-4 | ●       | 1        | 0.2R          | 3            | 50             | 4          | 4            |
| STC-EPM-RS-4015-02-4 | ●       | 1.5      | 0.2R          | 4            | 50             | 4          | 4            |
| STC-EPM-RS-4020-02-4 | ●       | 2        | 0.2R          | 6            | 50             | 4          | 4            |
| STC-EPM-RS-4020-03-4 | ●       | 2        | 0.3R          | 6            | 50             | 4          | 4            |
| STC-EPM-RS-4020-05-4 | ●       | 2        | 0.5R          | 6            | 50             | 4          | 4            |
| STC-EPM-RS-4030-02-4 | ●       | 3        | 0.2R          | 8            | 50             | 4          | 4            |
| STC-EPM-RS-4030-03-4 | ●       | 3        | 0.3R          | 8            | 50             | 4          | 4            |
| STC-EPM-RS-4030-05-4 | ●       | 3        | 0.5R          | 8            | 50             | 4          | 4            |
| STC-EPM-RS-4040-02-4 | ●       | 4        | 0.2R          | 10           | 50             | 4          | 4            |
| STC-EPM-RS-4040-03-4 | ●       | 4        | 0.3R          | 10           | 50             | 4          | 4            |
| STC-EPM-RS-4040-05-4 | ●       | 4        | 0.5R          | 10           | 50             | 4          | 4            |
| STC-EPM-RS-4040-10-4 | ●       | 4        | 1R            | 10           | 50             | 4          | 4            |
| STC-EPM-RS-4040-02-6 | ●       | 4        | 0.2R          | 10           | 50             | 6          | 4            |
| STC-EPM-RS-4040-03-6 | ●       | 4        | 0.3R          | 10           | 50             | 6          | 4            |
| STC-EPM-RS-4040-05-6 | ●       | 4        | 0.5R          | 10           | 50             | 6          | 4            |
| STC-EPM-RS-4040-10-6 | ●       | 4        | 1R            | 10           | 50             | 6          | 4            |
| STC-EPM-RS-4060-02   | ●       | 6        | 0.2R          | 15           | 50             | 6          | 4            |
| STC-EPM-RS-4060-03   | ●       | 6        | 0.3R          | 15           | 50             | 6          | 4            |
| STC-EPM-RS-4060-05   | ●       | 6        | 0.5R          | 15           | 50             | 6          | 4            |
| STC-EPM-RS-4060-10   | ●       | 6        | 1R            | 15           | 50             | 6          | 4            |
| STC-EPM-RS-4080-03   | ●       | 8        | 0.3R          | 20           | 60             | 8          | 4            |
| STC-EPM-RS-4080-05   | ●       | 8        | 0.5R          | 20           | 60             | 8          | 4            |
| STC-EPM-RS-4080-10   | ●       | 8        | 1R            | 20           | 60             | 8          | 4            |
| STC-EPM-RS-4080-15   | ●       | 8        | 1.5R          | 20           | 60             | 8          | 4            |
| STC-EPM-RS-4080-20   | ●       | 8        | 2R            | 20           | 60             | 8          | 4            |
| STC-EPM-RS-4100-03   | ●       | 10       | 0.3R          | 25           | 75             | 10         | 4            |
| STC-EPM-RS-4100-05   | ●       | 10       | 0.5R          | 25           | 75             | 10         | 4            |
| STC-EPM-RS-4100-10   | ●       | 10       | 1R            | 25           | 75             | 10         | 4            |
| STC-EPM-RS-4100-15   | ●       | 10       | 1.5R          | 25           | 75             | 10         | 4            |
| STC-EPM-RS-4100-20   | ●       | 10       | 2R            | 25           | 75             | 10         | 4            |
| STC-EPM-RS-4120-05   | ●       | 12       | 0.5R          | 30           | 75             | 12         | 4            |

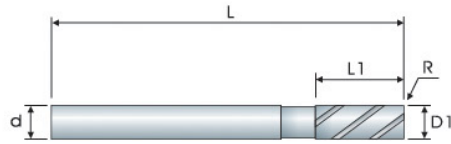
●印: 標準在庫品.Stocked items

□印: 無在庫品, 印製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             | ●               |               | ●                       | ●               | ●                    |

## STC EPOCH POWER MILL Radius



單位(unit):mm

| 型號                 | 在庫      | 直徑 D1    | 圓鼻            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE               | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| STC-EPM-RS-4120-10 | ●       | 12       | 1R            | 30           | 75             | 12         | 4            |
| STC-EPM-RS-4120-15 | ●       | 12       | 1.5R          | 30           | 75             | 12         | 4            |
| STC-EPM-RS-4120-20 | ●       | 12       | 2R            | 30           | 75             | 12         | 4            |
| STC-EPM-RS-4120-30 | ●       | 12       | 3R            | 30           | 75             | 12         | 4            |
| STC-EPM-RS-4160-10 | □       | 16       | 1R            | 40           | 100            | 16         | 4            |
| STC-EPM-RS-4160-15 | □       | 16       | 1.5R          | 40           | 100            | 16         | 4            |
| STC-EPM-RS-4160-20 | □       | 16       | 2R            | 40           | 100            | 16         | 4            |
| STC-EPM-RS-4160-30 | □       | 16       | 3R            | 40           | 100            | 16         | 4            |
| STC-EPM-RS-4200-10 | □       | 20       | 1R            | 45           | 100            | 20         | 4            |
| STC-EPM-RS-4200-15 | □       | 20       | 1.5R          | 45           | 100            | 20         | 4            |
| STC-EPM-RS-4200-20 | □       | 20       | 2R            | 45           | 100            | 20         | 4            |
| STC-EPM-RS-4200-30 | □       | 20       | 3R            | 45           | 100            | 20         | 4            |

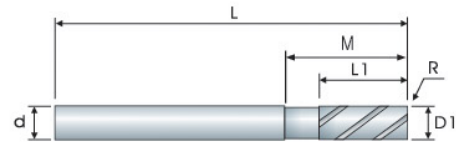
●印: 標準在庫品.Stocked items

□印: 無在庫品, 印製生產品

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             | ●               |               | ●                       | ●               | ●                |





單位(unit):mm

| 型號                     | 在庫      | 直徑 D1    | 圓鼻            | 刃長L1         | 首下長M              | 全長L            | 柄徑d        | 刃數T          |
|------------------------|---------|----------|---------------|--------------|-------------------|----------------|------------|--------------|
| MODE                   | Stocket | Tool Dia | Corner Radius | Flute Length | Under Neck Length | Overall Length | Shank Dia. | No. of Flute |
| STC-EPM-RSLN-4030-02-4 | ●       | 3        | 0.2R          | 4.5          | 9                 | 50             | 4          | 4            |
| STC-EPM-RSLN-4030-05-4 | ●       | 3        | 0.5R          | 4.5          | 9                 | 50             | 4          | 4            |
| STC-EPM-RSLN-4040-02-4 | ●       | 4        | 0.2R          | 6            | 12                | 50             | 4          | 4            |
| STC-EPM-RSLN-4040-05-4 | ●       | 4        | 0.5R          | 6            | 12                | 50             | 4          | 4            |
| STC-EPM-RSLN-4030-02-6 | ●       | 3        | 0.2R          | 4.5          | 9                 | 60             | 6          | 4            |
| STC-EPM-RSLN-4030-05-6 | ●       | 3        | 0.5R          | 4.5          | 9                 | 60             | 6          | 4            |
| STC-EPM-RSLN-4040-02-6 | ●       | 4        | 0.2R          | 6            | 12                | 60             | 6          | 4            |
| STC-EPM-RSLN-4040-05-6 | ●       | 4        | 0.5R          | 6            | 12                | 60             | 6          | 4            |
| STC-EPM-RSLN-4060-03   | ●       | 6        | 0.3R          | 9            | 18                | 75             | 6          | 4            |
| STC-EPM-RSLN-4060-05   | ●       | 6        | 0.5R          | 9            | 18                | 75             | 6          | 4            |
| STC-EPM-RSLN-4060-10   | ●       | 6        | 1R            | 9            | 18                | 75             | 6          | 4            |
| STC-EPM-RSLN-4080-05   | ●       | 8        | 0.5R          | 12           | 24                | 100            | 8          | 4            |
| STC-EPM-RSLN-4080-10   | ●       | 8        | 1R            | 12           | 24                | 100            | 8          | 4            |
| STC-EPM-RSLN-4080-15   | ●       | 8        | 1.5R          | 12           | 24                | 100            | 8          | 4            |
| STC-EPM-RSLN-4100-05   | ●       | 10       | 0.5R          | 15           | 30                | 100            | 10         | 4            |
| STC-EPM-RSLN-4100-10   | ●       | 10       | 1R            | 15           | 30                | 100            | 10         | 4            |
| STC-EPM-RSLN-4100-15   | ●       | 10       | 1.5R          | 15           | 30                | 100            | 10         | 4            |
| STC-EPM-RSLN-4120-05   | ●       | 12       | 0.5R          | 15           | 36                | 100            | 12         | 4            |
| STC-EPM-RSLN-4120-10   | ●       | 12       | 1R            | 18           | 36                | 100            | 12         | 4            |
| STC-EPM-RSLN-4120-15   | ●       | 12       | 1.5R          | 18           | 36                | 100            | 12         | 4            |
| STC-EPM-RSLN-4120-20   | ●       | 12       | 2R            | 18           | 36                | 100            | 12         | 4            |

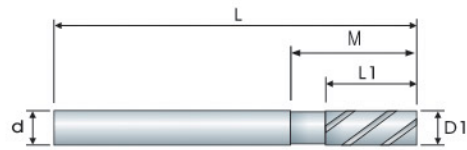
●印: 標準在庫品.Stocked items

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             | ●               |               | ●                       | ●               | ●                    |

## 超高硬度全鎢鋼銑刀-短刀長頸

### STC EPOCH POWER MILL Short-Long Neck



單位(unit):mm

| 型號                     | 在庫      | 直徑 D1    | 刃長L1         | 首下長M              | 全長L            | 柄徑d        | 刃數T          |
|------------------------|---------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE                   | Stocket | Tool Dia | Flute Length | Under Neck Length | Overall Length | Shank Dia. | No. of Flute |
| STC-EPM-SLN-4010-030-4 | ●       | 1        | 1.5          | 3                 | 50             | 4          | 4            |
| STC-EPM-SLN-4015-045-4 | ●       | 1.5      | 2.3          | 4.5               | 50             | 4          | 4            |
| STC-EPM-SLN-4020-060-4 | ●       | 2        | 3            | 6                 | 50             | 4          | 4            |
| STC-EPM-SLN-4030-090-4 | ●       | 3        | 4.5          | 9                 | 50             | 4          | 4            |
| STC-EPM-SLN-4040-120-4 | ●       | 4        | 6            | 12                | 50             | 4          | 4            |
| STC-EPM-SLN-4040-120-6 | ●       | 4        | 6            | 12                | 50             | 6          | 4            |
| STC-EPM-SLN-4050-150   | ●       | 5        | 7.5          | 15                | 50             | 6          | 4            |
| STC-EPM-SLN-4060-180   | ●       | 6        | 9            | 18                | 50             | 6          | 4            |
| STC-EPM-SLN-4080-240   | ●       | 8        | 12           | 24                | 60             | 8          | 4            |
| STC-EPM-SLN-4100-300   | ●       | 10       | 15           | 30                | 75             | 10         | 4            |
| STC-EPM-SLN-4120-360   | ●       | 12       | 18           | 36                | 75             | 12         | 4            |
| STC-EPM-SLN-4160-480   | □       | 16       | 24           | 48                | 100            | 16         | 4            |
| STC-EPM-SLN-4200-600   | □       | 20       | 30           | 60                | 100            | 20         | 4            |

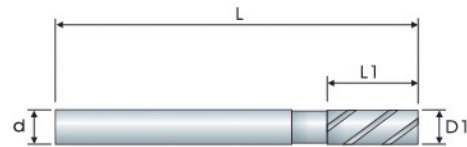
●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             | ●               |               | ●                       | ●               | ●                    |

## STC EPOCH POWER MILL Long Cutting Length



單位(unit):mm

| 型號             | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|----------------|---------|----------|--------------|----------------|------------|--------------|
| MODE           | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| STC-EPML4010-4 | □       | 1        | 4            | 50             | 4          | 4            |
| STC-EPML4020-4 | □       | 2        | 8            | 50             | 4          | 4            |
| STC-EPML4030-4 | □       | 3        | 12           | 55             | 4          | 4            |
| STC-EPML4040-4 | □       | 4        | 16           | 50             | 4          | 4            |
| STC-EPML4030-6 | ●       | 3        | 12           | 75             | 6          | 4            |
| STC-EPML4040-6 | ●       | 4        | 16           | 75             | 6          | 4            |
| STC-EPML4050   | ●       | 5        | 20           | 75             | 6          | 4            |
| STC-EPML4060   | ●       | 6        | 25           | 75             | 6          | 4            |
| STC-EPML4080   | ●       | 8        | 40           | 100            | 8          | 4            |
| STC-EPML4100   | ●       | 10       | 45           | 100            | 10         | 4            |
| STC-EPML4120   | ●       | 12       | 55           | 100            | 12         | 4            |
| STC-EPML4160   | ●       | 16       | 65           | 150            | 16         | 4            |
| STC-EPML4200   | ●       | 20       | 75           | 150            | 20         | 4            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             | ●               |               | ●                       | ●               | ●                    |



CARBIDE END MILLS - Square Type 2 Flutes- Miniature



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCS200204A | ●       | 0.2      | 0.4          | 50             | 4          | 2            |
| JCS200304A | ●       | 0.3      | 0.6          | 50             | 4          | 2            |
| JCS200404A | ●       | 0.4      | 0.8          | 50             | 4          | 2            |
| JCS200504A | ●       | 0.5      | 1            | 50             | 4          | 2            |
| JCS200604A | ●       | 0.6      | 1.2          | 50             | 4          | 2            |
| JCS200704A | ●       | 0.7      | 1.4          | 50             | 4          | 2            |
| JCS200804A | ●       | 0.8      | 1.6          | 50             | 4          | 2            |
| JCS200904A | ●       | 0.9      | 1.8          | 50             | 4          | 2            |
| JCS201104A | ●       | 1.1      | 3            | 50             | 4          | 2            |
| JCS201204A | ●       | 1.2      | 3            | 50             | 4          | 2            |
| JCS201304A | ●       | 1.3      | 3            | 50             | 4          | 2            |
| JCS201404A | ●       | 1.4      | 3            | 50             | 4          | 2            |
| JCS201604A | ●       | 1.6      | 4            | 50             | 4          | 2            |
| JCS201704A | ●       | 1.7      | 4            | 50             | 4          | 2            |
| JCS201804A | ●       | 1.8      | 4            | 50             | 4          | 2            |
| JCS201904A | ●       | 1.9      | 4            | 50             | 4          | 2            |
| JCS202104A | ●       | 2.1      | 6            | 50             | 4          | 2            |
| JCS202204A | ●       | 2.2      | 6            | 50             | 4          | 2            |
| JCS202304A | ●       | 2.3      | 6            | 50             | 4          | 2            |
| JCS202404A | ●       | 2.4      | 6            | 50             | 4          | 2            |
| JCS202604A | ●       | 2.6      | 8            | 50             | 4          | 2            |
| JCS202704A | ●       | 2.7      | 8            | 50             | 4          | 2            |
| JCS202804A | ●       | 2.8      | 8            | 50             | 4          | 2            |
| JCS202904A | ●       | 2.9      | 8            | 50             | 4          | 2            |

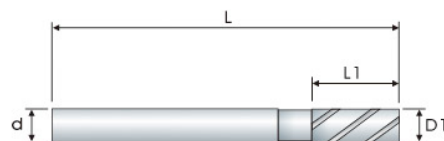
●印: 標準在庫品.Stocked items

◎ 優Excellent ● 可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼2刃立銑刀

### CARBIDE END MILLS - Square Type 2 Flutes



單位(unit):mm

| 型號         | 在庫                                  | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|-------------------------------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket                             | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCS201003A | <input type="checkbox"/>            | 1        | 3            | 50             | 3          | 2            |
| JCS201503A | <input type="checkbox"/>            | 1.5      | 4            | 50             | 3          | 2            |
| JCS202003A | <input type="checkbox"/>            | 2        | 6            | 50             | 3          | 2            |
| JCS202503A | <input type="checkbox"/>            | 2.5      | 8            | 50             | 3          | 2            |
| JCS203003A | <input type="checkbox"/>            | 3        | 9            | 50             | 3          | 2            |
| JCS201004A | <input checked="" type="checkbox"/> | 1        | 3            | 50             | 4          | 2            |
| JCS201504A | <input checked="" type="checkbox"/> | 1.5      | 4            | 50             | 4          | 2            |
| JCS202004A | <input checked="" type="checkbox"/> | 2        | 6            | 50             | 4          | 2            |
| JCS202504A | <input checked="" type="checkbox"/> | 2.5      | 8            | 50             | 4          | 2            |
| JCS203004A | <input checked="" type="checkbox"/> | 3        | 9            | 50             | 4          | 2            |
| JCS203504A | <input checked="" type="checkbox"/> | 3.5      | 10           | 50             | 4          | 2            |
| JCS204004A | <input checked="" type="checkbox"/> | 4        | 11           | 50             | 4          | 2            |
| JCS201006A | <input checked="" type="checkbox"/> | 1        | 3            | 50             | 6          | 2            |
| JCS201506A | <input checked="" type="checkbox"/> | 1.5      | 4            | 50             | 6          | 2            |
| JCS202006A | <input checked="" type="checkbox"/> | 2        | 6            | 50             | 6          | 2            |
| JCS202506A | <input checked="" type="checkbox"/> | 2.5      | 8            | 50             | 6          | 2            |
| JCS203006A | <input checked="" type="checkbox"/> | 3        | 9            | 50             | 6          | 2            |
| JCS203506A | <input checked="" type="checkbox"/> | 3.5      | 10           | 50             | 6          | 2            |
| JCS204006A | <input checked="" type="checkbox"/> | 4        | 11           | 50             | 6          | 2            |
| JCS204506A | <input checked="" type="checkbox"/> | 4.5      | 13           | 50             | 6          | 2            |
| JCS205006A | <input checked="" type="checkbox"/> | 5        | 13           | 50             | 6          | 2            |
| JCS205506A | <input checked="" type="checkbox"/> | 5.5      | 13           | 50             | 6          | 2            |
| JCS206006A | <input checked="" type="checkbox"/> | 6        | 16           | 50             | 6          | 2            |
| JCS206508A | <input checked="" type="checkbox"/> | 6.5      | 16           | 60             | 8          | 2            |
| JCS207008A | <input checked="" type="checkbox"/> | 7        | 16           | 60             | 8          | 2            |
| JCS207508A | <input checked="" type="checkbox"/> | 7.5      | 19           | 60             | 8          | 2            |
| JCS208008A | <input checked="" type="checkbox"/> | 8        | 20           | 60             | 8          | 2            |
| JCS208510A | <input checked="" type="checkbox"/> | 8.5      | 20           | 75             | 10         | 2            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼2刃立銑刀

### CARBIDE END MILLS - Square Type 2 Flutes



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCS209010A | ●       | 9        | 20           | 75             | 10         | 2            |
| JCS209510A | ●       | 9.5      | 25           | 75             | 10         | 2            |
| JCS210010A | ●       | 10       | 25           | 75             | 10         | 2            |
| JCS210512A | ●       | 10.5     | 25           | 75             | 12         | 2            |
| JCS211012A | ●       | 11       | 30           | 75             | 12         | 2            |
| JCS211512A | ●       | 11.5     | 30           | 75             | 12         | 2            |
| JCS212012A | ●       | 12       | 32           | 75             | 12         | 2            |
| JCS213016A | □       | 13       | 40           | 100            | 16         | 2            |
| JCS214016A | □       | 14       | 40           | 100            | 16         | 2            |
| JCS215016A | □       | 15       | 40           | 100            | 16         | 2            |
| JCS216016A | ●       | 16       | 40           | 100            | 16         | 2            |
| JCS217020A | □       | 17       | 45           | 100            | 20         | 2            |
| JCS218020A | □       | 18       | 45           | 100            | 20         | 2            |
| JCS219020A | □       | 19       | 45           | 100            | 20         | 2            |
| JCS220020A | ●       | 20       | 45           | 100            | 20         | 2            |
| JCS225025A | ●       | 25       | 45           | 100            | 25         | 2            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎂鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |



## CARBIDE END MILLS - Square Type 4 Flutes



單位(unit):mm

| 型號         | 在庫                                  | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|-------------------------------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket                             | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCS401003A | <input type="checkbox"/>            | 1        | 3            | 50             | 3          | 4            |
| JCS401503A | <input type="checkbox"/>            | 1.5      | 4            | 50             | 3          | 4            |
| JCS402003A | <input type="checkbox"/>            | 2        | 6            | 50             | 3          | 4            |
| JCS402503A | <input type="checkbox"/>            | 2.5      | 8            | 50             | 3          | 4            |
| JCS403003A | <input type="checkbox"/>            | 3        | 9            | 50             | 3          | 4            |
| JCS401004A | <input checked="" type="checkbox"/> | 1        | 3            | 50             | 4          | 4            |
| JCS401504A | <input checked="" type="checkbox"/> | 1.5      | 4            | 50             | 4          | 4            |
| JCS402004A | <input checked="" type="checkbox"/> | 2        | 6            | 50             | 4          | 4            |
| JCS402504A | <input checked="" type="checkbox"/> | 2.5      | 8            | 50             | 4          | 4            |
| JCS403004A | <input checked="" type="checkbox"/> | 3        | 9            | 50             | 4          | 4            |
| JCS403504A | <input checked="" type="checkbox"/> | 3.5      | 10           | 50             | 4          | 4            |
| JCS404004A | <input checked="" type="checkbox"/> | 4        | 11           | 50             | 4          | 4            |
| JCS401006A | <input checked="" type="checkbox"/> | 1        | 3            | 50             | 6          | 4            |
| JCS401506A | <input checked="" type="checkbox"/> | 1.5      | 4            | 50             | 6          | 4            |
| JCS402006A | <input checked="" type="checkbox"/> | 2        | 6            | 50             | 6          | 4            |
| JCS402506A | <input checked="" type="checkbox"/> | 2.5      | 8            | 50             | 6          | 4            |
| JCS403006A | <input checked="" type="checkbox"/> | 3        | 9            | 50             | 6          | 4            |
| JCS403506A | <input checked="" type="checkbox"/> | 3.5      | 10           | 50             | 6          | 4            |
| JCS404006A | <input checked="" type="checkbox"/> | 4        | 11           | 50             | 6          | 4            |
| JCS404506A | <input checked="" type="checkbox"/> | 4.5      | 13           | 50             | 6          | 4            |
| JCS405006A | <input checked="" type="checkbox"/> | 5        | 13           | 50             | 6          | 4            |
| JCS405506A | <input checked="" type="checkbox"/> | 5.5      | 13           | 50             | 6          | 4            |
| JCS406006A | <input checked="" type="checkbox"/> | 6        | 16           | 50             | 6          | 4            |
| JCS406508A | <input checked="" type="checkbox"/> | 6.5      | 16           | 60             | 8          | 4            |
| JCS407008A | <input checked="" type="checkbox"/> | 7        | 16           | 60             | 8          | 4            |
| JCS407508A | <input checked="" type="checkbox"/> | 7.5      | 19           | 60             | 8          | 4            |
| JCS408008A | <input checked="" type="checkbox"/> | 8.0      | 20           | 60             | 8          | 4            |

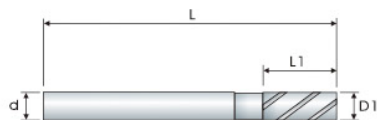
●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎂鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

### CARBIDE END MILLS - Square Type 4 Flutes



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCS408510A | ●       | 8.5      | 20           | 75             | 10         | 4            |
| JCS409010A | ●       | 9        | 20           | 75             | 10         | 4            |
| JCS409510A | ●       | 9.5      | 25           | 75             | 10         | 4            |
| JCS410010A | ●       | 10       | 30           | 75             | 10         | 4            |
| JCS410512A | ●       | 10.5     | 30           | 75             | 12         | 4            |
| JCS411012A | ●       | 11       | 30           | 75             | 12         | 4            |
| JCS411512A | ●       | 11.5     | 30           | 75             | 12         | 4            |
| JCS412012A | ●       | 12       | 32           | 75             | 12         | 4            |
| JCS413016A | ●       | 13       | 40           | 100            | 16         | 4            |
| JCS414016A | ●       | 14       | 40           | 100            | 16         | 4            |
| JCS415016A | ●       | 15       | 40           | 100            | 16         | 4            |
| JCS416016A | ●       | 16       | 40           | 100            | 16         | 4            |
| JCS417020A | ●       | 17       | 45           | 100            | 20         | 4            |
| JCS418020A | ●       | 18       | 45           | 100            | 20         | 4            |
| JCS419020A | ●       | 19       | 45           | 100            | 20         | 4            |
| JCS420020A | ●       | 20       | 45           | 100            | 20         | 4            |
| JCS425025A | ●       | 25       | 45           | 100            | 25         | 4            |

●印: 標準在庫品.Stocked items

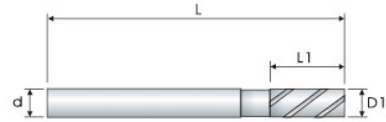
□印: 無在庫品，訂製生產品

◎優 Excellent ●可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼2刃立銑刀 - 長柄型

### CARBIDE END MILLS - Square Type 2 Flutes - Long Shank



單位(unit):mm

| 型號             | 在庫      | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|----------------|---------|----------|--------------|----------------|------------|--------------|
| MODE           | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCSL203003075A | ●       | 3        | 9            | 75             | 3          | 2            |
| JCSL201004075A | □       | 1        | 3            | 75             | 4          | 2            |
| JCSL201504075A | □       | 1.5      | 4            | 75             | 4          | 2            |
| JCSL202004075A | □       | 2        | 6            | 75             | 4          | 2            |
| JCSL203004075A | □       | 3        | 9            | 75             | 4          | 2            |
| JCSL204004075A | ●       | 4        | 11           | 75             | 4          | 2            |
| JCSL204004100A | ●       | 4        | 11           | 100            | 4          | 2            |
| JCSL203006075A | □       | 3        | 9            | 75             | 6          | 2            |
| JCSL204006075A | □       | 4        | 11           | 75             | 6          | 2            |
| JCSL204006100A | □       | 4        | 11           | 100            | 6          | 2            |
| JCSL205006075A | ●       | 5        | 13           | 75             | 6          | 2            |
| JCSL205006100A | ●       | 5        | 13           | 100            | 6          | 2            |
| JCSL206006075A | ●       | 6        | 16           | 75             | 6          | 2            |
| JCSL206006100A | ●       | 6        | 16           | 100            | 6          | 2            |
| JCSL208008075A | ●       | 8        | 20           | 75             | 8          | 2            |
| JCSL208008100A | ●       | 8        | 20           | 100            | 8          | 2            |
| JCSL210010100A | ●       | 10       | 25           | 100            | 10         | 2            |
| JCSL210010150A | ●       | 10       | 25           | 150            | 10         | 2            |
| JCSL212012100A | ●       | 12       | 32           | 100            | 12         | 2            |
| JCSL212012150A | ●       | 12       | 32           | 150            | 12         | 2            |
| JCSL216016150A | ●       | 16       | 40           | 150            | 16         | 2            |
| JCSL220020150A | ●       | 20       | 45           | 150            | 20         | 2            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

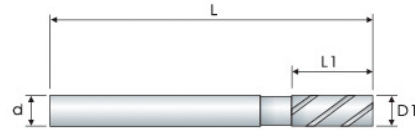
◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |



## 鎢鋼2刃立銑刀 - 長刃長柄型

### CARBIDE END MILLS - Square Type 2 Flutes - Long Shank & Long Cutting Length



單位(unit):mm

| 型號              | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-----------------|---------|----------|--------------|----------------|------------|--------------|
| MODE            | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCSLL201004A    | ●       | 1        | 7            | 50             | 4          | 2            |
| JCSLL201504A    | ●       | 1.5      | 9            | 50             | 4          | 2            |
| JCSLL202004A    | ●       | 2        | 12           | 50             | 4          | 2            |
| JCSLL202504A    | ●       | 2.5      | 12           | 50             | 4          | 2            |
| JCSLL203006A    | ●       | 3        | 15           | 60             | 6          | 2            |
| JCSLL203506A    | ●       | 3.5      | 15           | 60             | 6          | 2            |
| JCSLL204006A    | ●       | 4        | 20           | 75             | 6          | 2            |
| JCSLL204506A    | ●       | 4.5      | 20           | 75             | 6          | 2            |
| JCSLL205006A    | ●       | 5        | 25           | 75             | 6          | 2            |
| JCSLL205506A    | ●       | 5.5      | 25           | 75             | 6          | 2            |
| JCSLL206006A    | ●       | 6        | 30           | 75             | 6          | 2            |
| JCSLL207008A    | ●       | 7        | 30           | 100            | 8          | 2            |
| JCSLL208008A    | ●       | 8        | 40           | 100            | 8          | 2            |
| JCSLL209010A    | ●       | 9        | 40           | 100            | 10         | 2            |
| JCSLL210010A    | ●       | 10       | 40           | 100            | 10         | 2            |
| JCSLL211012A    | ●       | 11       | 40           | 100            | 12         | 2            |
| JCSLL212012A    | ●       | 12       | 50           | 100            | 12         | 2            |
| JCSLL214016A    | □       | 14       | 50           | 150            | 16         | 2            |
| JCSLL216016A    | □       | 16       | 60           | 150            | 16         | 2            |
| JCSLL216016A-75 | □       | 16       | 75           | 150            | 16         | 2            |
| JCSLL220020A    | □       | 20       | 75           | 150            | 20         | 2            |
| JCSLL220020A-90 | □       | 20       | 90           | 200            | 20         | 2            |

●印: 標準在庫品.Stocked items

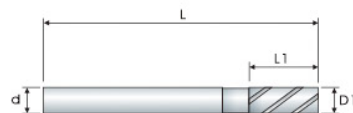
□印: 無在庫品, 訂製生產品

◎優Excellent ●可Good

| 碳鋼            | 合金鋼          | 硬化鋼             |        | 高硬度鋼                 | 銅      | 鑄鐵        | 鋁        | 不銹鋼              | 鈦合金      | 鎳鎳鐵合金   |
|---------------|--------------|-----------------|--------|----------------------|--------|-----------|----------|------------------|----------|---------|
| Carbon Steels | Alloy Steels | Hardened Steels |        | High Hardened Steels | Copper | Cast Iron | Aluminum | Stainless Steels | Titanium | Inconel |
| ~HB225        | HB225~325    | HRC~50          | HRC~55 | HRC~60               |        |           |          |                  |          |         |
| ◎             | ◎            | ◎               |        |                      |        | ●         |          | ●                | ●        | ●       |

## 鎢鋼4刃立銑刀 - 長柄型

### CARBIDE END MILLS - Square Type 4 Flutes - Long Shank



單位(unit):mm

| 型號             | 在庫    | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|----------------|-------|----------|--------------|----------------|------------|--------------|
| MODE           | Stock | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCSL403003075A | ●     | 3        | 9            | 75             | 3          | 4            |
| JCSL401004075A | □     | 1        | 3            | 75             | 4          | 4            |
| JCSL401504075A | □     | 1.5      | 4            | 75             | 4          | 4            |
| JCSL402004075A | □     | 2        | 6            | 75             | 4          | 4            |
| JCSL403004075A | □     | 3        | 9            | 75             | 4          | 4            |
| JCSL404004075A | ●     | 4        | 11           | 75             | 4          | 4            |
| JCSL404004100A | ●     | 4        | 11           | 100            | 4          | 4            |
| JCSL403006075A | □     | 3        | 9            | 75             | 6          | 4            |
| JCSL404006075A | □     | 4        | 11           | 75             | 6          | 4            |
| JCSL404006100A | □     | 4        | 11           | 100            | 6          | 4            |
| JCSL405006075A | ●     | 5        | 13           | 75             | 6          | 4            |
| JCSL405006100A | ●     | 5        | 13           | 100            | 6          | 4            |
| JCSL406006075A | ●     | 6        | 16           | 75             | 6          | 4            |
| JCSL406006100A | ●     | 6        | 16           | 100            | 6          | 4            |
| JCSL408008075A | ●     | 8        | 20           | 75             | 8          | 4            |
| JCSL408008100A | ●     | 8        | 20           | 100            | 8          | 4            |
| JCSL410010100A | ●     | 10       | 30           | 100            | 10         | 4            |
| JCSL410010150A | ●     | 10       | 30           | 150            | 10         | 4            |
| JCSL412012100A | ●     | 12       | 32           | 100            | 12         | 4            |
| JCSL412012150A | ●     | 12       | 32           | 150            | 12         | 4            |
| JCSL416016150A | ●     | 16       | 40           | 150            | 16         | 4            |
| JCSL420020150A | ●     | 20       | 45           | 150            | 20         | 4            |

●印: 標準在庫品.Stocked items

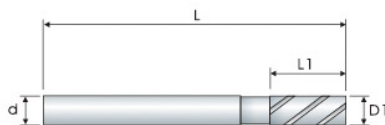
□印: 無在庫品, 訂製生產品

◎優 Excellent ●可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼4刃立銑刀 - 長刃長柄型

### CARBIDE END MILLS - Square Type 4 Flutes - Long Shank & Long Cutting Length



單位(unit):mm

| 型號              | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-----------------|---------|----------|--------------|----------------|------------|--------------|
| MODE            | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCSLL401004A    | ●       | 1        | 7            | 50             | 4          | 4            |
| JCSLL401504A    | ●       | 1.5      | 9            | 50             | 4          | 4            |
| JCSLL402004A    | ●       | 2        | 12           | 50             | 4          | 4            |
| JCSLL402504A    | ●       | 2.5      | 12           | 50             | 4          | 4            |
| JCSLL403006A    | ●       | 3        | 15           | 60             | 6          | 4            |
| JCSLL403506A    | ●       | 3.5      | 15           | 60             | 6          | 4            |
| JCSLL404006A    | ●       | 4        | 20           | 75             | 6          | 4            |
| JCSLL404506A    | ●       | 4.5      | 20           | 75             | 6          | 4            |
| JCSLL405006A    | ●       | 5        | 25           | 75             | 6          | 4            |
| JCSLL405506A    | ●       | 5.5      | 25           | 75             | 6          | 4            |
| JCSLL406006A    | ●       | 6        | 30           | 75             | 6          | 4            |
| JCSLL407008A    | ●       | 7        | 30           | 100            | 8          | 4            |
| JCSLL408008A    | ●       | 8        | 40           | 100            | 8          | 4            |
| JCSLL409010A    | ●       | 9        | 40           | 100            | 10         | 4            |
| JCSLL410010A    | ●       | 10       | 40           | 100            | 10         | 4            |
| JCSLL411012A    | ●       | 11       | 40           | 100            | 12         | 4            |
| JCSLL412012A    | ●       | 12       | 50           | 100            | 12         | 4            |
| JCSLL414016A    | □       | 14       | 50           | 150            | 16         | 4            |
| JCSLL416016A    | □       | 16       | 60           | 150            | 16         | 4            |
| JCSLL416016A-75 | □       | 16       | 75           | 150            | 16         | 4            |
| JCSLL420020A    | □       | 20       | 75           | 150            | 20         | 4            |
| JCSLL420020A-90 | □       | 20       | 90           | 200            | 20         | 4            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

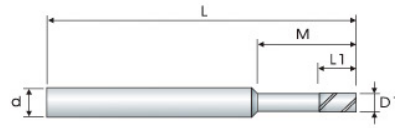
◎優 Excellent ●可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |



## 鎢鋼2刃立銑刀 - 長頸型

### CARBIDE END MILLS - Square Type 2 Flutes - Long Neck



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 有效長M              | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Under neck Length | Overall Length | Shank Dia. | No. of Flute |
| JDS200502A | ●       | 0.5      | 0.75         | 2                 | 50             | 4          | 2            |
| JDS200504A | ●       | 0.5      | 0.75         | 4                 | 50             | 4          | 2            |
| JDS200506A | ●       | 0.5      | 0.75         | 6                 | 50             | 4          | 2            |
| JDS200602A | ●       | 0.6      | 0.9          | 2                 | 50             | 4          | 2            |
| JDS200604A | ●       | 0.6      | 0.9          | 4                 | 50             | 4          | 2            |
| JDS200606A | ●       | 0.6      | 0.9          | 6                 | 50             | 4          | 2            |
| JDS200704A | ●       | 0.7      | 1.1          | 4                 | 50             | 4          | 2            |
| JDS200706A | ●       | 0.7      | 1.1          | 6                 | 50             | 4          | 2            |
| JDS200804A | ●       | 0.8      | 1.2          | 4                 | 50             | 4          | 2            |
| JDS200806A | ●       | 0.8      | 1.2          | 6                 | 50             | 4          | 2            |
| JDS200808A | ●       | 0.8      | 1.2          | 8                 | 50             | 4          | 2            |
| JDS200906A | ●       | 0.9      | 1.4          | 6                 | 50             | 4          | 2            |
| JDS200908A | ●       | 0.9      | 1.4          | 8                 | 50             | 4          | 2            |
| JDS200910A | ●       | 0.9      | 1.4          | 10                | 50             | 4          | 2            |
| JDS201006A | ●       | 1        | 1.5          | 6                 | 50             | 4          | 2            |
| JDS201008A | ●       | 1        | 1.5          | 8                 | 50             | 4          | 2            |
| JDS201010A | ●       | 1        | 1.5          | 10                | 50             | 4          | 2            |
| JDS201012A | ●       | 1        | 1.5          | 12                | 50             | 4          | 2            |
| JDS201014A | ●       | 1        | 1.5          | 14                | 50             | 4          | 2            |
| JDS201016A | ●       | 1        | 1.5          | 16                | 50             | 4          | 2            |
| JDS201206A | ●       | 1.2      | 1.8          | 6                 | 50             | 4          | 2            |
| JDS201208A | ●       | 1.2      | 1.8          | 8                 | 50             | 4          | 2            |
| JDS201210A | ●       | 1.2      | 1.8          | 10                | 50             | 4          | 2            |
| JDS201212A | ●       | 1.2      | 1.8          | 12                | 50             | 4          | 2            |
| JDS201406A | ●       | 1.4      | 2.1          | 6                 | 50             | 4          | 2            |
| JDS201410A | ●       | 1.4      | 2.1          | 10                | 50             | 4          | 2            |
| JDS201416A | ●       | 1.4      | 2.1          | 16                | 50             | 4          | 2            |
| JDS201506A | ●       | 1.5      | 2.3          | 6                 | 50             | 4          | 2            |
| JDS201508A | ●       | 1.5      | 2.3          | 8                 | 50             | 4          | 2            |
| JDS201510A | ●       | 1.5      | 2.3          | 10                | 50             | 4          | 2            |

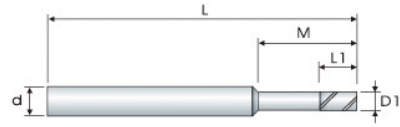
●印: 標準在庫品.Stocked items

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎂鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼2刃立銑刀 - 長頸型

### CARBIDE END MILLS - Square Type 2 Flutes - Long Neck



單位(unit):mm

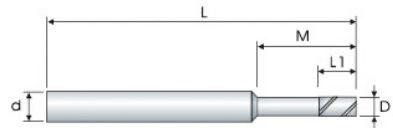
| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 有效長M              | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Under neck Length | Overall Length | Shank Dia. | No. of Flute |
| JDS201512A | ●       | 1.5      | 2.3          | 12                | 50             | 4          | 2            |
| JDS201514A | ●       | 1.5      | 2.3          | 14                | 50             | 4          | 2            |
| JDS201516A | ●       | 1.5      | 2.3          | 16                | 50             | 4          | 2            |
| JDS201518A | ●       | 1.5      | 2.3          | 18                | 50             | 4          | 2            |
| JDS201520A | ●       | 1.5      | 2.3          | 20                | 50             | 4          | 2            |
| JDS201606A | ●       | 1.6      | 2.4          | 6                 | 50             | 4          | 2            |
| JDS201608A | ●       | 1.6      | 2.4          | 8                 | 50             | 4          | 2            |
| JDS201610A | ●       | 1.6      | 2.4          | 10                | 50             | 4          | 2            |
| JDS201612A | ●       | 1.6      | 2.4          | 12                | 50             | 4          | 2            |
| JDS201614A | ●       | 1.6      | 2.4          | 14                | 50             | 4          | 2            |
| JDS201616A | ●       | 1.6      | 2.4          | 16                | 50             | 4          | 2            |
| JDS201618A | ●       | 1.6      | 2.4          | 18                | 50             | 4          | 2            |
| JDS201620A | ●       | 1.6      | 2.4          | 20                | 50             | 4          | 2            |
| JDS201808A | ●       | 1.8      | 2.7          | 8                 | 50             | 4          | 2            |
| JDS201814A | ●       | 1.8      | 2.7          | 14                | 50             | 4          | 2            |
| JDS201820A | ●       | 1.8      | 2.7          | 20                | 50             | 4          | 2            |
| JDS202006A | ●       | 2        | 3            | 6                 | 50             | 4          | 2            |
| JDS202008A | ●       | 2        | 3            | 8                 | 50             | 4          | 2            |
| JDS202010A | ●       | 2        | 3            | 10                | 50             | 4          | 2            |
| JDS202012A | ●       | 2        | 3            | 12                | 50             | 4          | 2            |
| JDS202014A | ●       | 2        | 3            | 14                | 50             | 4          | 2            |
| JDS202016A | ●       | 2        | 3            | 16                | 50             | 4          | 2            |
| JDS202018A | ●       | 2        | 3            | 18                | 50             | 4          | 2            |
| JDS202020A | ●       | 2        | 3            | 20                | 50             | 4          | 2            |
| JDS202508A | ●       | 2.5      | 4            | 8                 | 50             | 4          | 2            |
| JDS202510A | ●       | 2.5      | 4            | 10                | 50             | 4          | 2            |
| JDS202512A | ●       | 2.5      | 4            | 12                | 50             | 4          | 2            |
| JDS202514A | ●       | 2.5      | 4            | 14                | 50             | 4          | 2            |
| JDS202516A | ●       | 2.5      | 4            | 16                | 50             | 4          | 2            |
| JDS202520A | ●       | 2.5      | 4            | 20                | 50             | 4          | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

### CARBIDE END MILLS - Square Type 2 Flutes - Long Neck



單位(unit):mm

| 型號         | 在庫    | 直徑 D1    | 刃長L1         | 有效長M              | 全長L            | 柄徑d        | 刃數T          |
|------------|-------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE       | Stock | Tool Dia | Flute Length | Under neck Length | Overall Length | Shank Dia. | No. of Flute |
| JDS203008A | ●     | 3        | 4.5          | 8                 | 50             | 6          | 2            |
| JDS203010A | ●     | 3        | 4.5          | 10                | 50             | 6          | 2            |
| JDS203012A | ●     | 3        | 4.5          | 12                | 50             | 6          | 2            |
| JDS203016A | ●     | 3        | 4.5          | 16                | 60             | 6          | 2            |
| JDS203020A | ●     | 3        | 4.5          | 20                | 60             | 6          | 2            |
| JDS203025A | ●     | 3        | 6            | 25                | 75             | 6          | 2            |
| JDS203512A | ●     | 3.5      | 6            | 12                | 50             | 6          | 2            |
| JDS203516A | ●     | 3.5      | 6            | 16                | 60             | 6          | 2            |
| JDS203520A | ●     | 3.5      | 6            | 20                | 75             | 6          | 2            |
| JDS203525A | ●     | 3.5      | 6            | 25                | 75             | 6          | 2            |
| JDS203530A | ●     | 3.5      | 6            | 30                | 75             | 6          | 2            |
| JDS204012A | ●     | 4        | 6            | 12                | 50             | 6          | 2            |
| JDS204016A | ●     | 4        | 6            | 16                | 60             | 6          | 2            |
| JDS204020A | ●     | 4        | 6            | 20                | 75             | 6          | 2            |
| JDS204025A | ●     | 4        | 6            | 25                | 75             | 6          | 2            |
| JDS204030A | ●     | 4        | 6            | 30                | 75             | 6          | 2            |
| JDS204035A | ●     | 4        | 6            | 35                | 75             | 6          | 2            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

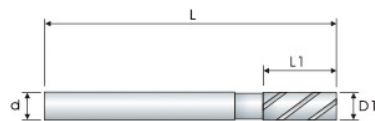
◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |



## 鎢鋼3刃45°立銑刀

### GRAIN CARBIDE END MILLS - Square Type 3 Flutes, Helix 45°



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JHS303003A | ●       | 3        | 8            | 50             | 3          | 3            |
| JHS301004A | ●       | 1        | 3            | 50             | 4          | 3            |
| JHS301504A | ●       | 1.5      | 4            | 50             | 4          | 3            |
| JHS302004A | ●       | 2        | 6            | 50             | 4          | 3            |
| JHS302504A | ●       | 2.5      | 8            | 50             | 4          | 3            |
| JHS303004A | ●       | 3        | 8            | 50             | 4          | 3            |
| JHS303504A | ●       | 3.5      | 10           | 50             | 4          | 3            |
| JHS304004A | ●       | 4        | 11           | 50             | 4          | 3            |
| JHS301006A | ●       | 1        | 3            | 50             | 6          | 3            |
| JHS301506A | ●       | 1.5      | 4            | 50             | 6          | 3            |
| JHS302006A | ●       | 2        | 6            | 50             | 6          | 3            |
| JHS302506A | ●       | 2.5      | 8            | 50             | 6          | 3            |
| JHS303006A | ●       | 3        | 8            | 50             | 6          | 3            |
| JHS303506A | ●       | 3.5      | 10           | 50             | 6          | 3            |
| JHS304006A | ●       | 4        | 11           | 50             | 6          | 3            |
| JHS304506A | ●       | 4.5      | 13           | 50             | 6          | 3            |
| JHS305006A | ●       | 5        | 13           | 50             | 6          | 3            |
| JHS305506A | ●       | 5.5      | 13           | 50             | 6          | 3            |
| JHS306006A | ●       | 6        | 16           | 50             | 6          | 3            |
| JHS306508A | ●       | 6.5      | 16           | 60             | 8          | 3            |
| JHS307008A | ●       | 7        | 16           | 60             | 8          | 3            |
| JHS307508A | ●       | 7.5      | 19           | 60             | 8          | 3            |
| JHS308008A | ●       | 8        | 20           | 60             | 8          | 3            |
| JHS308510A | ●       | 8.5      | 20           | 75             | 10         | 3            |
| JHS309010A | ●       | 9        | 20           | 75             | 10         | 3            |

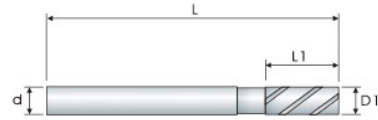
●印: 標準在庫品.Stocked items

◎ 優Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼3刃45°立銑刀

### GRAIN CARBIDE END MILLS - Square Type 3 Flutes, Helix 45°



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JHS309510A | ●       | 9.5      | 25           | 75             | 10         | 3            |
| JHS310010A | ●       | 10       | 30           | 75             | 10         | 3            |
| JHS310512A | ●       | 10.5     | 30           | 75             | 12         | 3            |
| JHS311012A | ●       | 11       | 30           | 75             | 12         | 3            |
| JHS311512A | ●       | 11.5     | 30           | 75             | 12         | 3            |
| JHS312012A | ●       | 12       | 32           | 75             | 12         | 3            |
| JHS314016A | ●       | 14       | 40           | 100            | 16         | 3            |
| JHS316016A | ●       | 16       | 40           | 100            | 16         | 3            |
| JHS318020A | ●       | 18       | 45           | 100            | 20         | 3            |
| JHS320020A | ●       | 20       | 45           | 100            | 20         | 3            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

### CARBIDE END MILLS - Square Type 4 Flutes, Helix 45°

Super  
MG

AlTiN  
COAT

HRC  
50

45°

4 Flute

Shank  
h6



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JHS403003A | ●       | 3        | 8            | 50             | 3          | 4            |
| JHS401004A | ●       | 1        | 3            | 50             | 4          | 4            |
| JHS401504A | ●       | 1.5      | 4            | 50             | 4          | 4            |
| JHS402004A | ●       | 2        | 6            | 50             | 4          | 4            |
| JHS402504A | ●       | 2.5      | 8            | 50             | 4          | 4            |
| JHS403004A | ●       | 3        | 8            | 50             | 4          | 4            |
| JHS403504A | ●       | 3.5      | 10           | 50             | 4          | 4            |
| JHS404004A | ●       | 4        | 11           | 50             | 4          | 4            |
| JHS401006A | ●       | 1        | 3            | 50             | 6          | 4            |
| JHS401506A | ●       | 1.5      | 4            | 50             | 6          | 4            |
| JHS402006A | ●       | 2        | 6            | 50             | 6          | 4            |
| JHS402506A | ●       | 2.5      | 8            | 50             | 6          | 4            |
| JHS403006A | ●       | 3        | 8            | 50             | 6          | 4            |
| JHS403506A | ●       | 3.5      | 10           | 50             | 6          | 4            |
| JHS404006A | ●       | 4        | 11           | 50             | 6          | 4            |
| JHS404506A | ●       | 4.5      | 13           | 50             | 6          | 4            |
| JHS405006A | ●       | 5        | 13           | 50             | 6          | 4            |
| JHS405506A | ●       | 5.5      | 13           | 50             | 6          | 4            |
| JHS406006A | ●       | 6        | 16           | 50             | 6          | 4            |
| JHS406508A | ●       | 6.5      | 16           | 60             | 8          | 4            |
| JHS407008A | ●       | 7        | 16           | 60             | 8          | 4            |
| JHS407508A | ●       | 7.5      | 19           | 60             | 8          | 4            |
| JHS408008A | ●       | 8        | 20           | 60             | 8          | 4            |
| JHS408510A | ●       | 8.5      | 20           | 75             | 10         | 4            |
| JHS409010A | ●       | 9        | 20           | 75             | 10         | 4            |
| JHS409510A | ●       | 9.5      | 25           | 75             | 10         | 4            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB 225~325          | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                    |



CARBIDE END MILLS - Square Type 4 Flutes, Helix 45°



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JHS410010A | ●       | 10       | 30           | 75             | 10         | 4            |
| JHS410512A | ●       | 10.5     | 30           | 75             | 12         | 4            |
| JHS411012A | ●       | 11       | 30           | 75             | 12         | 4            |
| JHS411512A | ●       | 11.5     | 30           | 75             | 12         | 4            |
| JHS412012A | ●       | 12       | 32           | 75             | 12         | 4            |
| JHS414016A | ●       | 14       | 40           | 100            | 16         | 4            |
| JHS416016A | ●       | 16       | 40           | 100            | 16         | 4            |
| JHS418020A | ●       | 18       | 45           | 100            | 20         | 4            |
| JHS420020A | ●       | 20       | 45           | 100            | 20         | 4            |

●印: 標準在庫品.Stocked items

◎ 優Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                    |

### CARBIDE END MILLS - Ball Nose Type 2 Flutes- Miniature



單位(unit):mm

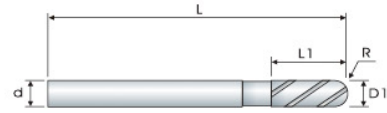
| 型號         | 在庫    | 球頭R         | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|-------|-------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stock | Ball Radius | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JBS200304A | ●     | 0.15R       | 0.3      | 0.6          | 50             | 4          | 2            |
| JBS200404A | ●     | 0.2R        | 0.4      | 0.8          | 50             | 4          | 2            |
| JBS200504A | ●     | 0.25R       | 0.5      | 1            | 50             | 4          | 2            |
| JBS200604A | ●     | 0.3R        | 0.6      | 1.2          | 50             | 4          | 2            |
| JBS200704A | ●     | 0.35R       | 0.7      | 1.4          | 50             | 4          | 2            |
| JBS200804A | ●     | 0.4R        | 0.8      | 1.6          | 50             | 4          | 2            |
| JBS200904A | ●     | 0.45R       | 0.9      | 1.8          | 50             | 4          | 2            |
| JBS201104A | ●     | 0.55R       | 1.1      | 2.2          | 50             | 4          | 2            |
| JBS201204A | ●     | 0.6R        | 1.2      | 2.4          | 50             | 4          | 2            |
| JBS201304A | ●     | 0.65R       | 1.3      | 2.6          | 50             | 4          | 2            |
| JBS201404A | ●     | 0.7R        | 1.4      | 2.8          | 50             | 4          | 2            |
| JBS201604A | ●     | 0.8R        | 1.6      | 3.2          | 50             | 4          | 2            |
| JBS201704A | ●     | 0.85R       | 1.7      | 3.4          | 50             | 4          | 2            |
| JBS201804A | ●     | 0.9R        | 1.8      | 3.6          | 50             | 4          | 2            |
| JBS201904A | ●     | 0.95R       | 1.9      | 3.8          | 50             | 4          | 2            |
| JBS202104A | ●     | 1.05R       | 2.1      | 4.2          | 50             | 4          | 2            |
| JBS202204A | ●     | 1.1R        | 2.2      | 4.4          | 50             | 4          | 2            |
| JBS202304A | ●     | 1.15R       | 2.3      | 4.6          | 50             | 4          | 2            |
| JBS202404A | ●     | 1.2R        | 2.4      | 4.8          | 50             | 4          | 2            |
| JBS202604A | ●     | 1.3R        | 2.6      | 5.2          | 50             | 4          | 2            |
| JBS202704A | ●     | 1.35R       | 2.7      | 5.4          | 50             | 4          | 2            |
| JBS202804A | ●     | 1.4R        | 2.8      | 5.6          | 50             | 4          | 2            |
| JBS202904A | ●     | 1.45R       | 2.9      | 5.8          | 50             | 4          | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

CARBIDE END MILLS - Ball Nose Type 2 Flutes



單位(unit):mm

| 型號         | 在庫      | 球頭R         | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|-------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Ball Radius | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JBS201003A | ●       | 0.5R        | 1        | 2            | 50             | 3          | 2            |
| JBS201503A | ●       | 0.75R       | 1.5      | 3            | 50             | 3          | 2            |
| JBS202003A | ●       | 1R          | 2        | 4            | 50             | 3          | 2            |
| JBS202503A | ●       | 1.25R       | 2.5      | 5            | 50             | 3          | 2            |
| JBS203003A | ●       | 1.5R        | 3        | 6            | 50             | 3          | 2            |
| JBS201004A | ●       | 0.5R        | 1        | 2            | 50             | 4          | 2            |
| JBS201504A | ●       | 0.75R       | 1.5      | 3            | 50             | 4          | 2            |
| JBS202004A | ●       | 1R          | 2        | 4            | 50             | 4          | 2            |
| JBS202504A | ●       | 1.25R       | 2.5      | 5            | 50             | 4          | 2            |
| JBS203004A | ●       | 1.5R        | 3        | 6            | 50             | 4          | 2            |
| JBS203504A | ●       | 1.75R       | 3.5      | 7            | 50             | 4          | 2            |
| JBS204004A | ●       | 2R          | 4        | 8            | 50             | 4          | 2            |
| JBS201506A | ●       | 0.75R       | 1.5      | 3            | 50             | 6          | 2            |
| JBS201006A | ●       | 0.5R        | 1        | 2            | 50             | 6          | 2            |
| JBS202006A | ●       | 1R          | 2        | 4            | 50             | 6          | 2            |
| JBS202506A | ●       | 1.25R       | 2.5      | 5            | 50             | 6          | 2            |
| JBS203006A | ●       | 1.5R        | 3        | 6            | 50             | 6          | 2            |
| JBS203506A | ●       | 1.75R       | 3.5      | 7            | 50             | 6          | 2            |
| JBS204006A | ●       | 2R          | 4        | 8            | 50             | 6          | 2            |
| JBS204506A | ●       | 2.25R       | 4.5      | 9            | 50             | 6          | 2            |
| JBS205006A | ●       | 2.5R        | 5        | 10           | 50             | 6          | 2            |
| JBS205506A | ●       | 2.75R       | 5.5      | 11           | 50             | 6          | 2            |
| JBS206006A | ●       | 3R          | 6        | 12           | 50             | 6          | 2            |
| JBS207008A | ●       | 3.5R        | 7        | 14           | 60             | 8          | 2            |
| JBS208008A | ●       | 4R          | 8        | 16           | 60             | 8          | 2            |
| JBS209010A | ●       | 4.5R        | 9        | 18           | 75             | 10         | 2            |
| JBS210010A | ●       | 5R          | 10       | 20           | 75             | 10         | 2            |
| JBS211012A | ●       | 5.5R        | 11       | 22           | 75             | 12         | 2            |
| JBS212012A | ●       | 6R          | 12       | 24           | 75             | 12         | 2            |
| JBS214016A | ●       | 7R          | 14       | 28           | 100            | 16         | 2            |
| JBS216016A | ●       | 8R          | 16       | 32           | 100            | 16         | 2            |
| JBS218020A | ●       | 9R          | 18       | 36           | 100            | 20         | 2            |
| JBS220020A | ●       | 10R         | 20       | 40           | 100            | 20         | 2            |

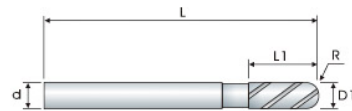
●印: 標準在庫品.Stocked items

○ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎢鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                      |
| ○                   | ○                   | ○                      |        |                              |             | ●               |               | ●                       | ●               | ●                    |



CARBIDE END MILLS - Ball Nose Type 2 Flutes - Long Shank



單位(unit):mm

| 型號             | 在庫      | 球頭R         | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|----------------|---------|-------------|----------|--------------|----------------|------------|--------------|
| MODE           | Stocket | Ball Radius | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JBSL201004075A | ●       | 0.5R        | 1        | 2            | 75             | 4          | 2            |
| JBSL201006075A | ●       | 0.5R        | 1        | 2            | 75             | 6          | 2            |
| JBSL201006100A | ●       | 0.5R        | 1        | 2            | 100            | 6          | 2            |
| JBSL201504075A | ●       | 0.75R       | 1.5      | 3            | 75             | 4          | 2            |
| JBSL201506075A | ●       | 0.75R       | 1.5      | 3            | 75             | 6          | 2            |
| JBSL201506100A | ●       | 0.75R       | 1.5      | 3            | 100            | 6          | 2            |
| JBSL202006075A | ●       | 1R          | 2        | 4            | 75             | 6          | 2            |
| JBSL202006100A | ●       | 1R          | 2        | 4            | 100            | 6          | 2            |
| JBSL202506075A | ●       | 1.25R       | 2.5      | 5            | 75             | 6          | 2            |
| JBSL202506100A | ●       | 1.25R       | 2.5      | 5            | 100            | 6          | 2            |
| JBSL203006075A | ●       | 1.5R        | 3        | 6            | 75             | 6          | 2            |
| JBSL203006100A | ●       | 1.5R        | 3        | 6            | 100            | 6          | 2            |
| JBSL203506075A | ●       | 1.75R       | 3.5      | 7            | 100            | 6          | 2            |
| JBSL204006075A | ●       | 2R          | 4        | 8            | 75             | 6          | 2            |
| JBSL204006100A | ●       | 2R          | 4        | 8            | 100            | 6          | 2            |
| JBSL205006075A | ●       | 2.5R        | 5        | 10           | 75             | 6          | 2            |
| JBSL205006100A | ●       | 2.5R        | 5        | 10           | 100            | 6          | 2            |
| JBSL206006075A | ●       | 3R          | 6        | 12           | 75             | 6          | 2            |
| JBSL206006100A | ●       | 3R          | 6        | 12           | 100            | 6          | 2            |
| JBSL206006150A | ●       | 3R          | 6        | 12           | 150            | 6          | 2            |
| JBSL208008075A | ●       | 4R          | 8        | 16           | 75             | 8          | 2            |
| JBSL208008100A | ●       | 4R          | 8        | 16           | 100            | 8          | 2            |
| JBSL208008150A | ●       | 4R          | 8        | 16           | 150            | 8          | 2            |
| JBSL210010100A | ●       | 5R          | 10       | 20           | 100            | 10         | 2            |
| JBSL210010150A | ●       | 5R          | 10       | 20           | 150            | 10         | 2            |
| JBSL210010200A | □       | 5R          | 10       | 20           | 200            | 10         | 2            |
| JBSL212012100A | ●       | 6R          | 12       | 24           | 100            | 12         | 2            |
| JBSL212012150A | ●       | 6R          | 12       | 24           | 150            | 12         | 2            |
| JBSL212012200A | □       | 6R          | 12       | 24           | 200            | 12         | 2            |
| JBSL216016150A | ●       | 8R          | 16       | 32           | 150            | 16         | 2            |
| JBSL216016200A | □       | 8R          | 16       | 32           | 200            | 16         | 2            |
| JBSL220020150A | ●       | 10R         | 20       | 40           | 150            | 20         | 2            |
| JBSL220020200A | □       | 10R         | 20       | 40           | 200            | 20         | 2            |

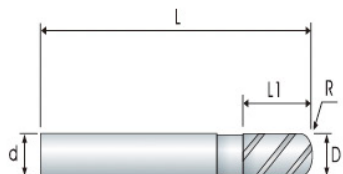
●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

CARBIDE END MILLS - Ball Nose Type 4 Flutes



單位(unit):mm

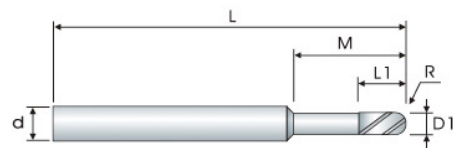
| 型號         | 在庫                       | 球頭R         | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|--------------------------|-------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket                  | Ball Radius | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JBS402004A | <input type="checkbox"/> | 1R          | 2        | 4            | 50             | 4          | 4            |
| JBS402504A | <input type="checkbox"/> | 1.25R       | 2.5      | 5            | 50             | 4          | 4            |
| JBS403004A | <input type="checkbox"/> | 1.5R        | 3        | 6            | 50             | 4          | 4            |
| JBS403504A | <input type="checkbox"/> | 1.75R       | 3.5      | 7            | 50             | 4          | 4            |
| JBS404004A | <input type="checkbox"/> | 2R          | 4        | 8            | 50             | 4          | 4            |
| JBS401006A | <input type="checkbox"/> | 0.5R        | 1        | 2            | 50             | 6          | 4            |
| JBS401506A | <input type="checkbox"/> | 0.75R       | 1.5      | 3            | 50             | 6          | 4            |
| JBS402006A | <input type="checkbox"/> | 1R          | 2        | 4            | 50             | 6          | 4            |
| JBS402506A | <input type="checkbox"/> | 1.25R       | 2.5      | 5            | 50             | 6          | 4            |
| JBS403006A | <input type="checkbox"/> | 1.5R        | 3        | 6            | 50             | 6          | 4            |
| JBS403506A | <input type="checkbox"/> | 1.75R       | 3.5      | 7            | 50             | 6          | 4            |
| JBS404006A | <input type="checkbox"/> | 2R          | 4        | 8            | 50             | 6          | 4            |
| JBS404506A | <input type="checkbox"/> | 2.25R       | 4.5      | 9            | 50             | 6          | 4            |
| JBS405006A | <input type="checkbox"/> | 2.5R        | 5        | 10           | 50             | 6          | 4            |
| JBS405506A | <input type="checkbox"/> | 2.75R       | 5.5      | 11           | 50             | 6          | 4            |
| JBS406006A | <input type="checkbox"/> | 3R          | 6        | 12           | 50             | 6          | 4            |
| JBS407008A | <input type="checkbox"/> | 3.5R        | 7        | 14           | 60             | 8          | 4            |
| JBS408008A | <input type="checkbox"/> | 4R          | 8        | 16           | 60             | 8          | 4            |
| JBS409010A | <input type="checkbox"/> | 4.5R        | 9        | 18           | 75             | 10         | 4            |
| JBS410010A | <input type="checkbox"/> | 5R          | 10       | 20           | 75             | 10         | 4            |
| JBS411012A | <input type="checkbox"/> | 5.5R        | 11       | 22           | 75             | 12         | 4            |
| JBS412012A | <input type="checkbox"/> | 6R          | 12       | 24           | 75             | 12         | 4            |
| JBS414016A | <input type="checkbox"/> | 7R          | 14       | 28           | 100            | 16         | 4            |
| JBS416016A | <input type="checkbox"/> | 8R          | 16       | 32           | 100            | 16         | 4            |
| JBS418020A | <input type="checkbox"/> | 9R          | 18       | 36           | 100            | 20         | 4            |
| JBS420020A | <input type="checkbox"/> | 10R         | 20       | 40           | 100            | 20         | 4            |

☐印: 無在庫品，訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

### CARBIDE END MILLS - Ball Nose Type 2 Flutes - Long Neck



單位(unit):mm

| 型號         | 在庫      | R角R         | 直徑 D1    | 刃長L1         | 全長L            | 有效長M              | 柄徑d        | 刃數T          |
|------------|---------|-------------|----------|--------------|----------------|-------------------|------------|--------------|
| MODE       | Stocket | Ball Radius | Tool Dia | Flute Length | Overall Length | Under neck Length | Shank Dia. | No. of Flute |
| JDB200502A | ●       | 0.25R       | 0.5      | 0.75         | 50             | 2                 | 4          | 2            |
| JDB200504A | ●       | 0.25R       | 0.5      | 0.75         | 50             | 4                 | 4          | 2            |
| JDB200506A | ●       | 0.25R       | 0.5      | 0.75         | 50             | 6                 | 4          | 2            |
| JDB200602A | ●       | 0.3R        | 0.6      | 0.9          | 50             | 2                 | 4          | 2            |
| JDB200604A | ●       | 0.3R        | 0.6      | 0.9          | 50             | 4                 | 4          | 2            |
| JDB200606A | ●       | 0.3R        | 0.6      | 0.9          | 50             | 6                 | 4          | 2            |
| JDB200804A | ●       | 0.4R        | 0.8      | 1.2          | 50             | 4                 | 4          | 2            |
| JDB200806A | ●       | 0.4R        | 0.8      | 1.2          | 50             | 6                 | 4          | 2            |
| JDB200808A | ●       | 0.4R        | 0.8      | 1.2          | 50             | 8                 | 4          | 2            |
| JDB201006A | ●       | 0.5R        | 1        | 1.5          | 50             | 6                 | 4          | 2            |
| JDB201008A | ●       | 0.5R        | 1        | 1.5          | 50             | 8                 | 4          | 2            |
| JDB201010A | ●       | 0.5R        | 1        | 1.5          | 50             | 10                | 4          | 2            |
| JDB201012A | ●       | 0.5R        | 1        | 1.5          | 50             | 12                | 4          | 2            |
| JDB201206A | ●       | 0.6R        | 1.2      | 1.8          | 50             | 6                 | 4          | 2            |
| JDB201208A | ●       | 0.6R        | 1.2      | 1.8          | 50             | 8                 | 4          | 2            |
| JDB201210A | ●       | 0.6R        | 1.2      | 1.8          | 50             | 10                | 4          | 2            |
| JDB201212A | ●       | 0.6R        | 1.2      | 1.8          | 50             | 12                | 4          | 2            |
| JDB201406A | ●       | 0.7R        | 1.4      | 2.1          | 50             | 6                 | 4          | 2            |
| JDB201410A | ●       | 0.7R        | 1.4      | 2.1          | 50             | 10                | 4          | 2            |
| JDB201416A | ●       | 0.7R        | 1.4      | 2.1          | 50             | 16                | 4          | 2            |
| JDB201506A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 6                 | 4          | 2            |
| JDB201508A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 8                 | 4          | 2            |
| JDB201510A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 10                | 4          | 2            |
| JDB201512A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 12                | 4          | 2            |
| JDB201514A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 14                | 4          | 2            |
| JDB201516A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 16                | 4          | 2            |
| JDB201518A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 18                | 4          | 2            |
| JDB201520A | ●       | 0.75R       | 1.5      | 2.3          | 50             | 20                | 4          | 2            |
| JDB201606A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 6                 | 4          | 2            |
| JDB201608A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 8                 | 4          | 2            |
| JDB201610A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 10                | 4          | 2            |
| JDB201612A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 12                | 4          | 2            |
| JDB201614A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 14                | 4          | 2            |
| JDB201616A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 16                | 4          | 2            |

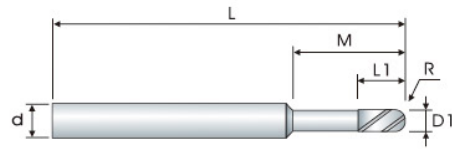
●印: 標準在庫品.Stocked items

○ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎢鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ○                   | ○                   | ○                      |        |                              |             | ●               |               | ●                       | ●               | ●                |



### CARBIDE END MILLS - Ball Nose Type 2 Flutes - Long Neck



單位(unit):mm

| 型號         | 在庫      | R角R         | 直徑 D1    | 刃長L1         | 全長L            | 有效長M              | 柄徑d        | 刃數T          |
|------------|---------|-------------|----------|--------------|----------------|-------------------|------------|--------------|
| MODE       | Stocket | Ball Radius | Tool Dia | Flute Length | Overall Length | Under neck Length | Shank Dia. | No. of Flute |
| JDB201618A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 18                | 4          | 2            |
| JDB201620A | ●       | 0.8R        | 1.6      | 2.4          | 50             | 20                | 4          | 2            |
| JDB201808A | ●       | 0.9R        | 1.8      | 2.7          | 50             | 8                 | 4          | 2            |
| JDB201814A | ●       | 0.9R        | 1.8      | 2.7          | 50             | 14                | 4          | 2            |
| JDB201820A | ●       | 0.9R        | 1.8      | 2.7          | 50             | 20                | 4          | 2            |
| JDB202008A | ●       | 1R          | 2        | 3            | 50             | 8                 | 4          | 2            |
| JDB202010A | ●       | 1R          | 2        | 3            | 50             | 10                | 4          | 2            |
| JDB202012A | ●       | 1R          | 2        | 3            | 50             | 12                | 4          | 2            |
| JDB202014A | ●       | 1R          | 2        | 3            | 50             | 14                | 4          | 2            |
| JDB202016A | ●       | 1R          | 2        | 3            | 50             | 16                | 4          | 2            |
| JDB202018A | ●       | 1R          | 2        | 3            | 50             | 18                | 4          | 2            |
| JDB202020A | ●       | 1R          | 2        | 3            | 50             | 20                | 4          | 2            |
| JDB202508A | ●       | 1.25R       | 2.5      | 4            | 50             | 8                 | 4          | 2            |
| JDB202512A | ●       | 1.25R       | 2.5      | 4            | 50             | 12                | 4          | 2            |
| JDB202516A | ●       | 1.25R       | 2.5      | 4            | 50             | 16                | 4          | 2            |
| JDB202520A | ●       | 1.25R       | 2.5      | 4            | 50             | 20                | 4          | 2            |
| JDB203010A | ●       | 1.5R        | 3        | 4.5          | 50             | 10                | 6          | 2            |
| JDB203012A | ●       | 1.5R        | 3        | 4.5          | 50             | 12                | 6          | 2            |
| JDB203016A | ●       | 1.5R        | 3        | 4.5          | 60             | 16                | 6          | 2            |
| JDB203020A | ●       | 1.5R        | 3        | 4.5          | 60             | 20                | 6          | 2            |
| JDB203025A | ●       | 1.5R        | 3        | 4.5          | 75             | 25                | 6          | 2            |
| JDB204012A | ●       | 2R          | 4        | 6            | 50             | 12                | 6          | 2            |
| JDB204016A | ●       | 2R          | 4        | 6            | 60             | 16                | 6          | 2            |
| JDB204020A | ●       | 2R          | 4        | 6            | 75             | 20                | 6          | 2            |
| JDB204025A | ●       | 2R          | 4        | 6            | 75             | 25                | 6          | 2            |
| JDB204030A | ●       | 2R          | 4        | 6            | 75             | 30                | 6          | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

CARBIDE END MILLS - Corner Radius Type 2 Flutes



單位(unit):mm

| 型號           | 在庫      | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE         | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCR20300302A | ●       | 3        | 0.2R          | 8            | 50             | 3          | 2            |
| JCR20300303A | ●       | 3        | 0.3R          | 8            | 50             | 3          | 2            |
| JCR20300305A | ●       | 3        | 0.5R          | 8            | 50             | 3          | 2            |
| JCR20300310A | ●       | 3        | 1R            | 8            | 50             | 3          | 2            |
| JCR20100402A | ●       | 1        | 0.2R          | 3            | 50             | 4          | 2            |
| JCR20100403A | ●       | 1        | 0.3R          | 3            | 50             | 4          | 2            |
| JCR20150402A | ●       | 1.5      | 0.2R          | 4            | 50             | 4          | 2            |
| JCR20150403A | ●       | 1.5      | 0.3R          | 4            | 50             | 4          | 2            |
| JCR20200402A | ●       | 2        | 0.2R          | 6            | 50             | 4          | 2            |
| JCR20200403A | ●       | 2        | 0.3R          | 6            | 50             | 4          | 2            |
| JCR20200405A | ●       | 2        | 0.5R          | 6            | 50             | 4          | 2            |
| JCR20250402A | ●       | 2.5      | 0.2R          | 8            | 50             | 4          | 2            |
| JCR20250405A | ●       | 2.5      | 0.5R          | 8            | 50             | 4          | 2            |
| JCR20300402A | ●       | 3        | 0.2R          | 8            | 50             | 4          | 2            |
| JCR20300403A | ●       | 3        | 0.3R          | 8            | 50             | 4          | 2            |
| JCR20300405A | ●       | 3        | 0.5R          | 8            | 50             | 4          | 2            |
| JCR20300410A | ●       | 3        | 1R            | 8            | 50             | 4          | 2            |
| JCR20400402A | ●       | 4        | 0.2R          | 10           | 50             | 4          | 2            |
| JCR20400403A | ●       | 4        | 0.3R          | 10           | 50             | 4          | 2            |
| JCR20400405A | ●       | 4        | 0.5R          | 10           | 50             | 4          | 2            |
| JCR20400410A | ●       | 4        | 1R            | 10           | 50             | 4          | 2            |
| JCR20400415A | ●       | 4        | 1.5R          | 10           | 50             | 4          | 2            |
| JCR20500602A | ●       | 5        | 0.2R          | 13           | 50             | 6          | 2            |
| JCR20500603A | ●       | 5        | 0.3R          | 13           | 50             | 6          | 2            |
| JCR20500605A | ●       | 5        | 0.5R          | 13           | 50             | 6          | 2            |
| JCR20500610A | ●       | 5        | 1R            | 13           | 50             | 6          | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

### CARBIDE END MILLS - Corner Radius Type 2 Flutes



單位(unit):mm

| 型號           | 在庫      | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE         | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCR20600602A | ●       | 6        | 0.2R          | 15           | 50             | 6          | 2            |
| JCR20600603A | ●       | 6        | 0.3R          | 15           | 50             | 6          | 2            |
| JCR20600605A | ●       | 6        | 0.5R          | 15           | 50             | 6          | 2            |
| JCR20600610A | ●       | 6        | 1R            | 15           | 50             | 6          | 2            |
| JCR20600615A | ●       | 6        | 1.5R          | 15           | 50             | 6          | 2            |
| JCR20600620A | ●       | 6        | 2R            | 15           | 50             | 6          | 2            |
| JCR20800803A | ●       | 8        | 0.3R          | 20           | 60             | 8          | 2            |
| JCR20800805A | ●       | 8        | 0.5R          | 20           | 60             | 8          | 2            |
| JCR20800810A | ●       | 8        | 1R            | 20           | 60             | 8          | 2            |
| JCR20800815A | ●       | 8        | 1.5R          | 20           | 60             | 8          | 2            |
| JCR20800820A | ●       | 8        | 2R            | 20           | 60             | 8          | 2            |
| JCR20800825A | ●       | 8        | 2.5R          | 20           | 60             | 8          | 2            |
| JCR20800830A | ●       | 8        | 3R            | 20           | 60             | 8          | 2            |
| JCR21001003A | ●       | 10       | 0.3R          | 25           | 75             | 10         | 2            |
| JCR21001005A | ●       | 10       | 0.5R          | 25           | 75             | 10         | 2            |
| JCR21001010A | ●       | 10       | 1R            | 25           | 75             | 10         | 2            |
| JCR21001015A | ●       | 10       | 1.5R          | 25           | 75             | 10         | 2            |
| JCR21001020A | ●       | 10       | 2R            | 25           | 75             | 10         | 2            |
| JCR21001025A | ●       | 10       | 2.5R          | 25           | 75             | 10         | 2            |
| JCR21001030A | ●       | 10       | 3R            | 25           | 75             | 10         | 2            |
| JCR21201203A | ●       | 12       | 0.3R          | 30           | 75             | 12         | 2            |
| JCR21201205A | ●       | 12       | 0.5R          | 30           | 75             | 12         | 2            |
| JCR21201210A | ●       | 12       | 1R            | 30           | 75             | 12         | 2            |
| JCR21201215A | ●       | 12       | 1.5R          | 30           | 75             | 12         | 2            |
| JCR21201220A | ●       | 12       | 2R            | 30           | 75             | 12         | 2            |
| JCR21201225A | ●       | 12       | 2.5R          | 30           | 75             | 12         | 2            |
| JCR21201230A | ●       | 12       | 3R            | 30           | 75             | 12         | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |



### CARBIDE END MILLS - Corner Radius Type 4 Flutes



單位(unit):mm

| 型號           | 在庫      | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE         | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCR40300302A | ●       | 3        | 0.2R          | 8            | 50             | 3          | 4            |
| JCR40300303A | ●       | 3        | 0.3R          | 8            | 50             | 3          | 4            |
| JCR40300305A | ●       | 3        | 0.5R          | 8            | 50             | 3          | 4            |
| JCR40300310A | ●       | 3        | 1R            | 8            | 50             | 3          | 4            |
| JCR40100402A | ●       | 1        | 0.2R          | 3            | 50             | 4          | 4            |
| JCR40100403A | ●       | 1        | 0.3R          | 3            | 50             | 4          | 4            |
| JCR40150402A | ●       | 1.5      | 0.2R          | 4            | 50             | 4          | 4            |
| JCR40150403A | ●       | 1.5      | 0.3R          | 4            | 50             | 4          | 4            |
| JCR40200402A | ●       | 2        | 0.2R          | 6            | 50             | 4          | 4            |
| JCR40200403A | ●       | 2        | 0.3R          | 6            | 50             | 4          | 4            |
| JCR40200405A | ●       | 2        | 0.5R          | 6            | 50             | 4          | 4            |
| JCR40250402A | ●       | 2.5      | 0.2R          | 8            | 50             | 4          | 4            |
| JCR40250405A | ●       | 2.5      | 0.5R          | 8            | 50             | 4          | 4            |
| JCR40300402A | ●       | 3        | 0.2R          | 8            | 50             | 4          | 4            |
| JCR40300403A | ●       | 3        | 0.3R          | 8            | 50             | 4          | 4            |
| JCR40300405A | ●       | 3        | 0.5R          | 8            | 50             | 4          | 4            |
| JCR40300410A | ●       | 3        | 1R            | 8            | 50             | 4          | 4            |
| JCR40400402A | ●       | 4        | 0.2R          | 10           | 50             | 4          | 4            |
| JCR40400403A | ●       | 4        | 0.3R          | 10           | 50             | 4          | 4            |
| JCR40400405A | ●       | 4        | 0.5R          | 10           | 50             | 4          | 4            |
| JCR40400410A | ●       | 4        | 1R            | 10           | 50             | 4          | 4            |
| JCR40400415A | ●       | 4        | 1.5R          | 10           | 50             | 4          | 4            |
| JCR40500602A | ●       | 5        | 0.2R          | 13           | 50             | 6          | 4            |
| JCR40500603A | ●       | 5        | 0.3R          | 13           | 50             | 6          | 4            |
| JCR40500605A | ●       | 5        | 0.5R          | 13           | 50             | 6          | 4            |
| JCR40500610A | ●       | 5        | 1R            | 13           | 50             | 6          | 4            |

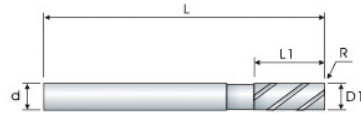
●印: 標準在庫品.Stocked items

◎優 Excellent ●可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼4刃圓鼻立銑刀

### CARBIDE END MILLS - Corner Radius Type 4 Flutes



單位(unit):mm

| 型號           | 在庫      | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE         | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCR40600602A | ●       | 6        | 0.2R          | 15           | 50             | 6          | 4            |
| JCR40600603A | ●       | 6        | 0.3R          | 15           | 50             | 6          | 4            |
| JCR40600605A | ●       | 6        | 0.5R          | 15           | 50             | 6          | 4            |
| JCR40600610A | ●       | 6        | 1R            | 15           | 50             | 6          | 4            |
| JCR40600615A | ●       | 6        | 1.5R          | 15           | 50             | 6          | 4            |
| JCR40600620A | ●       | 6        | 2R            | 15           | 50             | 6          | 4            |
| JCR40800803A | ●       | 8        | 0.3R          | 20           | 60             | 8          | 4            |
| JCR40800805A | ●       | 8        | 0.5R          | 20           | 60             | 8          | 4            |
| JCR40800810A | ●       | 8        | 1R            | 20           | 60             | 8          | 4            |
| JCR40800815A | ●       | 8        | 1.5R          | 20           | 60             | 8          | 4            |
| JCR40800820A | ●       | 8        | 2R            | 20           | 60             | 8          | 4            |
| JCR40800825A | ●       | 8        | 2.5R          | 20           | 60             | 8          | 4            |
| JCR40800830A | ●       | 8        | 3R            | 20           | 60             | 8          | 4            |
| JCR41001003A | ●       | 10       | 0.3R          | 25           | 75             | 10         | 4            |
| JCR41001005A | ●       | 10       | 0.5R          | 25           | 75             | 10         | 4            |
| JCR41001010A | ●       | 10       | 1R            | 25           | 75             | 10         | 4            |
| JCR41001015A | ●       | 10       | 1.5R          | 25           | 75             | 10         | 4            |
| JCR41001020A | ●       | 10       | 2R            | 25           | 75             | 10         | 4            |
| JCR41001025A | ●       | 10       | 2.5R          | 25           | 75             | 10         | 4            |
| JCR41001030A | ●       | 10       | 3R            | 25           | 75             | 10         | 4            |
| JCR41201203A | ●       | 12       | 0.3R          | 30           | 75             | 12         | 4            |
| JCR41201205A | ●       | 12       | 0.5R          | 30           | 75             | 12         | 4            |
| JCR41201210A | ●       | 12       | 1R            | 30           | 75             | 12         | 4            |
| JCR41201215A | ●       | 12       | 1.5R          | 30           | 75             | 12         | 4            |
| JCR41201220A | ●       | 12       | 2R            | 30           | 75             | 12         | 4            |
| JCR41201225A | ●       | 12       | 2.5R          | 30           | 75             | 12         | 4            |
| JCR41201230A | ●       | 12       | 3R            | 30           | 75             | 12         | 4            |

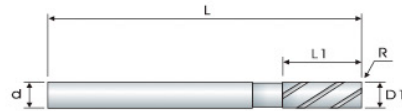
●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                    |

## 鎢鋼 2 刃圓鼻長柄銑刀

### CARBIDE END MILLS - Corner Radius Type 2 Flutes - Long Shank



單位(unit):mm

| 型號                | 在庫      | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE              | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCRL20300303A-75  | ●       | 3        | 0.3R          | 8            | 75             | 3          | 2            |
| JCRL20300305A-75  | ●       | 3        | 0.5R          | 8            | 75             | 3          | 2            |
| JCRL20300310A-75  | ●       | 3        | 1R            | 8            | 75             | 3          | 2            |
| JCRL20400403A-75  | ●       | 4        | 0.3R          | 10           | 75             | 4          | 2            |
| JCRL20400405A-75  | ●       | 4        | 0.5R          | 10           | 75             | 4          | 2            |
| JCRL20400410A-75  | ●       | 4        | 1R            | 10           | 75             | 4          | 2            |
| JCRL20400415A-75  | ●       | 4        | 1.5R          | 10           | 75             | 4          | 2            |
| JCRL20400403A-100 | □       | 4        | 0.3R          | 10           | 100            | 4          | 2            |
| JCRL20400405A-100 | □       | 4        | 0.5R          | 10           | 100            | 4          | 2            |
| JCRL20400410A-100 | □       | 4        | 1R            | 10           | 100            | 4          | 2            |
| JCRL20400415A-100 | □       | 4        | 1.5R          | 10           | 100            | 4          | 2            |
| JCRL20600603A-75  | ●       | 6        | 0.3R          | 15           | 75             | 6          | 2            |
| JCRL20600605A-75  | ●       | 6        | 0.5R          | 15           | 75             | 6          | 2            |
| JCRL20600610A-75  | ●       | 6        | 1R            | 15           | 75             | 6          | 2            |
| JCRL20600615A-75  | ●       | 6        | 1.5R          | 15           | 75             | 6          | 2            |
| JCRL20600620A-75  | ●       | 6        | 2R            | 15           | 75             | 6          | 2            |
| JCRL20600603A-100 | □       | 6        | 0.3R          | 15           | 100            | 6          | 2            |
| JCRL20600605A-100 | □       | 6        | 0.5R          | 15           | 100            | 6          | 2            |
| JCRL20600610A-100 | □       | 6        | 1R            | 15           | 100            | 6          | 2            |
| JCRL20600615A-100 | □       | 6        | 1.5R          | 15           | 100            | 6          | 2            |
| JCRL20600620A-100 | □       | 6        | 2R            | 15           | 100            | 6          | 2            |
| JCRL20800803A-75  | ●       | 8        | 0.3R          | 20           | 75             | 8          | 2            |
| JCRL20800805A-75  | ●       | 8        | 0.5R          | 20           | 75             | 8          | 2            |
| JCRL20800810A-75  | ●       | 8        | 1R            | 20           | 75             | 8          | 2            |
| JCRL20800815A-75  | ●       | 8        | 1.5R          | 20           | 75             | 8          | 2            |
| JCRL20800820A-75  | ●       | 8        | 2R            | 20           | 75             | 8          | 2            |
| JCRL20800825A-75  | ●       | 8        | 2.5R          | 20           | 75             | 8          | 2            |
| JCRL20800830A-75  | ●       | 8        | 3R            | 20           | 75             | 8          | 2            |
| JCRL20800803A-100 | □       | 8        | 0.3R          | 20           | 100            | 8          | 2            |
| JCRL20800805A-100 | □       | 8        | 0.5R          | 20           | 100            | 8          | 2            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎ 優Excellent ● 可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |



## 鎢鋼 2 刃圓鼻長柄銑刀

### CARBIDE END MILLS - Corner Radius Type 2 Flutes - Long Shank



單位(unit):mm

| 型號                | 在庫                                  | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|-------------------------------------|----------|---------------|--------------|----------------|------------|--------------|
| MODE              | Stocket                             | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCRL20800810A-100 | <input type="checkbox"/>            | 8        | 1R            | 20           | 100            | 8          | 2            |
| JCRL20800815A-100 | <input type="checkbox"/>            | 8        | 1.5R          | 20           | 100            | 8          | 2            |
| JCRL20800820A-100 | <input type="checkbox"/>            | 8        | 2R            | 20           | 100            | 8          | 2            |
| JCRL20800825A-100 | <input type="checkbox"/>            | 8        | 2.5R          | 20           | 100            | 8          | 2            |
| JCRL20800830A-100 | <input type="checkbox"/>            | 8        | 3R            | 20           | 100            | 8          | 2            |
| JCRL21001003A-100 | <input checked="" type="checkbox"/> | 10       | 0.3R          | 25           | 100            | 10         | 2            |
| JCRL21001005A-100 | <input checked="" type="checkbox"/> | 10       | 0.5R          | 25           | 100            | 10         | 2            |
| JCRL21001010A-100 | <input checked="" type="checkbox"/> | 10       | 1R            | 25           | 100            | 10         | 2            |
| JCRL21001015A-100 | <input checked="" type="checkbox"/> | 10       | 1.5R          | 25           | 100            | 10         | 2            |
| JCRL21001020A-100 | <input checked="" type="checkbox"/> | 10       | 2R            | 25           | 100            | 10         | 2            |
| JCRL21001025A-100 | <input checked="" type="checkbox"/> | 10       | 2.5R          | 25           | 100            | 10         | 2            |
| JCRL21001030A-100 | <input checked="" type="checkbox"/> | 10       | 3R            | 25           | 100            | 10         | 2            |
| JCRL21201203A-100 | <input checked="" type="checkbox"/> | 12       | 0.3R          | 30           | 100            | 12         | 2            |
| JCRL21201205A-100 | <input checked="" type="checkbox"/> | 12       | 0.5R          | 30           | 100            | 12         | 2            |
| JCRL21201210A-100 | <input checked="" type="checkbox"/> | 12       | 1R            | 30           | 100            | 12         | 2            |
| JCRL21201215A-100 | <input checked="" type="checkbox"/> | 12       | 1.5R          | 30           | 100            | 12         | 2            |
| JCRL21201220A-100 | <input checked="" type="checkbox"/> | 12       | 2R            | 30           | 100            | 12         | 2            |
| JCRL21201225A-100 | <input checked="" type="checkbox"/> | 12       | 2.5R          | 30           | 100            | 12         | 2            |
| JCRL21201230A-100 | <input checked="" type="checkbox"/> | 12       | 3R            | 30           | 100            | 12         | 2            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼 4 刃圓鼻長柄銑刀

### CARBIDE END MILLS - Corner Radius Type 4 Flutes - Long Shank



單位(unit):mm

| 型號                | 在庫      | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE              | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCRL40300303A-75  | ●       | 3        | 0.3R          | 8            | 75             | 3          | 4            |
| JCRL40300305A-75  | ●       | 3        | 0.5R          | 8            | 75             | 3          | 4            |
| JCRL40300310A-75  | ●       | 3        | 1R            | 8            | 75             | 3          | 4            |
| JCRL40400403A-75  | ●       | 4        | 0.3R          | 10           | 75             | 4          | 4            |
| JCRL40400405A-75  | ●       | 4        | 0.5R          | 10           | 75             | 4          | 4            |
| JCRL40400410A-75  | ●       | 4        | 1R            | 10           | 75             | 4          | 4            |
| JCRL40400415A-75  | ●       | 4        | 1.5R          | 10           | 75             | 4          | 4            |
| JCRL40400403A-100 | □       | 4        | 0.3R          | 10           | 100            | 4          | 4            |
| JCRL40400405A-100 | □       | 4        | 0.5R          | 10           | 100            | 4          | 4            |
| JCRL40400410A-100 | □       | 4        | 1R            | 10           | 100            | 4          | 4            |
| JCRL40400415A-100 | □       | 4        | 1.5R          | 10           | 100            | 4          | 4            |
| JCRL40600603A-75  | ●       | 6        | 0.3R          | 15           | 75             | 6          | 4            |
| JCRL40600605A-75  | ●       | 6        | 0.5R          | 15           | 75             | 6          | 4            |
| JCRL40600610A-75  | ●       | 6        | 1R            | 15           | 75             | 6          | 4            |
| JCRL40600615A-75  | ●       | 6        | 1.5R          | 15           | 75             | 6          | 4            |
| JCRL40600620A-75  | ●       | 6        | 2R            | 15           | 75             | 6          | 4            |
| JCRL40600603A-100 | □       | 6        | 0.3R          | 15           | 100            | 6          | 4            |
| JCRL40600605A-100 | □       | 6        | 0.5R          | 15           | 100            | 6          | 4            |
| JCRL40600610A-100 | □       | 6        | 1R            | 15           | 100            | 6          | 4            |
| JCRL40600615A-100 | □       | 6        | 1.5R          | 15           | 100            | 6          | 4            |
| JCRL40600620A-100 | □       | 6        | 2R            | 15           | 100            | 6          | 4            |
| JCRL40800803A-75  | ●       | 8        | 0.3R          | 20           | 75             | 8          | 4            |
| JCRL40800805A-75  | ●       | 8        | 0.5R          | 20           | 75             | 8          | 4            |
| JCRL40800810A-75  | ●       | 8        | 1R            | 20           | 75             | 8          | 4            |
| JCRL40800815A-75  | ●       | 8        | 1.5R          | 20           | 75             | 8          | 4            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎優 Excellent ●可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                |

## 鎢鋼 4 刃圓鼻長柄銑刀

### CARBIDE END MILLS - Corner Radius Type 4 Flutes - Long Shank



單位(unit):mm

| 型號                | 在庫      | 直徑 D1    | R角            | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|---------|----------|---------------|--------------|----------------|------------|--------------|
| MODE              | Stocket | Tool Dia | Corner Radius | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JCRL40800820A-75  | ●       | 8        | 2R            | 20           | 75             | 8          | 4            |
| JCRL40800825A-75  | ●       | 8        | 2.5R          | 20           | 75             | 8          | 4            |
| JCRL40800830A-75  | ●       | 8        | 3R            | 20           | 75             | 8          | 4            |
| JCRL40800803A-100 | □       | 8        | 0.3R          | 20           | 100            | 8          | 4            |
| JCRL40800805A-100 | □       | 8        | 0.5R          | 20           | 100            | 8          | 4            |
| JCRL40800810A-100 | □       | 8        | 1R            | 20           | 100            | 8          | 4            |
| JCRL40800815A-100 | □       | 8        | 1.5R          | 20           | 100            | 8          | 4            |
| JCRL40800820A-100 | □       | 8        | 2R            | 20           | 100            | 8          | 4            |
| JCRL40800825A-100 | □       | 8        | 2.5R          | 20           | 100            | 8          | 4            |
| JCRL40800830A-100 | □       | 8        | 3R            | 20           | 100            | 8          | 4            |
| JCRL41001003A-100 | ●       | 10       | 0.3R          | 25           | 100            | 10         | 4            |
| JCRL41001005A-100 | ●       | 10       | 0.5R          | 25           | 100            | 10         | 4            |
| JCRL41001010A-100 | ●       | 10       | 1R            | 25           | 100            | 10         | 4            |
| JCRL41001015A-100 | ●       | 10       | 1.5R          | 25           | 100            | 10         | 4            |
| JCRL41001020A-100 | ●       | 10       | 2R            | 25           | 100            | 10         | 4            |
| JCRL41001025A-100 | ●       | 10       | 2.5R          | 25           | 100            | 10         | 4            |
| JCRL41001030A-100 | ●       | 10       | 3R            | 25           | 100            | 10         | 4            |
| JCRL41201203A-100 | ●       | 12       | 0.3R          | 30           | 100            | 12         | 4            |
| JCRL41201205A-100 | ●       | 12       | 0.5R          | 30           | 100            | 12         | 4            |
| JCRL41201210A-100 | ●       | 12       | 1R            | 30           | 100            | 12         | 4            |
| JCRL41201215A-100 | ●       | 12       | 1.5R          | 30           | 100            | 12         | 4            |
| JCRL41201220A-100 | ●       | 12       | 2R            | 30           | 100            | 12         | 4            |
| JCRL41201225A-100 | ●       | 12       | 2.5R          | 30           | 100            | 12         | 4            |
| JCRL41201230A-100 | ●       | 12       | 3R            | 30           | 100            | 12         | 4            |

●印: 標準在庫品.Stocked items

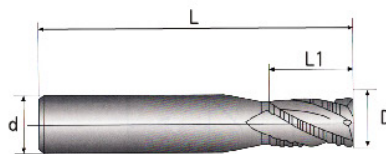
□印: 無在庫品, 訂製生產品

◎優Excellent ●可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      |        |                              |             | ●               |               | ●                       | ●               | ●                    |



## FINE PITCH ROUGHING END MILL



單位(unit):mm

| 型號         | 在庫                       | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket                  | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JGF304006A | <input type="checkbox"/> | 4        | 8            | 50             | 6          | 3            |
| JGF305006A | <input type="checkbox"/> | 5        | 13           | 50             | 6          | 3            |
| JGF306006A | <input type="checkbox"/> | 6        | 16           | 50             | 6          | 3            |
| JGF307008A | <input type="checkbox"/> | 7        | 16           | 60             | 8          | 3            |
| JGF308008A | <input type="checkbox"/> | 8        | 19           | 60             | 8          | 3            |
| JGF309010A | <input type="checkbox"/> | 9        | 25           | 75             | 10         | 3            |
| JGF310010A | <input type="checkbox"/> | 10       | 25           | 75             | 10         | 3            |
| JGF311012A | <input type="checkbox"/> | 11       | 30           | 75             | 12         | 3            |
| JGF312012A | <input type="checkbox"/> | 12       | 30           | 75             | 12         | 3            |
| JGF316016A | <input type="checkbox"/> | 16       | 35           | 100            | 16         | 3            |
| JGF320020A | <input type="checkbox"/> | 20       | 45           | 100            | 20         | 3            |

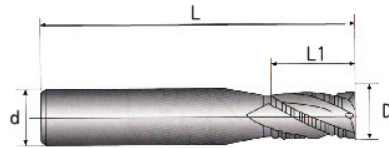
□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB 225~325          | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ●                   | ●                   | ●                      |        |                              |             | ●               |               | ●                       |                 |                  |

## 粗精銑刀

### FINE PITCH ROUGHING END MILL



單位(unit):mm

| 型號         | 在庫                       | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket                  | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JGF405006A | <input type="checkbox"/> | 5        | 13           | 50             | 6          | 4            |
| JGF406006A | <input type="checkbox"/> | 6        | 16           | 50             | 6          | 4            |
| JGF407008A | <input type="checkbox"/> | 7        | 16           | 60             | 8          | 4            |
| JGF408008A | <input type="checkbox"/> | 8        | 19           | 60             | 8          | 4            |
| JGF409010A | <input type="checkbox"/> | 9        | 25           | 75             | 10         | 4            |
| JGF410010A | <input type="checkbox"/> | 10       | 25           | 75             | 10         | 4            |
| JGF411012A | <input type="checkbox"/> | 11       | 30           | 75             | 12         | 4            |
| JGF412012A | <input type="checkbox"/> | 12       | 30           | 75             | 12         | 4            |
| JGF416016A | <input type="checkbox"/> | 16       | 35           | 100            | 16         | 4            |
| JGF420020A | <input type="checkbox"/> | 20       | 45           | 100            | 20         | 4            |

☐印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

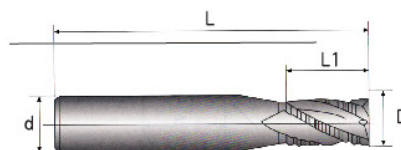
| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB 225~325          | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ●                   | ●                   | ●                      |        |                              |             | ●               |               | ●                       |                 |                  |

## ROUGHING CUTTER

Super  
MGAlTiN  
COATHRC  
50

25°

3 Flute

Shank  
h6

單位(unit):mm

| 型號         | 在庫                       | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket                  | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JGR304006A | <input type="checkbox"/> | 4        | 8            | 50             | 6          | 3            |
| JGR305006A | <input type="checkbox"/> | 5        | 13           | 50             | 6          | 3            |
| JGR306006A | <input type="checkbox"/> | 6        | 16           | 50             | 6          | 3            |
| JGR307008A | <input type="checkbox"/> | 7        | 16           | 60             | 8          | 3            |
| JGR308008A | <input type="checkbox"/> | 8        | 19           | 60             | 8          | 3            |
| JGR309010A | <input type="checkbox"/> | 9        | 25           | 75             | 10         | 3            |
| JGR310010A | <input type="checkbox"/> | 10       | 25           | 75             | 10         | 3            |
| JGR311012A | <input type="checkbox"/> | 11       | 30           | 75             | 12         | 3            |
| JGR312012A | <input type="checkbox"/> | 12       | 30           | 75             | 12         | 3            |
| JGR316016A | <input type="checkbox"/> | 16       | 35           | 100            | 16         | 3            |
| JGR320020A | <input type="checkbox"/> | 20       | 45           | 100            | 20         | 3            |

□印: 無在庫品, 在訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ●                   | ●                   | ●                      |        |                              |             | ●               |               | ●                       |                 |                  |

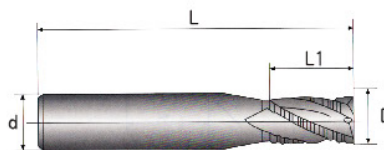


## ROUGHING CUTTER

Super  
MGAlTiN  
COATHRC  
50

25

4 Flute

Shank  
h6

單位(unit):mm

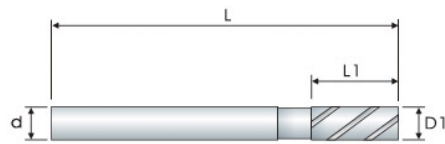
| 型號         | 在庫                       | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stock                    | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JGR405006A | <input type="checkbox"/> | 5        | 13           | 50             | 6          | 4            |
| JGR406006A | <input type="checkbox"/> | 6        | 16           | 50             | 6          | 4            |
| JGR407008A | <input type="checkbox"/> | 7        | 16           | 60             | 8          | 4            |
| JGR408008A | <input type="checkbox"/> | 8        | 19           | 60             | 8          | 4            |
| JGR409010A | <input type="checkbox"/> | 9        | 25           | 75             | 10         | 4            |
| JGR410010A | <input type="checkbox"/> | 10       | 25           | 75             | 10         | 4            |
| JGR411012A | <input type="checkbox"/> | 11       | 30           | 75             | 12         | 4            |
| JGR412012A | <input type="checkbox"/> | 12       | 30           | 75             | 12         | 4            |
| JGR416016A | <input type="checkbox"/> | 16       | 35           | 100            | 16         | 4            |
| JGR420020A | <input type="checkbox"/> | 20       | 45           | 100            | 20         | 4            |

□印: 無在庫品，在訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ●                   | ●                   | ●                      |        |                              |             | ●               |               | ●                       |                 |                  |

CARBIDE END MILLS - Square Type 2 Flutes- for Aluminum



單位(unit):mm

| 型號        | 在庫                                  | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-----------|-------------------------------------|----------|--------------|----------------|------------|--------------|
| MODE      | Stocket                             | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JAE203004 | <input type="checkbox"/>            | 3        | 9            | 50             | 4          | 2            |
| JAE204004 | <input type="checkbox"/>            | 4        | 12           | 50             | 4          | 2            |
| JAE202006 | <input type="checkbox"/>            | 2        | 6            | 50             | 6          | 2            |
| JAE203006 | <input checked="" type="checkbox"/> | 3        | 9            | 50             | 6          | 2            |
| JAE204006 | <input checked="" type="checkbox"/> | 4        | 12           | 50             | 6          | 2            |
| JAE205006 | <input checked="" type="checkbox"/> | 5        | 15           | 50             | 6          | 2            |
| JAE206006 | <input checked="" type="checkbox"/> | 6        | 18           | 50             | 6          | 2            |
| JAE208008 | <input checked="" type="checkbox"/> | 8        | 20           | 60             | 8          | 2            |
| JAE210010 | <input checked="" type="checkbox"/> | 10       | 30           | 75             | 10         | 2            |
| JAE212012 | <input checked="" type="checkbox"/> | 12       | 32           | 75             | 12         | 2            |
| JAE216016 | <input checked="" type="checkbox"/> | 16       | 45           | 100            | 16         | 2            |
| JAE220020 | <input checked="" type="checkbox"/> | 20       | 45           | 100            | 20         | 2            |

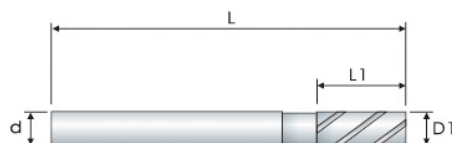
●印: 標準在庫品.Stocked items

□印: 無在庫品, 印製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
|                     |                     |                        |        |                              | ●           |                 | ◎             |                         |                 |                  |

CARBIDE END MILLS - Square Type 2 Flutes- for Aluminum Shank



單位(unit):mm

| 型號        | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-----------|---------|----------|--------------|----------------|------------|--------------|
| MODE      | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JAE203006 | ●       | 3        | 12           | 60             | 6          | 2            |
| JAE204006 | ●       | 4        | 16           | 60             | 6          | 2            |
| JAE205006 | ●       | 5        | 20           | 60             | 6          | 2            |
| JAE206006 | ●       | 6        | 25           | 75             | 6          | 2            |
| JAE208008 | ●       | 8        | 32           | 75             | 8          | 2            |
| JAE210010 | ●       | 10       | 45           | 100            | 10         | 2            |
| JAE212012 | ●       | 12       | 45           | 100            | 12         | 2            |
| JAE216016 | ●       | 16       | 65           | 150            | 16         | 2            |
| JAE220020 | ●       | 20       | 75           | 150            | 20         | 2            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 印製生產品

◎優 Excellent ●可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
|                     |                     |                        |        |                              | ●           |                 | ◎             |                         |                 |                  |



## CARBIDE END MILLS - Square Type 3 Flutes- for Aluminum

Super  
MG

45

3 Flute

Shank  
h6



單位(unit):mm

| 型號        | 在庫                                  | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-----------|-------------------------------------|----------|--------------|----------------|------------|--------------|
| MODE      | Stocket                             | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JAE303004 | <input type="checkbox"/>            | 3        | 9            | 50             | 4          | 3            |
| JAE304004 | <input type="checkbox"/>            | 4        | 12           | 50             | 4          | 3            |
| JAE302006 | <input type="checkbox"/>            | 2        | 6            | 50             | 6          | 3            |
| JAE303006 | <input checked="" type="checkbox"/> | 3        | 9            | 50             | 6          | 3            |
| JAE304006 | <input checked="" type="checkbox"/> | 4        | 12           | 50             | 6          | 3            |
| JAE305006 | <input checked="" type="checkbox"/> | 5        | 15           | 50             | 6          | 3            |
| JAE306006 | <input checked="" type="checkbox"/> | 6        | 18           | 50             | 6          | 3            |
| JAE308008 | <input checked="" type="checkbox"/> | 8        | 20           | 60             | 8          | 3            |
| JAE310010 | <input checked="" type="checkbox"/> | 10       | 30           | 75             | 10         | 3            |
| JAE312012 | <input checked="" type="checkbox"/> | 12       | 32           | 75             | 12         | 3            |
| JAE316016 | <input checked="" type="checkbox"/> | 16       | 45           | 100            | 16         | 3            |
| JAE320020 | <input checked="" type="checkbox"/> | 20       | 45           | 100            | 20         | 3            |

●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
|                     |                     |                        |        |                              | ●           |                 | ●             |                         |                 |                  |

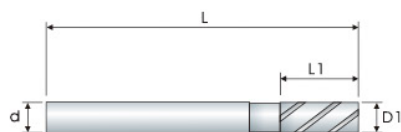
CARBIDE END MILLS - Square Type 3 Flutes- for Aluminum

Super  
MG

45

3 Flute

Shank  
h6



單位(unit):mm

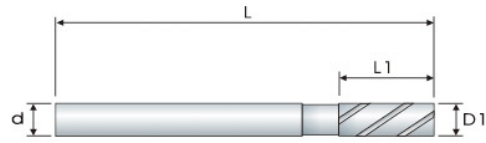
| 型號        | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-----------|---------|----------|--------------|----------------|------------|--------------|
| MODE      | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| JAE303006 | ●       | 3        | 12           | 60             | 6          | 3            |
| JAE304006 | ●       | 4        | 16           | 60             | 6          | 3            |
| JAE305006 | ●       | 5        | 20           | 60             | 6          | 3            |
| JAE306006 | ●       | 6        | 25           | 75             | 6          | 3            |
| JAE308008 | ●       | 8        | 32           | 75             | 8          | 3            |
| JAE310010 | ●       | 10       | 45           | 100            | 10         | 3            |
| JAE312012 | ●       | 12       | 45           | 100            | 12         | 3            |
| JAE316016 | ●       | 16       | 65           | 150            | 16         | 3            |
| JAE320020 | ●       | 20       | 75           | 150            | 20         | 3            |

●印: 標準在庫品.Stocked items

◎ 優Excellent ● 可Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
|                     |                     |                        |        |                              | ●           |                 | ●             |                         |                 |                  |

CARBIDE END MILLS Square Type 6 Flutes(8Flutes)



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| AHD606006H | ●       | 6        | 15           | 60             | 6          | 6            |
| AHD608008H | ●       | 8        | 20           | 60             | 8          | 6            |
| AHD610010H | ●       | 10       | 25           | 75             | 10         | 6            |
| AHD612012H | ●       | 12       | 30           | 75             | 12         | 6            |
| AHD616016H | ●       | 16       | 45           | 100            | 16         | 6            |
| AHD620020H | ●       | 20       | 45           | 100            | 20         | 6            |
| AHD825025H | ●       | 25       | 45           | 100            | 25         | 8            |

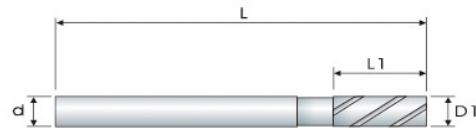
●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             |                 |               | ●                       | ●               | ●                |



CARBIDE END MILLS - Square TYPE 6 Flutes (8 Flutes) - Long Shank



單位(unit):mm

| 型號           | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|---------|----------|--------------|----------------|------------|--------------|
| MODE         | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| AHDLL606006H | ●       | 6        | 25           | 75             | 6          | 6            |
| AHDLL608008H | ●       | 8        | 35           | 100            | 8          | 6            |
| AHDLL610010H | ●       | 10       | 45           | 100            | 10         | 6            |
| AHDLL612012H | ●       | 12       | 50           | 100            | 12         | 6            |
| AHDLL616016H | ●       | 16       | 65           | 150            | 16         | 6            |
| AHDLL620020H | ●       | 20       | 75           | 150            | 20         | 6            |
| AHDLL825025H | ●       | 25       | 80           | 150            | 25         | 8            |

●印: 標準在庫品.Stocked items

□印: 無在庫品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             |                 |               | ●                       | ●               | ●               |

### CARBIDE END MILLS - Square Type 2 Flutes



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACS201004H | ●       | 1        | 2.5          | 50             | 4          | 2            |
| ACS201504H | ●       | 1.5      | 3            | 50             | 4          | 2            |
| ACS200204H | ●       | 2        | 5            | 50             | 4          | 2            |
| ACS202504H | ●       | 2.5      | 6            | 50             | 4          | 2            |
| ACS203004H | ●       | 3        | 6            | 50             | 4          | 2            |
| ACS203504H | ●       | 3.5      | 8            | 50             | 4          | 2            |
| ACS204004H | ●       | 4        | 9            | 50             | 4          | 2            |
| ACS203006H | ●       | 3        | 6            | 50             | 6          | 2            |
| ACS204006H | ●       | 4        | 9            | 50             | 6          | 2            |
| ACS205006H | ●       | 5        | 12           | 50             | 6          | 2            |
| ACS206006H | ●       | 6        | 13           | 50             | 6          | 2            |
| ACS206508H | ●       | 6.5      | 20           | 60             | 8          | 2            |
| ACS207008H | ●       | 7        | 20           | 60             | 8          | 2            |
| ACS207508H | ●       | 7.5      | 20           | 60             | 8          | 2            |
| ACS208008H | ●       | 8        | 20           | 60             | 8          | 2            |
| ACS208510H | ●       | 8.5      | 25           | 75             | 10         | 2            |
| ACS209010H | ●       | 9        | 25           | 75             | 10         | 2            |
| ACS209510H | ●       | 9.5      | 25           | 75             | 10         | 2            |
| ACS210010H | ●       | 10       | 25           | 75             | 10         | 2            |
| ACS210512H | ●       | 10.5     | 30           | 75             | 12         | 2            |
| ACS211012H | ●       | 11       | 30           | 75             | 12         | 2            |
| ACS211512H | ●       | 11.5     | 30           | 75             | 12         | 2            |
| ACS212012H | ●       | 12       | 30           | 75             | 12         | 2            |
| ACS214016H | ●       | 14       | 30           | 100            | 16         | 2            |
| ACS215016H | ●       | 15       | 30           | 100            | 16         | 2            |
| ACS216016H | ●       | 16       | 40           | 100            | 16         | 2            |
| ACS220020H | ●       | 20       | 45           | 100            | 20         | 2            |
| ACS225025H | ●       | 25       | 45           | 100            | 25         | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             |                 |               | ●                       | ●               | ●                |

## CARBIDE END MILLS - Square Type 4 Flutes



單位(unit):mm

| 型號         | 在庫      | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|------------|---------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACS401004H | ●       | 1        | 2.5          | 50             | 4          | 4            |
| ACS401504H | ●       | 1.5      | 3            | 50             | 4          | 4            |
| ACS402004H | ●       | 2        | 5            | 50             | 4          | 4            |
| ACS402504H | ●       | 2.5      | 6            | 50             | 4          | 4            |
| ACS403004H | ●       | 3        | 6            | 50             | 4          | 4            |
| ACS403504H | ●       | 3.5      | 8            | 50             | 4          | 4            |
| ACS404004H | ●       | 4        | 9            | 50             | 4          | 4            |
| ACS401506H | ●       | 1.5      | 3            | 50             | 6          | 4            |
| ACS403006H | ●       | 3        | 6            | 50             | 6          | 4            |
| ACS404006H | ●       | 4        | 9            | 50             | 6          | 4            |
| ACS405006H | ●       | 5        | 12           | 50             | 6          | 4            |
| ACS406006H | ●       | 6        | 13           | 50             | 6          | 4            |
| ACS406508H | ●       | 6.5      | 20           | 60             | 8          | 4            |
| ACS407008H | ●       | 7        | 20           | 60             | 8          | 4            |
| ACS407508H | ●       | 7.5      | 20           | 60             | 8          | 4            |
| ACS408008H | ●       | 8        | 20           | 60             | 8          | 4            |
| ACS408510H | ●       | 8.5      | 25           | 75             | 10         | 4            |
| ACS409010H | ●       | 9        | 25           | 75             | 10         | 4            |
| ACS409510H | ●       | 9.5      | 25           | 75             | 10         | 4            |
| ACS410010H | ●       | 10       | 25           | 75             | 10         | 4            |
| ACS410512H | ●       | 10.5     | 30           | 75             | 12         | 4            |
| ACS411012H | ●       | 11       | 30           | 75             | 12         | 4            |
| ACS411512H | ●       | 11.5     | 30           | 75             | 12         | 4            |
| ACS412012H | ●       | 12       | 30           | 75             | 12         | 4            |
| ACS414016H | ●       | 14       | 30           | 100            | 16         | 4            |
| ACS415016H | ●       | 15       | 30           | 100            | 16         | 4            |
| ACS416016H | ●       | 16       | 40           | 100            | 16         | 4            |
| ACS420020H | ●       | 20       | 45           | 100            | 20         | 4            |
| ACS425025H | ●       | 25       | 45           | 100            | 25         | 4            |

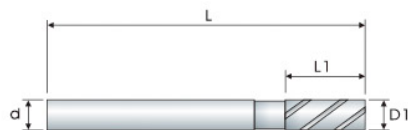
●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎢鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      | ◎      | ◎                            |             |                 |               | ●                       | ●               | ●                    |



## CARBIDE END MILLS - Square Type 2 Flutes - Long Shank



單位(unit):mm

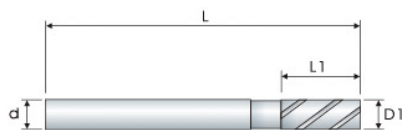
| 型號             | 在庫                       | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|----------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE           | Stock                    | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACSL203003075H | <input type="checkbox"/> | 3        | 6            | 75             | 3          | 2            |
| ACSL201004075H | <input type="checkbox"/> | 1        | 2.5          | 75             | 4          | 2            |
| ACSL201504075H | <input type="checkbox"/> | 1.5      | 3            | 75             | 4          | 2            |
| ACSL202004075H | <input type="checkbox"/> | 2        | 5            | 75             | 4          | 2            |
| ACSL203004075H | <input type="checkbox"/> | 3        | 6            | 75             | 4          | 2            |
| ACSL204004075H | <input type="checkbox"/> | 4        | 9            | 75             | 4          | 2            |
| ACSL204004100H | <input type="checkbox"/> | 4        | 9            | 100            | 4          | 2            |
| ACSL203006075H | <input type="checkbox"/> | 3        | 6            | 75             | 6          | 2            |
| ACSL204006075H | <input type="checkbox"/> | 4        | 9            | 75             | 6          | 2            |
| ACSL204006100H | <input type="checkbox"/> | 4        | 9            | 100            | 6          | 2            |
| ACSL205006075H | <input type="checkbox"/> | 5        | 12           | 75             | 6          | 2            |
| ACSL205006100H | <input type="checkbox"/> | 5        | 12           | 100            | 6          | 2            |
| ACSL206006075H | <input type="checkbox"/> | 6        | 13           | 75             | 6          | 2            |
| ACSL206006100H | <input type="checkbox"/> | 6        | 13           | 100            | 6          | 2            |
| ACSL208008075H | <input type="checkbox"/> | 8        | 20           | 75             | 8          | 2            |
| ACSL208008100H | <input type="checkbox"/> | 8        | 20           | 100            | 8          | 2            |
| ACSL210010100H | <input type="checkbox"/> | 10       | 25           | 100            | 10         | 2            |
| ACSL210010150H | <input type="checkbox"/> | 10       | 25           | 150            | 10         | 2            |
| ACSL212012100H | <input type="checkbox"/> | 12       | 30           | 100            | 12         | 2            |
| ACSL212012150H | <input type="checkbox"/> | 12       | 30           | 150            | 12         | 2            |
| ACSL216016150H | <input type="checkbox"/> | 16       | 40           | 150            | 16         | 2            |
| ACSL220020150H | <input type="checkbox"/> | 20       | 45           | 150            | 20         | 2            |

□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                |

### CARBIDE END MILLS - Square Type 2 Flutes - Long Shank & Long Cutting Length



單位(unit):mm

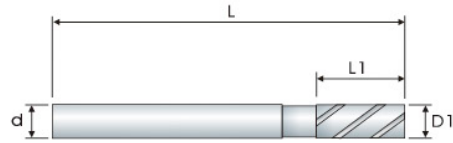
| 型號          | 在庫                       | 直徑 D     | 刃長L          | 全長L            | 柄徑d        | 刃數T          |
|-------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE        | Stocket                  | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACSL201004H | <input type="checkbox"/> | 1        | 4            | 50             | 4          | 2            |
| ACSL201504H | <input type="checkbox"/> | 1.5      | 6            | 50             | 4          | 2            |
| ACSL202004H | <input type="checkbox"/> | 2        | 8            | 50             | 4          | 2            |
| ACSL203006H | <input type="checkbox"/> | 3        | 11           | 60             | 6          | 2            |
| ACSL204006H | <input type="checkbox"/> | 4        | 14           | 60             | 6          | 2            |
| ACSL204506H | <input type="checkbox"/> | 4.5      | 16           | 60             | 6          | 2            |
| ACSL205006H | <input type="checkbox"/> | 5        | 18           | 60             | 6          | 2            |
| ACSL205506H | <input type="checkbox"/> | 5.5      | 20           | 60             | 6          | 2            |
| ACSL206006H | <input type="checkbox"/> | 6        | 25           | 75             | 6          | 2            |
| ACSL206508H | <input type="checkbox"/> | 6.5      | 25           | 75             | 8          | 2            |
| ACSL207008H | <input type="checkbox"/> | 7        | 25           | 75             | 8          | 2            |
| ACSL207508H | <input type="checkbox"/> | 7.5      | 25           | 75             | 8          | 2            |
| ACSL208008H | <input type="checkbox"/> | 8        | 35           | 100            | 8          | 2            |
| ACSL208510H | <input type="checkbox"/> | 8.5      | 35           | 100            | 10         | 2            |
| ACSL209010H | <input type="checkbox"/> | 9        | 35           | 100            | 10         | 2            |
| ACSL210010H | <input type="checkbox"/> | 10       | 40           | 100            | 10         | 2            |
| ACSL210512H | <input type="checkbox"/> | 10.5     | 40           | 100            | 12         | 2            |
| ACSL211012H | <input type="checkbox"/> | 11       | 40           | 100            | 12         | 2            |
| ACSL211512H | <input type="checkbox"/> | 11.5     | 45           | 100            | 12         | 2            |
| ACSL212012H | <input type="checkbox"/> | 12       | 45           | 100            | 12         | 2            |
| ACSL214016H | <input type="checkbox"/> | 14       | 45           | 100            | 16         | 2            |
| ACSL215016H | <input type="checkbox"/> | 15       | 45           | 100            | 16         | 2            |
| ACSL216016H | <input type="checkbox"/> | 16       | 45           | 100            | 16         | 2            |

□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |

CARBIDE END MILLS - Square Type 4 Flutes - Long Shank



單位(unit):mm

| 型號             | 在庫                       | 直徑 D1    | 刃長 L1        | 全長 L           | 柄徑 d       | 刃數 T         |
|----------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE           | Stocket                  | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACSL403003075H | <input type="checkbox"/> | 3        | 6            | 75             | 3          | 4            |
| ACSL401004075H | <input type="checkbox"/> | 1        | 2.5          | 75             | 4          | 4            |
| ACSL401504075H | <input type="checkbox"/> | 1.5      | 3            | 75             | 4          | 4            |
| ACSL402004075H | <input type="checkbox"/> | 2        | 5            | 75             | 4          | 4            |
| ACSL403004075H | <input type="checkbox"/> | 3        | 6            | 75             | 4          | 4            |
| ACSL404004075H | <input type="checkbox"/> | 4        | 9            | 75             | 4          | 4            |
| ACSL404004100H | <input type="checkbox"/> | 4        | 9            | 100            | 4          | 4            |
| ACSL403006075H | <input type="checkbox"/> | 3        | 6            | 75             | 6          | 4            |
| ACSL404006075H | <input type="checkbox"/> | 4        | 9            | 75             | 6          | 4            |
| ACSL404006100H | <input type="checkbox"/> | 4        | 9            | 100            | 6          | 4            |
| ACSL405006075H | <input type="checkbox"/> | 5        | 12           | 75             | 6          | 4            |
| ACSL405006100H | <input type="checkbox"/> | 5        | 12           | 100            | 6          | 4            |
| ACSL406006075H | <input type="checkbox"/> | 6        | 13           | 75             | 6          | 4            |
| ACSL406006100H | <input type="checkbox"/> | 6        | 13           | 100            | 6          | 4            |
| ACSL408008075H | <input type="checkbox"/> | 8        | 20           | 75             | 8          | 4            |
| ACSL408008100H | <input type="checkbox"/> | 8        | 20           | 100            | 8          | 4            |
| ACSL410010100H | <input type="checkbox"/> | 10       | 25           | 100            | 10         | 4            |
| ACSL410010150H | <input type="checkbox"/> | 10       | 25           | 150            | 10         | 4            |
| ACSL412012100H | <input type="checkbox"/> | 12       | 30           | 100            | 12         | 4            |
| ACSL412012150H | <input type="checkbox"/> | 12       | 30           | 150            | 12         | 4            |
| ACSL416016150H | <input type="checkbox"/> | 16       | 45           | 150            | 16         | 4            |
| ACSL420020150H | <input type="checkbox"/> | 20       | 45           | 150            | 20         | 4            |

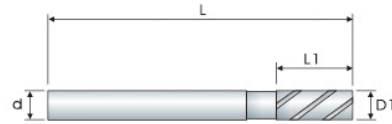
☐印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                |



CARBIDE END MILLS - Square Type 4 Flutes - Long Shank Long Cutting Length



單位(unit):mm

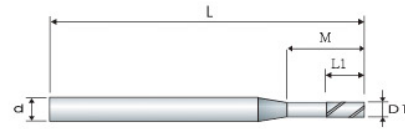
| 型號           | 在庫                       | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|--------------------------|----------|--------------|----------------|------------|--------------|
| MODE         | Stocket                  | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACSSL401004H | <input type="checkbox"/> | 1        | 4            | 50             | 4          | 4            |
| ACSSL401504H | <input type="checkbox"/> | 1.5      | 6            | 50             | 4          | 4            |
| ACSSL402004H | <input type="checkbox"/> | 2        | 8            | 50             | 4          | 4            |
| ACSSL403006H | <input type="checkbox"/> | 3        | 12           | 60             | 6          | 4            |
| ACSSL404006H | <input type="checkbox"/> | 4        | 16           | 60             | 6          | 4            |
| ACSSL405006H | <input type="checkbox"/> | 5        | 20           | 75             | 6          | 4            |
| ACSSL406006H | <input type="checkbox"/> | 6        | 25           | 75             | 6          | 4            |
| ACSSL407008H | <input type="checkbox"/> | 7        | 30           | 75             | 8          | 4            |
| ACSSL408008H | <input type="checkbox"/> | 8        | 30           | 75             | 8          | 4            |
| ACSSL410010H | <input type="checkbox"/> | 10       | 40           | 100            | 10         | 4            |
| ACSSL412012H | <input type="checkbox"/> | 12       | 45           | 100            | 12         | 4            |
| ACSSL414016H | <input type="checkbox"/> | 14       | 45           | 100            | 16         | 4            |
| ACSSL416016H | <input type="checkbox"/> | 16       | 65           | 150            | 16         | 4            |
| ACSSL420020H | <input type="checkbox"/> | 20       | 75           | 150            | 20         | 4            |
| ACSSL425025H | <input type="checkbox"/> | 25       | 80           | 150            | 25         | 4            |

☐印: 無在庫品，訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |

CARBIDE END MILLS - Square Type 2 Flutes - Long Neck



單位(unit):mm

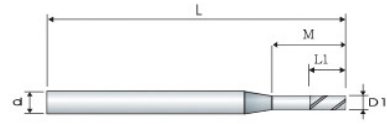
| 型號         | 在庫                       | 直徑 D1    | 刃長L1         | 有效長M              | 全長L            | 柄徑d        | 刃數T          |
|------------|--------------------------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE       | Stocket                  | Tool Dia | Flute Length | Under neck Length | Overall Length | Shank Dia. | No. of Flute |
| ADS200502H | <input type="checkbox"/> | 0.5      | 0.75         | 2                 | 50             | 4          | 2            |
| ADS200504H | <input type="checkbox"/> | 0.5      | 0.75         | 4                 | 50             | 4          | 2            |
| ADS200506H | <input type="checkbox"/> | 0.5      | 0.75         | 6                 | 50             | 4          | 2            |
| ADS200602H | <input type="checkbox"/> | 0.6      | 0.9          | 2                 | 50             | 4          | 2            |
| ADS200604H | <input type="checkbox"/> | 0.6      | 0.9          | 4                 | 50             | 4          | 2            |
| ADS200606H | <input type="checkbox"/> | 0.6      | 0.9          | 6                 | 50             | 4          | 2            |
| ADS200704H | <input type="checkbox"/> | 0.7      | 1.1          | 4                 | 50             | 4          | 2            |
| ADS200706H | <input type="checkbox"/> | 0.7      | 1.1          | 6                 | 50             | 4          | 2            |
| ADS200804H | <input type="checkbox"/> | 0.8      | 1.2          | 4                 | 50             | 4          | 2            |
| ADS200806H | <input type="checkbox"/> | 0.8      | 1.2          | 6                 | 50             | 4          | 2            |
| ADS200808H | <input type="checkbox"/> | 0.8      | 1.2          | 8                 | 50             | 4          | 2            |
| ADS200906H | <input type="checkbox"/> | 0.9      | 1.4          | 6                 | 50             | 4          | 2            |
| ADS200908H | <input type="checkbox"/> | 0.9      | 1.4          | 8                 | 50             | 4          | 2            |
| ADS200910H | <input type="checkbox"/> | 0.9      | 1.4          | 10                | 50             | 4          | 2            |
| ADS201006H | <input type="checkbox"/> | 1        | 1.5          | 6                 | 50             | 4          | 2            |
| ADS201008H | <input type="checkbox"/> | 1        | 1.5          | 8                 | 50             | 4          | 2            |
| ADS201010H | <input type="checkbox"/> | 1        | 1.5          | 10                | 50             | 4          | 2            |
| ADS201012H | <input type="checkbox"/> | 1        | 1.5          | 12                | 50             | 4          | 2            |
| ADS201016H | <input type="checkbox"/> | 1        | 1.5          | 16                | 50             | 4          | 2            |
| ADS201506H | <input type="checkbox"/> | 1.5      | 2.3          | 6                 | 50             | 4          | 2            |
| ADS201508H | <input type="checkbox"/> | 1.5      | 2.3          | 8                 | 50             | 4          | 2            |
| ADS201510H | <input type="checkbox"/> | 1.5      | 2.3          | 10                | 50             | 4          | 2            |
| ADS201512H | <input type="checkbox"/> | 1.5      | 2.3          | 12                | 50             | 4          | 2            |
| ADS201514H | <input type="checkbox"/> | 1.5      | 2.3          | 14                | 50             | 4          | 2            |
| ADS201516H | <input type="checkbox"/> | 1.5      | 2.3          | 16                | 50             | 4          | 2            |
| ADS201518H | <input type="checkbox"/> | 1.5      | 2.3          | 18                | 50             | 4          | 2            |
| ADS201520H | <input type="checkbox"/> | 1.5      | 2.3          | 20                | 50             | 4          | 2            |
| ADS202006H | <input type="checkbox"/> | 2        | 3            | 6                 | 50             | 4          | 2            |
| ADS202008H | <input type="checkbox"/> | 2        | 3            | 8                 | 50             | 4          | 2            |
| ADS202010H | <input type="checkbox"/> | 2        | 3            | 10                | 50             | 4          | 2            |
| ADS202012H | <input type="checkbox"/> | 2        | 3            | 12                | 50             | 4          | 2            |
| ADS202014H | <input type="checkbox"/> | 2        | 3            | 14                | 50             | 4          | 2            |

☐印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎢鎢合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |

CARBIDE END MILLS - Square Type 2 Flutes - Long Neck



單位(unit):mm

| 型號         | 在庫                       | 直徑 D1    | 刃長L1         | 有效長M              | 全長L            | 柄徑d        | 刃數T          |
|------------|--------------------------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE       | Stocket                  | Tool Dia | Flute Length | Under neck Length | Overall Length | Shank Dia. | No. of Flute |
| ADS202016H | <input type="checkbox"/> | 2        | 3            | 16                | 50             | 4          | 2            |
| ADS202018H | <input type="checkbox"/> | 2        | 3            | 18                | 50             | 4          | 2            |
| ADS202020H | <input type="checkbox"/> | 2        | 3            | 20                | 50             | 4          | 2            |
| ADS202508H | <input type="checkbox"/> | 2.5      | 4            | 8                 | 50             | 4          | 2            |
| ADS202510H | <input type="checkbox"/> | 2.5      | 4            | 10                | 50             | 4          | 2            |
| ADS202512H | <input type="checkbox"/> | 2.5      | 4            | 12                | 50             | 4          | 2            |
| ADS202514H | <input type="checkbox"/> | 2.5      | 4            | 14                | 50             | 4          | 2            |
| ADS202516H | <input type="checkbox"/> | 2.5      | 4            | 16                | 50             | 4          | 2            |
| ADS202520H | <input type="checkbox"/> | 2.5      | 4            | 20                | 50             | 4          | 2            |
| ADS203008H | <input type="checkbox"/> | 3        | 4.5          | 8                 | 50             | 6          | 2            |
| ADS203010H | <input type="checkbox"/> | 3        | 4.5          | 10                | 50             | 6          | 2            |
| ADS203012H | <input type="checkbox"/> | 3        | 4.5          | 12                | 50             | 6          | 2            |
| ADS203016H | <input type="checkbox"/> | 3        | 4.5          | 16                | 60             | 6          | 2            |
| ADS203020H | <input type="checkbox"/> | 3        | 4.5          | 20                | 60             | 6          | 2            |
| ADS203025H | <input type="checkbox"/> | 3        | 4.5          | 25                | 75             | 6          | 2            |
| ADS204012H | <input type="checkbox"/> | 4        | 6            | 12                | 50             | 6          | 2            |
| ADS204016H | <input type="checkbox"/> | 4        | 6            | 16                | 60             | 6          | 2            |
| ADS204020H | <input type="checkbox"/> | 4        | 6            | 20                | 75             | 6          | 2            |
| ADS204025H | <input type="checkbox"/> | 4        | 6            | 25                | 75             | 6          | 2            |
| ADS204030H | <input type="checkbox"/> | 4        | 6            | 30                | 75             | 6          | 2            |
| ADS204035H | <input type="checkbox"/> | 4        | 6            | 35                | 75             | 6          | 2            |

☐印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |



### CARBIDE END MILLS - Ball Nose Type 2 Flutes-Miniature



單位(unit):mm

| 型號         | 在庫                                  | 球頭R         | 直徑 D     | 刃長L          | 全長L            | 柄徑d        | 刃數T          |
|------------|-------------------------------------|-------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket                             | Ball Radius | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ABS200303H | <input type="checkbox"/>            | 0.15R       | 0.3      | 0.6          | 38             | 3          | 2            |
| ABS200403H | <input type="checkbox"/>            | 0.2R        | 0.4      | 0.8          | 38             | 3          | 2            |
| ABS200503H | <input type="checkbox"/>            | 0.25R       | 0.5      | 1            | 38             | 3          | 2            |
| ABS200603H | <input type="checkbox"/>            | 0.3R        | 0.6      | 1.2          | 38             | 3          | 2            |
| ABS200703H | <input type="checkbox"/>            | 0.35R       | 0.7      | 1.4          | 38             | 3          | 2            |
| ABS200803H | <input type="checkbox"/>            | 0.4R        | 0.8      | 1.6          | 38             | 3          | 2            |
| ABS201003H | <input type="checkbox"/>            | 0.5R        | 1.0      | 2            | 38             | 3          | 2            |
| ABS201203H | <input type="checkbox"/>            | 0.6R        | 1.2      | 2.4          | 38             | 3          | 2            |
| ABS201403H | <input type="checkbox"/>            | 0.7R        | 1.4      | 2.8          | 38             | 3          | 2            |
| ABS201503H | <input type="checkbox"/>            | 0.75R       | 1.5      | 2.5          | 38             | 3          | 2            |
| ABS201603H | <input type="checkbox"/>            | 0.8R        | 1.6      | 3.2          | 38             | 3          | 2            |
| ABS201803H | <input type="checkbox"/>            | 0.9R        | 1.8      | 3.6          | 38             | 3          | 2            |
| ABS202003H | <input type="checkbox"/>            | 1.0R        | 2.0      | 3            | 38             | 3          | 2            |
| ABS202203H | <input type="checkbox"/>            | 1.1R        | 2.2      | 4.4          | 38             | 3          | 2            |
| ABS202403H | <input type="checkbox"/>            | 1.2R        | 2.4      | 4.8          | 38             | 3          | 2            |
| ABS202503H | <input type="checkbox"/>            | 1.25R       | 2.5      | 4            | 38             | 3          | 2            |
| ABS203003H | <input type="checkbox"/>            | 1.5R        | 3.0      | 5            | 50             | 3          | 2            |
| ABS200304H | <input checked="" type="checkbox"/> | 0.15R       | 0.3      | 0.6          | 50             | 4          | 2            |
| ABS200404H | <input checked="" type="checkbox"/> | 0.2R        | 0.4      | 0.8          | 50             | 4          | 2            |
| ABS200504H | <input checked="" type="checkbox"/> | 0.25R       | 0.5      | 1            | 50             | 4          | 2            |
| ABS200604H | <input checked="" type="checkbox"/> | 0.3R        | 0.6      | 1.2          | 50             | 4          | 2            |
| ABS200704H | <input checked="" type="checkbox"/> | 0.35R       | 0.7      | 1.4          | 50             | 4          | 2            |
| ABS200804H | <input checked="" type="checkbox"/> | 0.4R        | 0.8      | 1.6          | 50             | 4          | 2            |
| ABS200904H | <input checked="" type="checkbox"/> | 0.45R       | 0.9      | 1.8          | 50             | 4          | 2            |
| ABS201204H | <input checked="" type="checkbox"/> | 0.6R        | 1.2      | 2.4          | 50             | 4          | 2            |
| ABS201404H | <input checked="" type="checkbox"/> | 0.7R        | 1.4      | 2.8          | 50             | 4          | 2            |
| ABS201604H | <input checked="" type="checkbox"/> | 0.8R        | 1.6      | 3.2          | 50             | 4          | 2            |
| ABS201804H | <input checked="" type="checkbox"/> | 0.9R        | 1.8      | 3.6          | 50             | 4          | 2            |
| ABS201904H | <input checked="" type="checkbox"/> | 0.95R       | 1.9      | 3.8          | 50             | 4          | 2            |
| ABS202104H | <input checked="" type="checkbox"/> | 1.05R       | 2.1      | 4.2          | 50             | 4          | 2            |
| ABS202204H | <input checked="" type="checkbox"/> | 1.1R        | 2.2      | 4.4          | 50             | 4          | 2            |
| ABS202304H | <input checked="" type="checkbox"/> | 1.15R       | 2.3      | 4.6          | 50             | 4          | 2            |
| ABS202404H | <input checked="" type="checkbox"/> | 1.2R        | 2.4      | 4.8          | 50             | 4          | 2            |

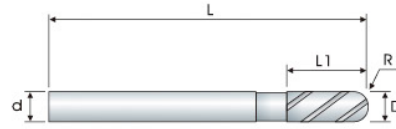
●印: 標準在庫品.Stocked items

□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎢鎳鐵<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                    |

CARBIDE END MILLS - Ball Nose Type 2 Flutes



單位(unit):mm

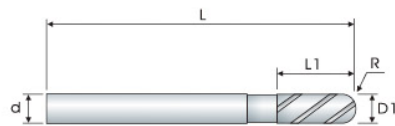
| 型號         | 在庫      | 球頭R         | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|-------------|----------|--------------|----------------|------------|--------------|
| MODE       | Stocket | Ball Radius | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ABS201004H | ●       | 0.5R        | 1        | 1.5          | 50             | 4          | 2            |
| ABS201504H | ●       | 0.75R       | 1.5      | 2.5          | 50             | 4          | 2            |
| ABS202004H | ●       | 1R          | 2        | 3            | 50             | 4          | 2            |
| ABS202504H | ●       | 1.25R       | 2.5      | 4            | 50             | 4          | 2            |
| ABS203004H | ●       | 1.5R        | 3        | 5            | 50             | 4          | 2            |
| ABS203504H | ●       | 1.75R       | 3.5      | 7            | 50             | 4          | 2            |
| ABS204004H | ●       | 2R          | 4        | 6            | 50             | 4          | 2            |
| ABS204006H | ●       | 2R          | 4        | 6            | 50             | 6          | 2            |
| ABS205006H | ●       | 2.5R        | 5        | 8            | 50             | 6          | 2            |
| ABS205506H | ●       | 2.75R       | 5.5      | 11           | 50             | 6          | 2            |
| ABS206006H | ●       | 3R          | 6        | 9            | 50             | 6          | 2            |
| ABS207008H | ●       | 3.5R        | 7        | 14           | 60             | 8          | 2            |
| ABS208008H | ●       | 4R          | 8        | 16           | 60             | 8          | 2            |
| ABS209010H | ●       | 4.5R        | 9        | 18           | 75             | 10         | 2            |
| ABS210010H | ●       | 5R          | 10       | 20           | 75             | 10         | 2            |
| ABS211012H | ●       | 5.5R        | 11       | 22           | 75             | 12         | 2            |
| ABS212012H | ●       | 6R          | 12       | 24           | 75             | 12         | 2            |
| ABS214016H | ●       | 7R          | 14       | 28           | 100            | 16         | 2            |
| ABS216016H | ●       | 8R          | 16       | 32           | 100            | 16         | 2            |
| ABS218020H | ●       | 9R          | 18       | 36           | 100            | 20         | 2            |
| ABS220020H | ●       | 10R         | 20       | 40           | 100            | 20         | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |

## CARBIDE END MILLS - Ball Nose Type 2 Flutes - Long Shank



單位(unit):mm

| 型號             | 在庫                                  | 球頭R         | 直徑 D1    | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|----------------|-------------------------------------|-------------|----------|--------------|----------------|------------|--------------|
| MODE           | Stocket                             | Ball Radius | Tool Dia | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ABSL201004075H | <input type="checkbox"/>            | 0.5R        | 1        | 2            | 75             | 4          | 2            |
| ABSL201006075H | <input type="checkbox"/>            | 0.5R        | 1        | 2            | 75             | 6          | 2            |
| ABSL201006100H | <input type="checkbox"/>            | 0.5R        | 1        | 2            | 100            | 6          | 2            |
| ABSL201504075H | <input type="checkbox"/>            | 0.75R       | 1.5      | 3            | 75             | 4          | 2            |
| ABSL201506075H | <input type="checkbox"/>            | 0.75R       | 1.5      | 3            | 75             | 6          | 2            |
| ABSL201506100H | <input type="checkbox"/>            | 0.75R       | 1.5      | 3            | 100            | 6          | 2            |
| ABSL202006075H | <input type="checkbox"/>            | 1R          | 2        | 4            | 75             | 6          | 2            |
| ABSL202006100H | <input type="checkbox"/>            | 1R          | 2        | 4            | 100            | 6          | 2            |
| ABSL202506075H | <input type="checkbox"/>            | 1.25R       | 2.5      | 5            | 75             | 6          | 2            |
| ABSL202506100H | <input type="checkbox"/>            | 1.25R       | 2.5      | 5            | 100            | 6          | 2            |
| ABSL203006075H | <input type="checkbox"/>            | 1.5R        | 3        | 6            | 75             | 6          | 2            |
| ABSL203006100H | <input type="checkbox"/>            | 1.5R        | 3        | 6            | 100            | 6          | 2            |
| ABSL203506075H | <input type="checkbox"/>            | 1.75R       | 3.5      | 7            | 100            | 6          | 2            |
| ABSL204006075H | <input type="checkbox"/>            | 2R          | 4        | 6            | 75             | 6          | 2            |
| ABSL204006100H | <input checked="" type="checkbox"/> | 2R          | 4        | 6            | 100            | 6          | 2            |
| ABSL205006075H | <input checked="" type="checkbox"/> | 2.5R        | 5        | 8            | 75             | 6          | 2            |
| ABSL205006100H | <input checked="" type="checkbox"/> | 2.5R        | 5        | 8            | 100            | 6          | 2            |
| ABSL206006075H | <input checked="" type="checkbox"/> | 3R          | 6        | 9            | 75             | 6          | 2            |
| ABSL206006100H | <input checked="" type="checkbox"/> | 3R          | 6        | 9            | 100            | 6          | 2            |
| ABSL206006150H | <input checked="" type="checkbox"/> | 3R          | 6        | 9            | 150            | 6          | 2            |
| ABSL208008075H | <input checked="" type="checkbox"/> | 4R          | 8        | 16           | 75             | 8          | 2            |
| ABSL208008100H | <input checked="" type="checkbox"/> | 4R          | 8        | 16           | 100            | 8          | 2            |
| ABSL208008150H | <input checked="" type="checkbox"/> | 4R          | 8        | 16           | 150            | 8          | 2            |
| ABSL210010100H | <input checked="" type="checkbox"/> | 5R          | 10       | 20           | 100            | 10         | 2            |
| ABSL210010150H | <input checked="" type="checkbox"/> | 5R          | 10       | 20           | 150            | 10         | 2            |
| ABSL210010200H | <input type="checkbox"/>            | 5R          | 10       | 20           | 200            | 10         | 2            |
| ABSL212012100H | <input checked="" type="checkbox"/> | 6R          | 12       | 24           | 100            | 12         | 2            |
| ABSL212012150H | <input checked="" type="checkbox"/> | 6R          | 12       | 24           | 150            | 12         | 2            |
| ABSL212012200H | <input type="checkbox"/>            | 6R          | 12       | 24           | 200            | 12         | 2            |
| ABSL216016150H | <input checked="" type="checkbox"/> | 8R          | 16       | 32           | 150            | 16         | 2            |
| ABSL216016200H | <input type="checkbox"/>            | 8R          | 16       | 32           | 200            | 16         | 2            |
| ABSL220020150H | <input checked="" type="checkbox"/> | 10R         | 20       | 40           | 150            | 20         | 2            |
| ABSL220020200H | <input type="checkbox"/>            | 10R         | 20       | 40           | 200            | 20         | 2            |

●印: 標準在庫品.Stocked items

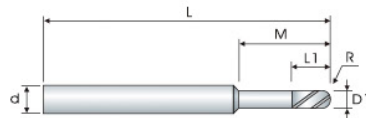
□印: 無在庫品, 訂製生產品

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎢鎳鎢<br>合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|----------------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                      |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                    |



## CARBIDE END MILLS - Ball Nose Type 2 Flutes - Long Neck



單位(unit):mm

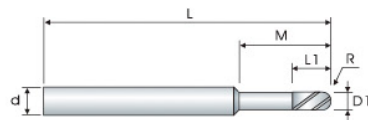
| 型號         | 在庫      | 球頭R         | 直徑 D1    | 刃長L1         | 有效長M              | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|-------------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE       | Stocket | Ball Radius | Tool Dia | Flute Length | Under neck Length | Overall Length | Shank Dia. | No. of Flute |
| ADB200502H | ●       | 0.25R       | 0.5      | 0.75         | 2                 | 50             | 4          | 2            |
| ADB200504H | ●       | 0.25R       | 0.5      | 0.75         | 4                 | 50             | 4          | 2            |
| ADB200506H | ●       | 0.25R       | 0.5      | 0.75         | 6                 | 50             | 4          | 2            |
| ADB200602H | ●       | 0.3R        | 0.6      | 0.9          | 2                 | 50             | 4          | 2            |
| ADB200604H | ●       | 0.3R        | 0.6      | 0.9          | 4                 | 50             | 4          | 2            |
| ADB200606H | ●       | 0.3R        | 0.6      | 0.9          | 6                 | 50             | 4          | 2            |
| ADB200804H | ●       | 0.4R        | 0.8      | 1.2          | 4                 | 50             | 4          | 2            |
| ADB200806H | ●       | 0.4R        | 0.8      | 1.2          | 6                 | 50             | 4          | 2            |
| ADB200808H | ●       | 0.4R        | 0.8      | 1.2          | 8                 | 50             | 4          | 2            |
| ADB201006H | ●       | 0.5R        | 1        | 1.5          | 6                 | 50             | 4          | 2            |
| ADB201008H | ●       | 0.5R        | 1        | 1.5          | 8                 | 50             | 4          | 2            |
| ADB201010H | ●       | 0.5R        | 1        | 1.5          | 10                | 50             | 4          | 2            |
| ADB201012H | ●       | 0.5R        | 1        | 1.5          | 12                | 50             | 4          | 2            |
| ADB201206H | ●       | 0.6R        | 1.2      | 1.8          | 6                 | 50             | 4          | 2            |
| ADB201208H | ●       | 0.6R        | 1.2      | 1.8          | 8                 | 50             | 4          | 2            |
| ADB201210H | ●       | 0.6R        | 1.2      | 1.8          | 10                | 50             | 4          | 2            |
| ADB201212H | ●       | 0.6R        | 1.2      | 1.8          | 12                | 50             | 4          | 2            |
| ADB201406H | ●       | 0.7R        | 1.4      | 2.1          | 6                 | 50             | 4          | 2            |
| ADB201410H | ●       | 0.7R        | 1.4      | 2.1          | 10                | 50             | 4          | 2            |
| ADB201416H | ●       | 0.7R        | 1.4      | 2.1          | 16                | 50             | 4          | 2            |
| ADB201506H | ●       | 0.75R       | 1.5      | 2.3          | 6                 | 50             | 4          | 2            |
| ADB201508H | ●       | 0.75R       | 1.5      | 2.3          | 8                 | 50             | 4          | 2            |
| ADB201510H | ●       | 0.75R       | 1.5      | 2.3          | 10                | 50             | 4          | 2            |
| ADB201512H | ●       | 0.75R       | 1.5      | 2.3          | 12                | 50             | 4          | 2            |
| ADB201514H | ●       | 0.75R       | 1.5      | 2.3          | 14                | 50             | 4          | 2            |
| ADB201516H | ●       | 0.75R       | 1.5      | 2.3          | 16                | 50             | 4          | 2            |
| ADB201518H | ●       | 0.75R       | 1.5      | 2.3          | 18                | 50             | 4          | 2            |
| ADB201520H | ●       | 0.75R       | 1.5      | 2.3          | 20                | 50             | 4          | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |

CARBIDE END MILLS - Ball Nose Type 2 Flutes - Long Neck



單位(unit):mm

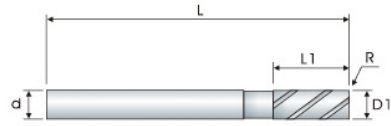
| 型號         | 在庫      | 球頭R         | 直徑 D1    | 刃長L1         | 有效長M              | 全長L            | 柄徑d        | 刃數T          |
|------------|---------|-------------|----------|--------------|-------------------|----------------|------------|--------------|
| MODE       | Stocket | Ball Radius | Tool Dia | Flute Length | Under neck Length | Overall Length | Shank Dia. | No. of Flute |
| ADB202008H | ●       | 1R          | 2        | 3            | 8                 | 50             | 4          | 2            |
| ADB202010H | ●       | 1R          | 2        | 3            | 10                | 50             | 4          | 2            |
| ADB202012H | ●       | 1R          | 2        | 3            | 12                | 50             | 4          | 2            |
| ADB202014H | ●       | 1R          | 2        | 3            | 14                | 50             | 4          | 2            |
| ADB202016H | ●       | 1R          | 2        | 3            | 16                | 50             | 4          | 2            |
| ADB202018H | ●       | 1R          | 2        | 3            | 18                | 50             | 4          | 2            |
| ADB202020H | ●       | 1R          | 2        | 3            | 20                | 50             | 4          | 2            |
| ADB202508H | ●       | 1.25R       | 2.5      | 4            | 8                 | 50             | 4          | 2            |
| ADB202512H | ●       | 1.25R       | 2.5      | 4            | 12                | 50             | 4          | 2            |
| ADB202516H | ●       | 1.25R       | 2.5      | 4            | 16                | 50             | 4          | 2            |
| ADB202520H | ●       | 1.25R       | 2.5      | 4            | 20                | 50             | 4          | 2            |
| ADB203010H | ●       | 1.5R        | 3        | 4.5          | 10                | 50             | 6          | 2            |
| ADB203012H | ●       | 1.5R        | 3        | 4.5          | 12                | 50             | 6          | 2            |
| ADB203016H | ●       | 1.5R        | 3        | 4.5          | 16                | 60             | 6          | 2            |
| ADB203020H | ●       | 1.5R        | 3        | 4.5          | 20                | 60             | 6          | 2            |
| ADB203025H | ●       | 1.5R        | 3        | 4.5          | 25                | 75             | 6          | 2            |
| ADB204012H | ●       | 2R          | 4        | 6            | 12                | 50             | 6          | 2            |
| ADB204016H | ●       | 2R          | 4        | 6            | 16                | 60             | 6          | 2            |
| ADB204020H | ●       | 2R          | 4        | 6            | 20                | 75             | 6          | 2            |
| ADB204025H | ●       | 2R          | 4        | 6            | 25                | 75             | 6          | 2            |
| ADB204030H | ●       | 2R          | 4        | 6            | 30                | 75             | 6          | 2            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |

CARBIDE END MILLS - Corner Radius Type 2 Flutes



單位(unit):mm

| 型號           | 在庫      | 直徑 D1    | R角       | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|---------|----------|----------|--------------|----------------|------------|--------------|
| MODE         | Stocket | Tool Dia | Corner R | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACR20600602H | ●       | 6        | 0.2R     | 16           | 50             | 6          | 2            |
| ACR20600603H | ●       | 6        | 0.3R     | 16           | 50             | 6          | 2            |
| ACR20600605H | ●       | 6        | 0.5R     | 16           | 50             | 6          | 2            |
| ACR20600610H | ●       | 6        | 1R       | 16           | 50             | 6          | 2            |
| ACR20600615H | ●       | 6        | 1.5R     | 16           | 50             | 6          | 2            |
| ACR20600620H | ●       | 6        | 2R       | 16           | 50             | 6          | 2            |
| ACR20800803H | ●       | 8        | 0.3R     | 20           | 60             | 8          | 2            |
| ACR20800805H | ●       | 8        | 0.5R     | 20           | 60             | 8          | 2            |
| ACR20800810H | ●       | 8        | 1R       | 20           | 60             | 8          | 2            |
| ACR20800815H | ●       | 8        | 1.5R     | 20           | 60             | 8          | 2            |
| ACR20800820H | ●       | 8        | 2R       | 20           | 60             | 8          | 2            |
| ACR20800825H | ●       | 8        | 2.5R     | 20           | 60             | 8          | 2            |
| ACR20800830H | ●       | 8        | 3R       | 20           | 60             | 8          | 2            |
| ACR21001003H | ●       | 10       | 0.3R     | 25           | 75             | 10         | 2            |
| ACR21001005H | ●       | 10       | 0.5R     | 25           | 75             | 10         | 2            |
| ACR21001010H | ●       | 10       | 1R       | 25           | 75             | 10         | 2            |
| ACR21001015H | ●       | 10       | 1.5R     | 25           | 75             | 10         | 2            |
| ACR21001020H | ●       | 10       | 2R       | 25           | 75             | 10         | 2            |
| ACR21001025H | ●       | 10       | 2.5R     | 25           | 75             | 10         | 2            |
| ACR21001030H | ●       | 10       | 3R       | 25           | 75             | 10         | 2            |
| ACR21201203H | ●       | 12       | 0.3R     | 30           | 75             | 12         | 2            |
| ACR21201205H | ●       | 12       | 0.5R     | 30           | 75             | 12         | 2            |
| ACR21201210H | ●       | 12       | 1R       | 30           | 75             | 12         | 2            |
| ACR21201215H | ●       | 12       | 1.5R     | 30           | 75             | 12         | 2            |
| ACR21201220H | ●       | 12       | 2R       | 30           | 75             | 12         | 2            |
| ACR21201225H | ●       | 12       | 2.5R     | 30           | 75             | 12         | 2            |
| ACR21201230H | ●       | 12       | 3R       | 30           | 75             | 12         | 2            |

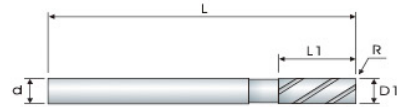
●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎢鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                |



CARBIDE END MILLS - Corner Radius Type 4 Flutes



單位(unit):mm

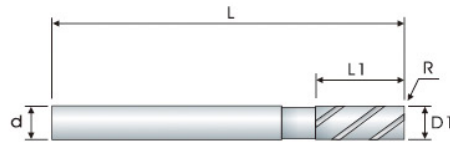
| 型號           | 在庫      | 直徑 D1    | R角       | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|--------------|---------|----------|----------|--------------|----------------|------------|--------------|
| MODE         | Stocket | Tool Dia | Corner R | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACR40600602H | ●       | 6        | 0.2R     | 16           | 50             | 6          | 4            |
| ACR40600603H | ●       | 6        | 0.3R     | 16           | 50             | 6          | 4            |
| ACR40600605H | ●       | 6        | 0.5R     | 16           | 50             | 6          | 4            |
| ACR40600610H | ●       | 6        | 1R       | 16           | 50             | 6          | 4            |
| ACR40600615H | ●       | 6        | 1.5R     | 16           | 50             | 6          | 4            |
| ACR40600620H | ●       | 6        | 2R       | 16           | 50             | 6          | 4            |
| ACR40800803H | ●       | 8        | 0.3R     | 20           | 60             | 8          | 4            |
| ACR40800805H | ●       | 8        | 0.5R     | 20           | 60             | 8          | 4            |
| ACR40800810H | ●       | 8        | 1R       | 20           | 60             | 8          | 4            |
| ACR40800815H | ●       | 8        | 1.5R     | 20           | 60             | 8          | 4            |
| ACR40800820H | ●       | 8        | 2R       | 20           | 60             | 8          | 4            |
| ACR40800825H | ●       | 8        | 2.5R     | 20           | 60             | 8          | 4            |
| ACR40800830H | ●       | 8        | 3R       | 20           | 60             | 8          | 4            |
| ACR41001003H | ●       | 10       | 0.3R     | 25           | 75             | 10         | 4            |
| ACR41001005H | ●       | 10       | 0.5R     | 25           | 75             | 10         | 4            |
| ACR41001010H | ●       | 10       | 1R       | 25           | 75             | 10         | 4            |
| ACR41001015H | ●       | 10       | 1.5R     | 25           | 75             | 10         | 4            |
| ACR41001020H | ●       | 10       | 2R       | 25           | 75             | 10         | 4            |
| ACR41001025H | ●       | 10       | 2.5R     | 25           | 75             | 10         | 4            |
| ACR41001030H | ●       | 10       | 3R       | 25           | 75             | 10         | 4            |
| ACR41201203H | ●       | 12       | 0.3R     | 30           | 75             | 12         | 4            |
| ACR41201205H | ●       | 12       | 0.5R     | 30           | 75             | 12         | 4            |
| ACR41201210H | ●       | 12       | 1R       | 30           | 75             | 12         | 4            |
| ACR41201215H | ●       | 12       | 1.5R     | 30           | 75             | 12         | 4            |
| ACR41201220H | ●       | 12       | 2R       | 30           | 75             | 12         | 4            |
| ACR41201225H | ●       | 12       | 2.5R     | 30           | 75             | 12         | 4            |
| ACR41201230H | ●       | 12       | 3R       | 30           | 75             | 12         | 4            |

●印: 標準在庫品.Stocked items

◎ 優 Excellent ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                |

### CARBIDE END MILLS - Corner Radius Type 2 Flutes - Long Shank



單位(unit):mm

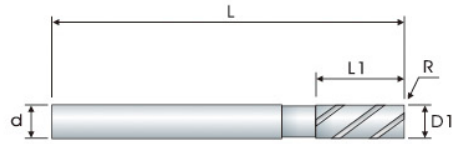
| 型號                | 在庫                       | 直徑 D1    | R角       | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|--------------------------|----------|----------|--------------|----------------|------------|--------------|
| MODE              | Stocket                  | Tool Dia | Corner R | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACRL20300303H-75  | <input type="checkbox"/> | 3        | 0.3R     | 8            | 75             | 3          | 2            |
| ACRL20300305H-75  | <input type="checkbox"/> | 3        | 0.5R     | 8            | 75             | 3          | 2            |
| ACRL20300310H-75  | <input type="checkbox"/> | 3        | 1R       | 8            | 75             | 3          | 2            |
| ACRL20400403H-75  | <input type="checkbox"/> | 4        | 0.3R     | 10           | 75             | 4          | 2            |
| ACRL20400405H-75  | <input type="checkbox"/> | 4        | 0.5R     | 10           | 75             | 4          | 2            |
| ACRL20400410H-75  | <input type="checkbox"/> | 4        | 1R       | 10           | 75             | 4          | 2            |
| ACRL20400415H-75  | <input type="checkbox"/> | 4        | 1.5R     | 10           | 75             | 4          | 2            |
| ACRL20400403H-100 | <input type="checkbox"/> | 4        | 0.3R     | 10           | 100            | 4          | 2            |
| ACRL20400405H-100 | <input type="checkbox"/> | 4        | 0.5R     | 10           | 100            | 4          | 2            |
| ACRL20400410H-100 | <input type="checkbox"/> | 4        | 1R       | 10           | 100            | 4          | 2            |
| ACRL20400415H-100 | <input type="checkbox"/> | 4        | 1.5R     | 10           | 100            | 4          | 2            |
| ACRL20600603H-75  | <input type="checkbox"/> | 6        | 0.3R     | 16           | 75             | 6          | 2            |
| ACRL20600605H-75  | <input type="checkbox"/> | 6        | 0.5R     | 16           | 75             | 6          | 2            |
| ACRL20600610H-75  | <input type="checkbox"/> | 6        | 1R       | 16           | 75             | 6          | 2            |
| ACRL20600615H-75  | <input type="checkbox"/> | 6        | 1.5R     | 16           | 75             | 6          | 2            |
| ACRL20600620H-75  | <input type="checkbox"/> | 6        | 2R       | 16           | 75             | 6          | 2            |
| ACRL20600603H-100 | <input type="checkbox"/> | 6        | 0.3R     | 16           | 100            | 6          | 2            |
| ACRL20600605H-100 | <input type="checkbox"/> | 6        | 0.5R     | 16           | 100            | 6          | 2            |
| ACRL20600610H-100 | <input type="checkbox"/> | 6        | 1R       | 16           | 100            | 6          | 2            |
| ACRL20600615H-100 | <input type="checkbox"/> | 6        | 1.5R     | 16           | 100            | 6          | 2            |
| ACRL20600620H-100 | <input type="checkbox"/> | 6        | 2R       | 16           | 100            | 6          | 2            |
| ACRL20800803H-75  | <input type="checkbox"/> | 8        | 0.3R     | 20           | 75             | 8          | 2            |
| ACRL20800805H-75  | <input type="checkbox"/> | 8        | 0.5R     | 20           | 75             | 8          | 2            |
| ACRL20800810H-75  | <input type="checkbox"/> | 8        | 1R       | 20           | 75             | 8          | 2            |
| ACRL20800815H-75  | <input type="checkbox"/> | 8        | 1.5R     | 20           | 75             | 8          | 2            |
| ACRL20800820H-75  | <input type="checkbox"/> | 8        | 2R       | 20           | 75             | 8          | 2            |

□印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                |

CARBIDE END MILLS - Corner Radius Type 2 Flutes



單位(unit):mm

| 型號                | 在庫                       | 直徑 D1    | R角       | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|--------------------------|----------|----------|--------------|----------------|------------|--------------|
| MODE              | Stocket                  | Tool Dia | Corner R | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACRL20800825H-75  | <input type="checkbox"/> | 8        | 2.5R     | 20           | 75             | 8          | 2            |
| ACRL20800830H-75  | <input type="checkbox"/> | 8        | 3R       | 20           | 75             | 8          | 2            |
| ACRL20800803H-100 | <input type="checkbox"/> | 8        | 0.3R     | 20           | 100            | 8          | 2            |
| ACRL20800805H-100 | <input type="checkbox"/> | 8        | 0.5R     | 20           | 100            | 8          | 2            |
| ACRL20800810H-100 | <input type="checkbox"/> | 8        | 1R       | 20           | 100            | 8          | 2            |
| ACRL20800815H-100 | <input type="checkbox"/> | 8        | 1.5R     | 20           | 100            | 8          | 2            |
| ACRL20800820H-100 | <input type="checkbox"/> | 8        | 2R       | 20           | 100            | 8          | 2            |
| ACRL20800825H-100 | <input type="checkbox"/> | 8        | 2.5R     | 20           | 100            | 8          | 2            |
| ACRL20800830H-100 | <input type="checkbox"/> | 8        | 3R       | 20           | 100            | 8          | 2            |
| ACRL21001003H-100 | <input type="checkbox"/> | 10       | 0.3R     | 25           | 100            | 10         | 2            |
| ACRL21001005H-100 | <input type="checkbox"/> | 10       | 0.5R     | 25           | 100            | 10         | 2            |
| ACRL21001010H-100 | <input type="checkbox"/> | 10       | 1R       | 25           | 100            | 10         | 2            |
| ACRL21001015H-100 | <input type="checkbox"/> | 10       | 1.5R     | 25           | 100            | 10         | 2            |
| ACRL21001020H-100 | <input type="checkbox"/> | 10       | 2R       | 25           | 100            | 10         | 2            |
| ACRL21001025H-100 | <input type="checkbox"/> | 10       | 2.5R     | 25           | 100            | 10         | 2            |
| ACRL21001030H-100 | <input type="checkbox"/> | 10       | 3R       | 25           | 100            | 10         | 2            |
| ACRL21201203H-100 | <input type="checkbox"/> | 12       | 0.3R     | 30           | 100            | 12         | 2            |
| ACRL21201205H-100 | <input type="checkbox"/> | 12       | 0.5R     | 30           | 100            | 12         | 2            |
| ACRL21201210H-100 | <input type="checkbox"/> | 12       | 1R       | 30           | 100            | 12         | 2            |
| ACRL21201215H-100 | <input type="checkbox"/> | 12       | 1.5R     | 30           | 100            | 12         | 2            |
| ACRL21201220H-100 | <input type="checkbox"/> | 12       | 2R       | 30           | 100            | 12         | 2            |
| ACRL21201225H-100 | <input type="checkbox"/> | 12       | 2.5R     | 30           | 100            | 12         | 2            |
| ACRL21201230H-100 | <input type="checkbox"/> | 12       | 3R       | 30           | 100            | 12         | 2            |

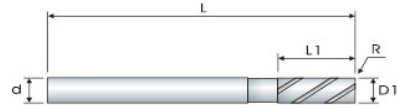
☐印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鎂合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |



CARBIDE END MILLS - Corner Radius Type 4 Flutes - Long Shank



單位(unit):mm

| 型號                | 在庫                       | 直徑 D1    | R角       | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|--------------------------|----------|----------|--------------|----------------|------------|--------------|
| MODE              | Stocket                  | Tool Dia | Corner R | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACRL40300303H-75  | <input type="checkbox"/> | 3        | 0.3R     | 8            | 75             | 3          | 4            |
| ACRL40300305H-75  | <input type="checkbox"/> | 3        | 0.5R     | 8            | 75             | 3          | 4            |
| ACRL40300310H-75  | <input type="checkbox"/> | 3        | 1R       | 8            | 75             | 3          | 4            |
| ACRL40400403H-75  | <input type="checkbox"/> | 4        | 0.3R     | 10           | 75             | 4          | 4            |
| ACRL40400405H-75  | <input type="checkbox"/> | 4        | 0.5R     | 10           | 75             | 4          | 4            |
| ACRL40400410H-75  | <input type="checkbox"/> | 4        | 1R       | 10           | 75             | 4          | 4            |
| ACRL40400415H-100 | <input type="checkbox"/> | 4        | 1.5R     | 10           | 75             | 4          | 4            |
| ACRL40400403H-100 | <input type="checkbox"/> | 4        | 0.3R     | 10           | 100            | 4          | 4            |
| ACRL40400405H-100 | <input type="checkbox"/> | 4        | 0.5R     | 10           | 100            | 4          | 4            |
| ACRL40400410H-100 | <input type="checkbox"/> | 4        | 1R       | 10           | 100            | 4          | 4            |
| ACRL40400415H-100 | <input type="checkbox"/> | 4        | 1.5R     | 10           | 100            | 4          | 4            |
| ACRL40600603H-75  | <input type="checkbox"/> | 6        | 0.3R     | 16           | 75             | 6          | 4            |
| ACRL40600605H-75  | <input type="checkbox"/> | 6        | 0.5R     | 16           | 75             | 6          | 4            |
| ACRL40600610H-75  | <input type="checkbox"/> | 6        | 1R       | 16           | 75             | 6          | 4            |
| ACRL40600615H-75  | <input type="checkbox"/> | 6        | 1.5R     | 16           | 75             | 6          | 4            |
| ACRL40600620H-75  | <input type="checkbox"/> | 6        | 2R       | 16           | 75             | 6          | 4            |
| ACRL40600603H-100 | <input type="checkbox"/> | 6        | 0.3R     | 16           | 100            | 6          | 4            |
| ACRL40600605H-100 | <input type="checkbox"/> | 6        | 0.5R     | 16           | 100            | 6          | 4            |
| ACRL40600610H-100 | <input type="checkbox"/> | 6        | 1R       | 16           | 100            | 6          | 4            |
| ACRL40600615H-100 | <input type="checkbox"/> | 6        | 1.5R     | 16           | 100            | 6          | 4            |
| ACRL40600620H-100 | <input type="checkbox"/> | 6        | 2R       | 16           | 100            | 6          | 4            |
| ACRL40800803H-75  | <input type="checkbox"/> | 8        | 0.3R     | 20           | 75             | 8          | 4            |
| ACRL40800805H-75  | <input type="checkbox"/> | 8        | 0.5R     | 20           | 75             | 8          | 4            |
| ACRL40800810H-75  | <input type="checkbox"/> | 8        | 1R       | 20           | 75             | 8          | 4            |

☐印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鎳鉻合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|-----------------|
| ~HB225              | HB225~325           | HRc~50                 | HRc~55 | HRc~60                       |             |                 |               |                         |                 |                 |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●               |

### CARBIDE END MILLS - Corner Radius Type 4 Flutes - Long Shank



單位(unit):mm

| 型號                | 在庫                       | 直徑 D1    | R角       | 刃長L1         | 全長L            | 柄徑d        | 刃數T          |
|-------------------|--------------------------|----------|----------|--------------|----------------|------------|--------------|
| MODE              | Stocket                  | Tool Dia | Corner R | Flute Length | Overall Length | Shank Dia. | No. of Flute |
| ACRL40800815H-75  | <input type="checkbox"/> | 8        | 1.5R     | 20           | 75             | 8          | 4            |
| ACRL40800820H-75  | <input type="checkbox"/> | 8        | 2R       | 20           | 75             | 8          | 4            |
| ACRL40800825H-75  | <input type="checkbox"/> | 8        | 2.5R     | 20           | 75             | 8          | 4            |
| ACRL40800830H-75  | <input type="checkbox"/> | 8        | 3R       | 20           | 75             | 8          | 4            |
| ACRL40800803H-100 | <input type="checkbox"/> | 8        | 0.3R     | 20           | 100            | 8          | 4            |
| ACRL40800805H-100 | <input type="checkbox"/> | 8        | 0.5R     | 20           | 100            | 8          | 4            |
| ACRL40800810H-100 | <input type="checkbox"/> | 8        | 1R       | 20           | 100            | 8          | 4            |
| ACRL40800815H-100 | <input type="checkbox"/> | 8        | 1.5R     | 20           | 100            | 8          | 4            |
| ACRL40800820H-100 | <input type="checkbox"/> | 8        | 2R       | 20           | 100            | 8          | 4            |
| ACRL40800825H-100 | <input type="checkbox"/> | 8        | 2.5R     | 20           | 100            | 8          | 4            |
| ACRL40800830H-100 | <input type="checkbox"/> | 8        | 3R       | 20           | 100            | 8          | 4            |
| ACRL41001003H-100 | <input type="checkbox"/> | 10       | 0.3R     | 25           | 100            | 10         | 4            |
| ACRL41001005H-100 | <input type="checkbox"/> | 10       | 0.5R     | 25           | 100            | 10         | 4            |
| ACRL41001010H-100 | <input type="checkbox"/> | 10       | 1R       | 25           | 100            | 10         | 4            |
| ACRL41001015H-100 | <input type="checkbox"/> | 10       | 1.5R     | 25           | 100            | 10         | 4            |
| ACRL41001020H-100 | <input type="checkbox"/> | 10       | 2R       | 25           | 100            | 10         | 4            |
| ACRL41001025H-100 | <input type="checkbox"/> | 10       | 2.5R     | 25           | 100            | 10         | 4            |
| ACRL41001030H-100 | <input type="checkbox"/> | 10       | 3R       | 25           | 100            | 10         | 4            |
| ACRL41201203H-100 | <input type="checkbox"/> | 12       | 0.3R     | 30           | 100            | 12         | 4            |
| ACRL41201205H-100 | <input type="checkbox"/> | 12       | 0.5R     | 30           | 100            | 12         | 4            |
| ACRL41201210H-100 | <input type="checkbox"/> | 12       | 1R       | 30           | 100            | 12         | 4            |
| ACRL41201215H-100 | <input type="checkbox"/> | 12       | 1.5R     | 30           | 100            | 12         | 4            |
| ACRL41201220H-100 | <input type="checkbox"/> | 12       | 2R       | 30           | 100            | 12         | 4            |
| ACRL41201225H-100 | <input type="checkbox"/> | 12       | 2.5R     | 30           | 100            | 12         | 4            |
| ACRL41201230H-100 | <input type="checkbox"/> | 12       | 3R       | 30           | 100            | 12         | 4            |

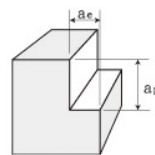
☐印: 無在庫品, 訂製生產品

◎ 優 Excellent    ● 可 Good

| 碳鋼<br>Carbon Steels | 合金鋼<br>Alloy Steels | 硬化鋼<br>Hardened Steels |        | 高硬度鋼<br>High Hardened Steels | 銅<br>Copper | 鑄鐵<br>Cast Iron | 鋁<br>Aluminum | 不銹鋼<br>Stainless Steels | 鈦合金<br>Titanium | 鉻鎳鐵合金<br>Inconel |
|---------------------|---------------------|------------------------|--------|------------------------------|-------------|-----------------|---------------|-------------------------|-----------------|------------------|
| ~HB225              | HB225~325           | HRC~50                 | HRC~55 | HRC~60                       |             |                 |               |                         |                 |                  |
| ◎                   | ◎                   | ◎                      | ◎      |                              |             |                 |               | ●                       | ●               | ●                |

# 標準切削條件表

## Recommended cutting conditions



### <側面切削> Side milling

| 被削材 (硬さ)<br>Work material<br>(Hardness)                                | 条件域<br>Condition Range | 切込み<br>Depth of cut<br>mm          | 切削条件<br>Cutting Conditions | 外径 Dc Tool Dia. (mm) |       |       |       |       |       |       |       |       |
|------------------------------------------------------------------------|------------------------|------------------------------------|----------------------------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                                        |                        |                                    |                            | φ 3                  | φ 4   | φ 5   | φ 6   | φ 8   | φ 10  | φ 12  | φ 16  | φ 20  |
| 鑄鉄<br>Cast Iron<br>(150 ~ 200HB)<br>FC250                              | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 12,700               | 9,550 | 7,640 | 6,370 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 1,020                | 1,150 | 1,220 | 1,270 | 1,340 | 1,220 | 1,140 | 960   | 920   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 10,600               | 7,960 | 6,370 | 5,310 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 850                  | 960   | 1,020 | 1,060 | 1,110 | 1,020 | 950   | 800   | 760   |
| 炭素鋼<br>Carbon Steels<br>(180 ~ 220HB)<br>SS400、S50C                    | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 12,700               | 9,550 | 7,640 | 6,370 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 1,020                | 1,150 | 1,220 | 1,270 | 1,340 | 1,220 | 1,140 | 960   | 920   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 10,600               | 7,960 | 6,370 | 5,310 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 850                  | 960   | 1,020 | 1,060 | 1,110 | 1,020 | 950   | 800   | 760   |
| 合金鋼<br>Alloy Steels<br>(200 ~ 250HB)<br>SCM440、SNCM                    | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 10,600               | 7,960 | 6,370 | 5,310 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 850                  | 960   | 1,020 | 1,060 | 1,110 | 1,020 | 950   | 800   | 760   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 8,490                | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 680                  | 760   | 810   | 850   | 890   | 820   | 760   | 640   | 610   |
| 不銹鋼、工具鋼<br>Stainless Steels, Tool Steels<br>(25 ~ 35HRC)<br>SUS304、SKD | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 8,490                | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 510                  | 640   | 710   | 680   | 640   | 610   | 590   | 540   | 510   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 6,370                | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 380                  | 480   | 530   | 510   | 480   | 460   | 450   | 400   | 380   |
| 預硬鋼<br>Pre-hardened Steels<br>(35 ~ 45HRC)<br>HPM1、NAK55               | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 8,490                | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 510                  | 640   | 710   | 680   | 640   | 610   | 590   | 540   | 510   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 6,370                | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | a <sub>e</sub> =0.1D <sub>c</sub>  | 進給速度 mm/min                | 380                  | 480   | 530   | 510   | 480   | 460   | 450   | 400   | 380   |
| 熱處理鋼<br>Hardened Steels<br>(45 ~ 60HRC)<br>SKD61、SKT4                  | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 6,370                | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | a <sub>e</sub> =0.05D <sub>c</sub> | 進給速度 mm/min                | 250                  | 380   | 460   | 450   | 430   | 420   | 380   | 330   | 300   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 4,240                | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | a <sub>e</sub> =0.05D <sub>c</sub> | 進給速度 mm/min                | 170                  | 250   | 310   | 300   | 290   | 280   | 250   | 220   | 200   |
| 鈦合金<br>Titanium Alloy<br>Ti-6Al-4V                                     | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 6,370                | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | a <sub>e</sub> =0.05D <sub>c</sub> | 進給速度 mm/min                | 250                  | 380   | 460   | 450   | 430   | 420   | 380   | 330   | 300   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 4,240                | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | a <sub>e</sub> =0.05D <sub>c</sub> | 進給速度 mm/min                | 170                  | 250   | 310   | 300   | 290   | 280   | 250   | 220   | 200   |
| 超耐熱合金<br>Super Heat-resistant Alloy<br>Inconel<br>Hasteloy             | 高速条件<br>High speed     | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 2,650                | 1,990 | 1,590 | 1,330 | 990   | 800   | 660   | 500   | 400   |
|                                                                        |                        | a <sub>e</sub> =0.05D <sub>c</sub> | 進給速度 mm/min                | 110                  | 160   | 190   | 190   | 180   | 180   | 160   | 140   | 130   |
|                                                                        | 汎用条件<br>General        | a <sub>p</sub> =1.5D <sub>c</sub>  | 回転数 min <sup>-1</sup>      | 2,120                | 1,590 | 1,270 | 1,060 | 800   | 640   | 530   | 400   | 320   |
|                                                                        |                        | a <sub>e</sub> =0.05D <sub>c</sub> | 進給速度 mm/min                | 85                   | 130   | 150   | 150   | 140   | 140   | 130   | 110   | 100   |

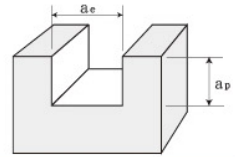
### 【注意】

- 1、请使用順銑(Down Cut)切削方向。
- 2、一般鋼材在使用高速切削時，請搭配載用冷卻風壓 Air Blow 或 Oil-Mist。
- 3、不銹鋼材，超耐熱合金鋼材，請使用不水溶性切削油。
- 4、请使用高剛性機配工具配件，以使切削加工安定。
- 5、機械回轉速不足的時候，主軸的回轉速和進給速度可以做同比例的調整下降。
- 6、請依據加工形狀、機械剛性工具的夾持突出長度等狀況不同，做主軸回轉速和進給速度的調整。

### 【Note】

- ① Down-cutting is recommended.
- ② Use generally dry (air-blow) or oil-mist coolant, especially at the high-speed machining.
- ③ Oil base coolant is recommended for machining stainless steels and heat-resistant alloy.
- ④ Use a machine tool with rigidity and rigid set-up, to machine stably
- ⑤ When the revolution speed is not enough, reduce the revolution speed and table speed at the same ratio.
- ⑥ Adjust the revolution speed and table speed, according to cutting conditions such as machining shape, rigidity of machine tool, over-hang and so on.





<溝切削> Slotting

| 被削材 (硬さ)<br>Work material (Hardness)                                   | 條件域<br>Condition Range | 切込み<br>Depth of cut<br>mm | 切削條件<br>Cutting Conditions | 外径 D c Tool Dia. (mm) |       |       |       |       |       |       |       |       |
|------------------------------------------------------------------------|------------------------|---------------------------|----------------------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                                        |                        |                           |                            | φ 3                   | φ 4   | φ 5   | φ 6   | φ 8   | φ 10  | φ 12  | φ 16  | φ 20  |
| 鑄鉄<br>Cast Iron<br>(150 ~ 200HB)<br>FC250                              | 高速條件<br>High speed     | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 420                   | 480   | 510   | 530   | 560   | 510   | 480   | 400   | 380   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 1D_c$           | 回転数 $\text{min}^{-1}$      | 3,180                 | 2,390 | 1,910 | 1,590 | 1,190 | 950   | 800   | 600   | 480   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 250                   | 290   | 310   | 320   | 330   | 300   | 290   | 240   | 230   |
| 炭素鋼<br>Carbon Steels<br>(180 ~ 220HB)<br>SS400、S50C                    | 高速條件<br>High speed     | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 8,490                 | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 680                   | 760   | 810   | 850   | 890   | 820   | 760   | 640   | 610   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 1D_c$           | 回転数 $\text{min}^{-1}$      | 7,430                 | 5,570 | 4,460 | 3,710 | 2,790 | 2,230 | 1,860 | 1,390 | 1,110 |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 590                   | 670   | 710   | 740   | 780   | 710   | 670   | 560   | 530   |
| 合金鋼<br>Alloy Steels<br>(200 ~ 250HB)<br>SCM440、SNCM                    | 高速條件<br>High speed     | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 7,430                 | 5,570 | 4,460 | 3,710 | 2,790 | 2,230 | 1,860 | 1,390 | 1,110 |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 590                   | 670   | 710   | 740   | 780   | 710   | 670   | 560   | 530   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 1D_c$           | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 420                   | 480   | 510   | 530   | 560   | 510   | 480   | 400   | 380   |
| 不銹鋼、工具鋼<br>Stainless Steels, Tool Steels<br>(25 ~ 35HRC)<br>SUS304、SKD | 高速條件<br>High speed     | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 320                   | 400   | 450   | 420   | 400   | 380   | 370   | 340   | 320   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 4,240                 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 250                   | 320   | 360   | 340   | 320   | 300   | 300   | 270   | 260   |
| 預硬鋼<br>Pre-hardened Steels<br>(35 ~ 45HRC)<br>HPM1、NAK55               | 高速條件<br>High speed     | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 320                   | 400   | 450   | 420   | 400   | 380   | 370   | 340   | 320   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 4,240                 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 250                   | 320   | 360   | 340   | 320   | 300   | 300   | 270   | 260   |
| 熱處理鋼<br>Hardened Steels<br>(45 ~ 60HRC)<br>SKD61、SKT4                  | 高速條件<br>High speed     | $a_p =$                   | 回転数 $\text{min}^{-1}$      |                       |       |       |       |       |       |       |       |       |
|                                                                        |                        | $a_e =$                   | 進給速度 $\text{mm/min}$       |                       |       |       |       |       |       |       |       |       |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 2,120                 | 1,590 | 1,270 | 1,060 | 800   | 640   | 530   | 400   | 320   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 85                    | 130   | 150   | 150   | 140   | 140   | 130   | 110   | 100   |
| 鈦合金<br>Titanium Alloy<br>Ti-6Al-4V                                     | 高速條件<br>High speed     | $a_p =$                   | 回転数 $\text{min}^{-1}$      |                       |       |       |       |       |       |       |       |       |
|                                                                        |                        | $a_e =$                   | 進給速度 $\text{mm/min}$       |                       |       |       |       |       |       |       |       |       |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 3,180                 | 2,390 | 1,910 | 1,590 | 1,190 | 950   | 800   | 600   | 480   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 130                   | 190   | 230   | 220   | 210   | 210   | 190   | 170   | 150   |
| 超耐熱合金<br>Super Heat-resistant Alloy<br>Inconel<br>Hasteloy             | 高速條件<br>High speed     | $a_p =$                   | 回転数 $\text{min}^{-1}$      |                       |       |       |       |       |       |       |       |       |
|                                                                        |                        | $a_e =$                   | 進給速度 $\text{mm/min}$       |                       |       |       |       |       |       |       |       |       |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 1,590                 | 1,190 | 950   | 800   | 600   | 480   | 400   | 300   | 240   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 65                    | 95    | 110   | 110   | 110   | 110   | 95    | 85    | 75    |

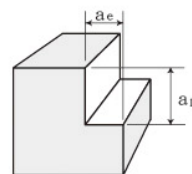
【注意】

- 1、請使用順銑(Down Cut)切削方向。
- 2、一般鋼材在使用高速切削時，請搭配載用冷卻風壓 Air Blow 或 Oil-Mist。
- 3、不銹鋼材，超耐熱合金鋼材，請使用不水溶性切削油。
- 4、請使用高剛性機配工具配件，以使切削加工安定。
- 5、機械回轉速不足的時候，主軸的回轉速和進給速度可以做同比例的調整下降。
- 6、請依據加工形狀、機械剛性工具的夾持突出長度等狀況不同，做主軸回轉速和進給速度的調整。

【Note】

- ① Down-cutting is recommended.
- ② Use generally dry (air-blow) or oil-mist coolant, especially at the high-speed machining.
- ③ Oil base coolant is recommended for machining stainless steels and heat-resistant alloy.
- ④ Use a machine tool with rigidity and rigid set-up, to machine stably
- ⑤ When the revolution speed is not enough, reduce the revolution speed and table speed at the same ratio.
- ⑥ Adjust the revolution speed and table speed, according to cutting conditions such as machining shape, rigidity of machine tool, over-hang and so on.

標準切削條件表 Recommended cutting conditions



<側面切削> Side milling

| 被削材 (硬さ)<br>Work material<br>(Hardness)                                 | 條件域<br>Condition Range | 切込み<br>Depth of cut<br>mm | 切削條件<br>Cutting Conditions | 外径 D c Tool Dia. (mm) |       |       |       |      |      |
|-------------------------------------------------------------------------|------------------------|---------------------------|----------------------------|-----------------------|-------|-------|-------|------|------|
|                                                                         |                        |                           |                            | φ 6                   | φ 8   | φ 10  | φ 12  | φ 16 | φ 20 |
| 鑄鉄<br>Cast Iron<br>(150 ~ 200HB)<br>FC250                               | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 2,650                 | 1,990 | 1,590 | 1,330 | 990  | 800  |
|                                                                         |                        | a <sub>e</sub> =0.02 D c  | 進給速度 mm/min                | 530                   | 560   | 510   | 480   | 400  | 380  |
| 炭素鋼<br>Carbon Steels<br>(180 ~ 220HB)<br>SS400、S50C                     | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 2,650                 | 1,990 | 1,590 | 1,330 | 990  | 800  |
|                                                                         |                        | a <sub>e</sub> =0.02 D c  | 進給速度 mm/min                | 530                   | 560   | 510   | 480   | 400  | 380  |
| 合金鋼<br>Alloy Steels<br>(200 ~ 250HB)<br>SCM440、SNCM                     | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 2,120                 | 1,590 | 1,270 | 1,060 | 800  | 640  |
|                                                                         |                        | a <sub>e</sub> =0.02 D c  | 進給速度 mm/min                | 420                   | 450   | 410   | 380   | 320  | 310  |
| 不銹鋼, 工具鋼<br>Stainless Steels, Tool Steels<br>(25 ~ 35HRC)<br>SUS304、SKD | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 1,590                 | 1,190 | 950   | 800   | 600  | 480  |
|                                                                         |                        | a <sub>e</sub> =0.02 D c  | 進給速度 mm/min                | 250                   | 240   | 230   | 220   | 200  | 190  |
| 預硬鋼<br>Pre-hardened Steels<br>(35 ~ 45HRC)<br>HPM1、NAK55                | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 1,590                 | 1,190 | 950   | 800   | 600  | 480  |
|                                                                         |                        | a <sub>e</sub> =0.02 D c  | 進給速度 mm/min                | 250                   | 240   | 230   | 220   | 200  | 190  |
| 熱處理鋼<br>Hardened Steels<br>(45 ~ 60HRC)<br>SKD61、SKT4                   | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 1,060                 | 800   | 640   | 530   | 400  | 320  |
|                                                                         |                        | a <sub>e</sub> =0.01 D c  | 進給速度 mm/min                | 150                   | 140   | 140   | 130   | 110  | 100  |
| 鈦合金<br>Titanium Alloy<br>Ti-6Al-4V                                      | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 1,060                 | 800   | 640   | 530   | 400  | 320  |
|                                                                         |                        | a <sub>e</sub> =0.01 D c  | 進給速度 mm/min                | 150                   | 140   | 140   | 130   | 110  | 100  |
| 超耐熱合金<br>Super Heat-resistant Alloy<br>Inconel<br>Hasteloy              | 高速條件<br>High speed     | a <sub>p</sub> =          | 回転数 min <sup>-1</sup>      |                       |       |       |       |      |      |
|                                                                         |                        | a <sub>e</sub> =          | 進給速度 mm/min                |                       |       |       |       |      |      |
|                                                                         | 汎用條件<br>General        | a <sub>p</sub> =3 D c     | 回転数 min <sup>-1</sup>      | 530                   | 400   | 320   | 270   | 200  | 160  |
|                                                                         |                        | a <sub>e</sub> =0.01 D c  | 進給速度 mm/min                | 75                    | 70    | 70    | 65    | 55   | 50   |

【注意】

- 1、請使用順銑(Down Cut)切削方向。
- 2、一般鋼材在使用高速切削時，請搭配載用冷卻風壓 Air Blow 或 Oil-Mist。
- 3、不銹鋼材，超耐熱合金鋼材，請使用不水溶性切削油。
- 4、請使用高剛性機配工具配件，以使切削加工安定。
- 5、機械回轉速不足的時候，主軸的回轉速和進給速度可以做同比例的調整下降。
- 6、請依據加工形狀、機械剛性工具的夾持突出長度等狀況不同，做主軸回轉速和進給速度的調整。

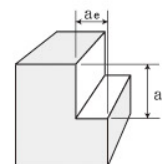
【Note】

- ① Down-cutting is recommended.
- ② Use generally dry (air-blow) or oil-mist coolant, especially at the high-speed machining.
- ③ Oil base coolant is recommended for machining stainless steels and heat-resistant alloy.
- ④ Use a machine tool with rigidity and rigid set-up, to machine stably
- ⑤ When the revolution speed is not enough, reduce the revolution speed and table speed at the same ratio.
- ⑥ Adjust the revolution speed and table speed, according to cutting conditions such as machining shape, rigidity of machine tool, over-hang and so on.



## STC-EPM-RS 標準圓鼻刀規格 Radius

### 標準圓鼻刀切削條件表 Recommended cutting conditions



#### <側面切削> Side milling

| 被削材 (硬さ)<br>Work material<br>(Hardness)                                | 條件域<br>Condition Range | 切込み<br>Depth of cut<br>mm | 切削條件<br>Cutting Conditions | 外径 D c Tool Dia. (mm) |       |       |       |       |       |       |       |       |
|------------------------------------------------------------------------|------------------------|---------------------------|----------------------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                                        |                        |                           |                            | φ 3                   | φ 4   | φ 5   | φ 6   | φ 8   | φ 10  | φ 12  | φ 16  | φ 20  |
| 鑄鉄<br>Cast Iron<br>(150 ~ 200HB)<br>FC250                              | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 12,700                | 9,550 | 7,640 | 6,370 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 1,020                 | 1,150 | 1,220 | 1,270 | 1,340 | 1,220 | 1,140 | 960   | 920   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 10,600                | 7,960 | 6,370 | 5,310 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 850                   | 960   | 1,020 | 1,060 | 1,110 | 1,020 | 950   | 800   | 760   |
| 炭素鋼<br>Carbon Steels<br>(180 ~ 220HB)<br>SS400、S50C                    | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 12,700                | 9,550 | 7,640 | 6,370 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 1,020                 | 1,150 | 1,220 | 1,270 | 1,340 | 1,220 | 1,140 | 960   | 920   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 10,600                | 7,960 | 6,370 | 5,310 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 850                   | 960   | 1,020 | 1,060 | 1,110 | 1,020 | 950   | 800   | 760   |
| 合金鋼<br>Alloy Steels<br>(200 ~ 250HB)<br>SCM440、SNCM                    | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 10,600                | 7,960 | 6,370 | 5,310 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 850                   | 960   | 1,020 | 1,060 | 1,110 | 1,020 | 950   | 800   | 760   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 8,490                 | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 680                   | 760   | 810   | 850   | 890   | 820   | 760   | 640   | 610   |
| 不銹鋼、工具鋼<br>Stainless Steels, Tool Steels<br>(25 ~ 35HRC)<br>SUS304、SKD | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 8,490                 | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 510                   | 640   | 710   | 680   | 640   | 610   | 590   | 540   | 510   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 6,370                 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 380                   | 480   | 530   | 510   | 480   | 460   | 450   | 400   | 380   |
| 預硬鋼<br>Pre-hardened Steels<br>(35 ~ 45HRC)<br>HPM1、NAK55               | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 8,490                 | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 510                   | 640   | 710   | 680   | 640   | 610   | 590   | 540   | 510   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 6,370                 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | $a_e=0.1D$ c              | 進給速度 $\text{mm/min}$       | 380                   | 480   | 530   | 510   | 480   | 460   | 450   | 400   | 380   |
| 熱處理鋼<br>Hardened Steels<br>(45 ~ 60HRC)<br>SKD61、SKT4                  | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 6,370                 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | $a_e=0.05D$ c             | 進給速度 $\text{mm/min}$       | 250                   | 380   | 460   | 450   | 430   | 420   | 380   | 330   | 300   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 4,240                 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | $a_e=0.05D$ c             | 進給速度 $\text{mm/min}$       | 170                   | 250   | 310   | 300   | 290   | 280   | 250   | 220   | 200   |
| 鈦合金<br>Titanium Alloy<br>Ti-6Al-4V                                     | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 6,370                 | 4,770 | 3,820 | 3,180 | 2,390 | 1,910 | 1,590 | 1,190 | 950   |
|                                                                        |                        | $a_e=0.05D$ c             | 進給速度 $\text{mm/min}$       | 250                   | 380   | 460   | 450   | 430   | 420   | 380   | 330   | 300   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 4,240                 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | $a_e=0.05D$ c             | 進給速度 $\text{mm/min}$       | 170                   | 250   | 310   | 300   | 290   | 280   | 250   | 220   | 200   |
| 超耐熱合金<br>Super Heat-resistant Alloy<br>Inconel<br>Hasteloy             | 高速條件<br>High speed     | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 2,650                 | 1,990 | 1,590 | 1,330 | 990   | 800   | 660   | 500   | 400   |
|                                                                        |                        | $a_e=0.05D$ c             | 進給速度 $\text{mm/min}$       | 110                   | 160   | 190   | 190   | 180   | 180   | 160   | 140   | 130   |
|                                                                        | 汎用條件<br>General        | $a_p=1.5D$ c              | 回転数 $\text{min}^{-1}$      | 2,120                 | 1,590 | 1,270 | 1,060 | 800   | 640   | 530   | 400   | 320   |
|                                                                        |                        | $a_e=0.05D$ c             | 進給速度 $\text{mm/min}$       | 85                    | 130   | 150   | 150   | 140   | 140   | 130   | 110   | 100   |

#### 【注意】

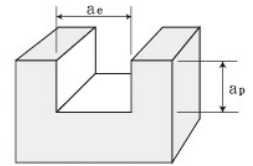
- 1、請使用順銑(Down Cut)切削方向。
- 2、一般鋼材在使用高速切削時，請搭配載用冷卻風壓 Air Blow 或 Oil-Mist。
- 3、不銹鋼材，超耐熱合金鋼材，請使用不水溶性切削油。
- 4、請使用高剛性機配工具配件，以使切削加工安定。
- 5、機械回轉速不足的時候，主軸的回轉速和進給速度可以做同比例的調整下降。
- 6、請依據加工形狀、機械剛性工具的夾持突出長度等狀況不同，做主軸回轉速和進給速度的調整。

#### 【Note】

- ① Down-cutting is recommended.
- ② Use generally dry (air-blow) or oil-mist coolant, especially at the high-speed machining.
- ③ Oil base coolant is recommended for machining stainless steels and heat-resistant alloy.
- ④ Use a machine tool with rigidity and rigid set-up, to machine stably
- ⑤ When the revolution speed is not enough, reduce the revolution speed and table speed at the same ratio.
- ⑥ Adjust the revolution speed and table speed, according to cutting conditions such as machining shape, rigidity of machine tool, over-hang and so on.



標準圓鼻刀切削條件表 Recommended cutting conditions



| 被削材 (硬さ)<br>Work material<br>(Hardness)                                | 條件域<br>Condition Range | 切込み<br>Depth of cut<br>mm | 切削條件<br>Cutting Conditions | 外径 D c Tool Dia. (mm) |       |       |       |       |       |       |       |       |
|------------------------------------------------------------------------|------------------------|---------------------------|----------------------------|-----------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                                        |                        |                           |                            | φ 3                   | φ 4   | φ 5   | φ 6   | φ 8   | φ 10  | φ 12  | φ 16  | φ 20  |
| 鑄鐵<br>Cast Iron<br>(150 ~ 200HB)<br>FC250                              | 高速條件<br>High speed     | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 420                   | 480   | 510   | 530   | 560   | 510   | 480   | 400   | 380   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 1D_c$           | 回転数 $\text{min}^{-1}$      | 3,180                 | 2,390 | 1,910 | 1,590 | 1,190 | 950   | 800   | 600   | 480   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 250                   | 290   | 310   | 320   | 330   | 300   | 290   | 240   | 230   |
| 炭素鋼<br>Carbon Steels<br>(180 ~ 220HB)<br>SS400、S50C                    | 高速條件<br>High speed     | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 8,490                 | 6,370 | 5,090 | 4,240 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 680                   | 760   | 810   | 850   | 890   | 820   | 760   | 640   | 610   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 1D_c$           | 回転数 $\text{min}^{-1}$      | 7,430                 | 5,570 | 4,460 | 3,710 | 2,790 | 2,230 | 1,860 | 1,390 | 1,110 |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 590                   | 670   | 710   | 740   | 780   | 710   | 670   | 560   | 530   |
| 合金鋼<br>Alloy Steels<br>(200 ~ 250HB)<br>SCM440、SNCM                    | 高速條件<br>High speed     | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 7,430                 | 5,570 | 4,460 | 3,710 | 2,790 | 2,230 | 1,860 | 1,390 | 1,110 |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 590                   | 670   | 710   | 740   | 780   | 710   | 670   | 560   | 530   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 1D_c$           | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 420                   | 480   | 510   | 530   | 560   | 510   | 480   | 400   | 380   |
| 不銹鋼、工具鋼<br>Stainless Steels, Tool Steels<br>(25 ~ 35HRC)<br>SUS304、SKD | 高速條件<br>High speed     | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 320                   | 400   | 450   | 420   | 400   | 380   | 370   | 340   | 320   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 4,240                 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 250                   | 320   | 360   | 340   | 320   | 300   | 300   | 270   | 260   |
| 預硬鋼<br>Pre-hardened Steels<br>(35 ~ 45HRC)<br>HPM1、NAK55               | 高速條件<br>High speed     | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 5,310                 | 3,980 | 3,180 | 2,650 | 1,990 | 1,590 | 1,330 | 990   | 800   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 320                   | 400   | 450   | 420   | 400   | 380   | 370   | 340   | 320   |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.5D_c$         | 回転数 $\text{min}^{-1}$      | 4,240                 | 3,180 | 2,550 | 2,120 | 1,590 | 1,270 | 1,060 | 800   | 640   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 250                   | 320   | 360   | 340   | 320   | 300   | 300   | 270   | 260   |
| 熱處理鋼<br>Hardened Steels<br>(45 ~ 60HRC)<br>SKD61、SKT4                  | 高速條件<br>High speed     | $a_p =$                   | 回転数 $\text{min}^{-1}$      |                       |       |       |       |       |       |       |       |       |
|                                                                        |                        | $a_e =$                   | 進給速度 $\text{mm/min}$       |                       |       |       |       |       |       |       |       |       |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 2,120                 | 1,590 | 1,270 | 1,060 | 800   | 640   | 530   | 400   | 320   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 85                    | 130   | 150   | 150   | 140   | 140   | 130   | 110   | 100   |
| 鈦合金<br>Titanium Alloy<br>Ti-6Al-4V                                     | 高速條件<br>High speed     | $a_p =$                   | 回転数 $\text{min}^{-1}$      |                       |       |       |       |       |       |       |       |       |
|                                                                        |                        | $a_e =$                   | 進給速度 $\text{mm/min}$       |                       |       |       |       |       |       |       |       |       |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 3,180                 | 2,390 | 1,910 | 1,590 | 1,190 | 950   | 800   | 600   | 480   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 130                   | 190   | 230   | 220   | 210   | 210   | 190   | 170   | 150   |
| 超耐熱合金<br>Super Heat-resistant Alloy<br>Inconel<br>Hasteloy             | 高速條件<br>High speed     | $a_p =$                   | 回転数 $\text{min}^{-1}$      |                       |       |       |       |       |       |       |       |       |
|                                                                        |                        | $a_e =$                   | 進給速度 $\text{mm/min}$       |                       |       |       |       |       |       |       |       |       |
|                                                                        | 汎用條件<br>General        | $a_p \leq 0.2D_c$         | 回転数 $\text{min}^{-1}$      | 1,590                 | 1,190 | 950   | 800   | 600   | 480   | 400   | 300   | 240   |
|                                                                        |                        | $a_e = 1D_c$              | 進給速度 $\text{mm/min}$       | 65                    | 95    | 110   | 110   | 110   | 110   | 95    | 85    | 75    |

【注意】

- 1、請使用順銑(Down Cut)切削方向。
- 2、一般鋼材在使用高速切削時，請搭配載用冷卻風壓 Air Blow 或 Oil-Mist。
- 3、不銹鋼材，超耐熱合金鋼材，請使用不水溶性切削油。
- 4、請使用高剛性機配工具配件，以使切削加工安定。
- 5、機械回轉速不足的時候，主軸的回轉速和進給速度可以做同比例的調整下降。
- 6、請依據加工形狀、機械剛性工具的夾持突出長度等狀況不同，做主軸回轉速和進給速度的調整。

【Note】

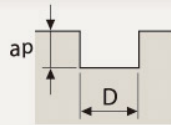
- ① Down-cutting is recommended.
- ② Use generally dry (air-blow) or oil-mist coolant, especially at the high-speed machining.
- ③ Oil base coolant is recommended for machining stainless steels and heat-resistant alloy.
- ④ Use a machine tool with rigidity and rigid set-up, to machine stably
- ⑤ When the revolution speed is not enough, reduce the revolution speed and table speed at the same ratio.
- ⑥ Adjust the revolution speed and table speed, according to cutting conditions such as machining shape, rigidity of machine tool, over-hang and so on.

## 標準切削條件表

| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>Hardened Steels |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|

| 工件硬度Hardness    |       | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      |
|-----------------|-------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刀徑<br>Mill Dia. | ap    | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D0.3            | 0.020 | 20000-50000             | 200-1500             | 15000-30000             | 150-1000             | 10000-20000             | 100-500              | 5000-15000              | 50-250               |
| D0.4            | 0.025 | 20000-50000             | 200-1500             | 15000-30000             | 150-1000             | 10000-20000             | 100-500              | 5000-15000              |                      |
| D0.5            | 0.030 | 20000-50000             | 200-1500             | 15000-30000             | 150-1000             | 10000-20000             | 100-500              | 5000-15000              | 50-250               |
| D0.6            | 0.035 | 20000-50000             | 200-1500             | 15000-30000             | 150-1000             | 10000-20000             | 100-500              | 5000-15000              |                      |
| D0.7            | 0.040 | 20000-50000             | 200-1500             | 15000-30000             | 150-1000             | 10000-20000             | 100-500              | 5000-15000              | 50-250               |
| D0.8            | 0.045 | 20000-50000             | 200-1500             | 15000-30000             | 150-1000             | 10000-20000             | 100-500              | 5000-15000              | 50-250               |
| D0.9            | 0.045 | 20000-50000             | 200-1500             | 15000-30000             | 150-1000             | 10000-20000             | 100-500              | 5000-15000              |                      |

### ■ 溝銑 Slot Milling



1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
  2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
  3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
  3. Use highly rigid and precise machine and holder.

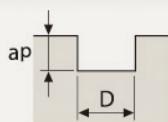


### 標準切削條件表

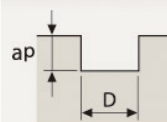
| 被切削材<br>Work Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D1.0             | 16000                   | 64                   | 9500                    | 40                   | 8600                    | 38                   | 7600                    | 36                   | 3200                    | 13                   |
| D2.0             | 9500                    | 88                   | 5700                    | 56                   | 5100                    | 50                   | 4500                    | 44                   | 1900                    | 19                   |
| D3.0             | 7400                    | 120                  | 4500                    | 76                   | 4000                    | 68                   | 3600                    | 60                   | 1500                    | 25                   |
| D4.0             | 6400                    | 160                  | 3800                    | 96                   | 3400                    | 86                   | 3000                    | 80                   | 1270                    | 32                   |
| D5.0             | 5700                    | 200                  | 3400                    | 120                  | 3100                    | 110                  | 2700                    | 96                   | 1150                    | 40                   |
| D6.0             | 5300                    | 256                  | 3200                    | 152                  | 2900                    | 136                  | 2500                    | 120                  | 1060                    | 50                   |
| D8.0             | 4000                    | 256                  | 2400                    | 152                  | 2200                    | 136                  | 1900                    | 120                  | 800                     | 50                   |
| D10.0            | 3200                    | 256                  | 1900                    | 152                  | 1700                    | 136                  | 1500                    | 120                  | 640                     | 50                   |
| D12.0            | 2600                    | 250                  | 1600                    | 152                  | 1450                    | 136                  | 1300                    | 120                  | 530                     | 50                   |
| D16.0            | 2000                    | 192                  | 1200                    | 116                  | 1100                    | 104                  | 950                     | 92                   | 400                     | 38                   |
| D18.0            | 1800                    | 176                  | 1100                    | 104                  | 1000                    | 94                   | 850                     | 80                   | 350                     | 33                   |
| D20.0            | 1600                    | 152                  | 950                     | 92                   | 860                     | 83                   | 760                     | 72                   | 320                     | 30                   |

#### 溝銑 Slot Milling



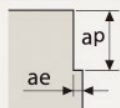
D=3.0mm以下時, ap=0.15D以下  
D=3.0mm以上時, ap=0.25D以下  
D=3.0mm under, ap=0.15D under  
D=3.0mm above, ap=0.25D under



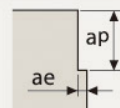
D=3.0mm以下時, ap=0.05D以下  
D=3.0mm以上時, ap=0.10D以下  
D=3.0mm under, ap=0.05D under  
D=3.0mm above, ap=0.10D under

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D1.0             | 16000                   | 80                   | 9500                    | 50                   | 8600                    | 48                   | 7600                    | 40                   | 3200                    | 16                   |
| D2.0             | 9500                    | 110                  | 5700                    | 70                   | 5100                    | 62                   | 4500                    | 55                   | 1900                    | 23                   |
| D3.0             | 7400                    | 150                  | 4500                    | 95                   | 4000                    | 85                   | 3600                    | 75                   | 1500                    | 31                   |
| D4.0             | 6400                    | 200                  | 3800                    | 120                  | 3400                    | 107                  | 3000                    | 100                  | 1270                    | 40                   |
| D5.0             | 5700                    | 250                  | 3400                    | 150                  | 3100                    | 137                  | 2700                    | 120                  | 1150                    | 51                   |
| D6.0             | 5300                    | 320                  | 3200                    | 190                  | 2900                    | 170                  | 2500                    | 150                  | 1060                    | 64                   |
| D8.0             | 4000                    | 320                  | 2400                    | 190                  | 2200                    | 170                  | 1900                    | 150                  | 800                     | 64                   |
| D10.0            | 3200                    | 320                  | 1900                    | 190                  | 1700                    | 170                  | 1500                    | 150                  | 640                     | 64                   |
| D12.0            | 2600                    | 310                  | 1600                    | 190                  | 1450                    | 170                  | 1300                    | 150                  | 530                     | 64                   |
| D16.0            | 2000                    | 240                  | 1200                    | 145                  | 1100                    | 130                  | 950                     | 115                  | 400                     | 48                   |
| D18.0            | 1800                    | 220                  | 1100                    | 130                  | 1000                    | 120                  | 850                     | 100                  | 350                     | 42                   |
| D20.0            | 1600                    | 190                  | 950                     | 115                  | 860                     | 105                  | 760                     | 90                   | 320                     | 38                   |

#### 側銑 Side Milling



ap=1.5D以下, ae=0.05D以下  
ap=1.5D under, ae=0.05D under



ap=1.5D以下, ae=0.025D以下  
ap=1.5D under, ae=0.025D under

1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.

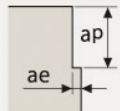


# 標準切削條件表

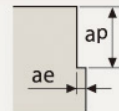
| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, S41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 7400                    | 220                  | 4500                    | 140                  | 4000                    | 130                  | 3600                    | 110                  | 1500                    | 45                   |
| D4.0             | 6400                    | 370                  | 3800                    | 180                  | 3400                    | 160                  | 3000                    | 150                  | 1270                    | 60                   |
| D5.0             | 5700                    | 370                  | 3400                    | 220                  | 3000                    | 200                  | 2700                    | 180                  | 1150                    | 76                   |
| D6.0             | 5300                    | 480                  | 3200                    | 290                  | 2900                    | 260                  | 2500                    | 220                  | 1060                    | 96                   |
| D8.0             | 4000                    | 480                  | 2400                    | 290                  | 2200                    | 260                  | 1900                    | 220                  | 800                     | 96                   |
| D10.0            | 3200                    | 480                  | 1900                    | 290                  | 1650                    | 260                  | 1500                    | 220                  | 640                     | 96                   |
| D12.0            | 2600                    | 460                  | 1600                    | 290                  | 1450                    | 260                  | 1300                    | 220                  | 530                     | 96                   |
| D16.0            | 2000                    | 360                  | 1200                    | 220                  | 1080                    | 200                  | 950                     | 170                  | 400                     | 72                   |
| D18.0            | 1800                    | 330                  | 1050                    | 195                  | 950                     | 180                  | 850                     | 150                  | 350                     | 63                   |
| D20.0            | 1600                    | 290                  | 950                     | 170                  | 850                     | 150                  | 760                     | 135                  | 320                     | 57                   |

## 側銑 Side Milling



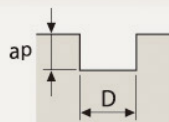
ap=1.5D以下, ae=0.1D以下  
ap=1.5D under, ae=0.1D under



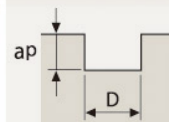
ap=1D以下, ae=0.05D以下  
ap=1D under, ae=0.05D under

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 7400                    | 176                  | 4500                    | 110                  | 4000                    | 104                  | 3600                    | 90                   | 1500                    | 37                   |
| D4.0             | 6400                    | 300                  | 3800                    | 145                  | 3400                    | 130                  | 3000                    | 120                  | 1270                    | 48                   |
| D5.0             | 5700                    | 300                  | 3400                    | 180                  | 3000                    | 160                  | 2700                    | 145                  | 1150                    | 60                   |
| D6.0             | 5300                    | 380                  | 3200                    | 230                  | 2900                    | 210                  | 2500                    | 180                  | 1060                    | 75                   |
| D8.0             | 4000                    | 380                  | 2400                    | 230                  | 2200                    | 210                  | 1900                    | 180                  | 800                     | 75                   |
| D10.0            | 3200                    | 380                  | 1900                    | 230                  | 1650                    | 210                  | 1500                    | 180                  | 640                     | 75                   |
| D12.0            | 2600                    | 370                  | 1600                    | 230                  | 1450                    | 210                  | 1300                    | 180                  | 530                     | 75                   |
| D16.0            | 2000                    | 290                  | 1200                    | 180                  | 1080                    | 160                  | 950                     | 140                  | 400                     | 57                   |
| D18.0            | 1800                    | 260                  | 1050                    | 160                  | 950                     | 145                  | 850                     | 120                  | 350                     | 50                   |
| D20.0            | 1600                    | 230                  | 950                     | 140                  | 850                     | 120                  | 760                     | 110                  | 320                     | 45                   |

## 溝銑 Slot Milling



ap=0.25D以下  
ap=0.25D under



ap=0.10D以下  
ap=0.10D under

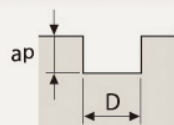
- 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
- 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
- 請使用準確性與高剛性之機器與刀把。
- The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
- Adjust milling condition when unusual vibration and sound occur by cutting.
- Use highly rigid and precise machine and holder.

### 標準切削條件表

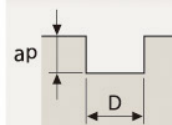
| 被切削材<br>Work Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D2.0             | 9500                    | 88                   | 5700                    | 56                   | 5100                    | 50                   | 4500                    | 44                   | 1900                    | 19                   |
| D3.0             | 7400                    | 120                  | 4500                    | 76                   | 4000                    | 68                   | 3600                    | 60                   | 1500                    | 25                   |
| D4.0             | 6400                    | 160                  | 3800                    | 96                   | 3400                    | 86                   | 3000                    | 80                   | 1270                    | 32                   |
| D5.0             | 5700                    | 200                  | 3400                    | 120                  | 3100                    | 110                  | 2700                    | 96                   | 1150                    | 40                   |
| D6.0             | 5300                    | 256                  | 3200                    | 152                  | 2900                    | 136                  | 2500                    | 120                  | 1060                    | 50                   |
| D8.0             | 4000                    | 256                  | 2400                    | 152                  | 2200                    | 136                  | 1900                    | 120                  | 800                     | 50                   |
| D10.0            | 3200                    | 256                  | 1900                    | 152                  | 1700                    | 136                  | 1500                    | 120                  | 640                     | 50                   |
| D12.0            | 2600                    | 250                  | 1600                    | 152                  | 1450                    | 136                  | 1300                    | 120                  | 530                     | 50                   |
| D16.0            | 2000                    | 192                  | 1200                    | 116                  | 1100                    | 104                  | 950                     | 92                   | 400                     | 38                   |
| D18.0            | 1800                    | 176                  | 1100                    | 104                  | 1000                    | 94                   | 850                     | 80                   | 350                     | 33                   |
| D20.0            | 1600                    | 152                  | 950                     | 92                   | 860                     | 83                   | 760                     | 72                   | 320                     | 30                   |

#### 溝銑 Slot Milling



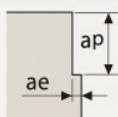
D=3.0mm以下時, ap=0.15D以下  
D=3.0mm以上時, ap=0.25D以下  
D=3.0mm under, ap=0.15D under  
D=3.0mm above, ap=0.25D under



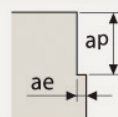
D=3.0mm以下時, ap=0.05D以下  
D=3.0mm以上時, ap=0.10D以下  
D=3.0mm under, ap=0.05D under  
D=3.0mm above, ap=0.10D under

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D2.0             | 9500                    | 110                  | 5700                    | 70                   | 5100                    | 62                   | 4500                    | 55                   | 1900                    | 23                   |
| D3.0             | 7400                    | 150                  | 4500                    | 95                   | 4000                    | 85                   | 3600                    | 75                   | 1500                    | 31                   |
| D4.0             | 6400                    | 200                  | 3800                    | 120                  | 3400                    | 107                  | 3000                    | 100                  | 1270                    | 40                   |
| D5.0             | 5700                    | 250                  | 3400                    | 150                  | 3100                    | 137                  | 2700                    | 120                  | 1150                    | 51                   |
| D6.0             | 5300                    | 320                  | 3200                    | 190                  | 2900                    | 170                  | 2500                    | 150                  | 1060                    | 64                   |
| D8.0             | 4000                    | 320                  | 2400                    | 190                  | 2200                    | 170                  | 1900                    | 150                  | 800                     | 64                   |
| D10.0            | 3200                    | 320                  | 1900                    | 190                  | 1700                    | 170                  | 1500                    | 150                  | 640                     | 64                   |
| D12.0            | 2600                    | 310                  | 1600                    | 190                  | 1450                    | 170                  | 1300                    | 150                  | 530                     | 64                   |
| D16.0            | 2000                    | 240                  | 1200                    | 145                  | 1100                    | 130                  | 950                     | 115                  | 400                     | 48                   |
| D18.0            | 1800                    | 220                  | 1100                    | 130                  | 1000                    | 120                  | 850                     | 100                  | 350                     | 42                   |
| D20.0            | 1600                    | 190                  | 950                     | 115                  | 860                     | 105                  | 760                     | 90                   | 320                     | 38                   |

#### 側銑 Side Milling



ap=1.5D以下, ae=0.05D以下  
ap=1.5D under, ae=0.05D under



ap=1.5D以下, ae=0.025D以下  
ap=1.5D under, ae=0.025D under

1. 此切銷條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.

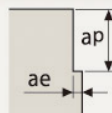


# 標準切削條件表

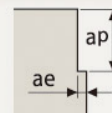
| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 7400                    | 220                  | 4500                    | 140                  | 4000                    | 130                  | 3600                    | 110                  | 1500                    | 45                   |
| D4.0             | 6400                    | 370                  | 3800                    | 180                  | 3400                    | 160                  | 3000                    | 150                  | 1270                    | 60                   |
| D5.0             | 5700                    | 370                  | 3400                    | 220                  | 3000                    | 200                  | 2700                    | 180                  | 1150                    | 76                   |
| D6.0             | 5300                    | 480                  | 3200                    | 290                  | 2900                    | 260                  | 2500                    | 220                  | 1060                    | 96                   |
| D8.0             | 4000                    | 480                  | 2400                    | 290                  | 2200                    | 260                  | 1900                    | 220                  | 800                     | 96                   |
| D10.0            | 3200                    | 480                  | 1900                    | 290                  | 1650                    | 260                  | 1500                    | 220                  | 640                     | 96                   |
| D12.0            | 2600                    | 460                  | 1600                    | 290                  | 1450                    | 260                  | 1300                    | 220                  | 530                     | 96                   |
| D16.0            | 2000                    | 360                  | 1200                    | 220                  | 1080                    | 200                  | 950                     | 170                  | 400                     | 72                   |
| D18.0            | 1800                    | 330                  | 1050                    | 195                  | 950                     | 180                  | 850                     | 150                  | 350                     | 63                   |
| D20.0            | 1600                    | 290                  | 950                     | 170                  | 850                     | 150                  | 760                     | 135                  | 320                     | 57                   |

## 側銑 Side Milling



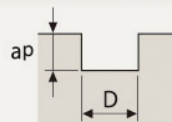
ap=1.5D以下, ae=0.1D以下  
ap=1.5D under, ae=0.1D under



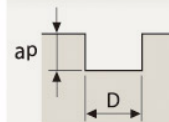
ap=1D以下, ae=0.05D以下  
ap=1D under, ae=0.05D under

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 7400                    | 176                  | 4500                    | 110                  | 4000                    | 104                  | 3600                    | 90                   | 1500                    | 37                   |
| D4.0             | 6400                    | 300                  | 3800                    | 145                  | 3400                    | 130                  | 3000                    | 120                  | 1270                    | 48                   |
| D5.0             | 5700                    | 300                  | 3400                    | 180                  | 3000                    | 160                  | 2700                    | 145                  | 1150                    | 60                   |
| D6.0             | 5300                    | 380                  | 3200                    | 230                  | 2900                    | 210                  | 2500                    | 180                  | 1060                    | 75                   |
| D8.0             | 4000                    | 380                  | 2400                    | 230                  | 2200                    | 210                  | 1900                    | 180                  | 800                     | 75                   |
| D10.0            | 3200                    | 380                  | 1900                    | 230                  | 1650                    | 210                  | 1500                    | 180                  | 640                     | 75                   |
| D12.0            | 2600                    | 370                  | 1600                    | 230                  | 1450                    | 210                  | 1300                    | 180                  | 530                     | 75                   |
| D16.0            | 2000                    | 290                  | 1200                    | 180                  | 1080                    | 160                  | 950                     | 140                  | 400                     | 57                   |
| D18.0            | 1800                    | 260                  | 1050                    | 160                  | 950                     | 145                  | 850                     | 120                  | 350                     | 50                   |
| D20.0            | 1600                    | 230                  | 950                     | 140                  | 850                     | 120                  | 760                     | 110                  | 320                     | 45                   |

## 溝銑 Slot Milling



ap=0.25D以下  
ap=0.25D under



ap=0.10D以下  
ap=0.10D under

- 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
- 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
- 請使用準確性與高剛性之機器與刀把。
- The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
- Adjust milling condition when unusual vibration and sound occur by cutting.
- Use highly rigid and precise machine and holder.

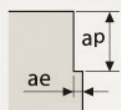


### 標準切削條件表

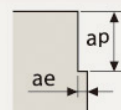
| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D2.0             | 4800                    | 44                   | 2850                    | 28                   | 2250                    | 22                   | 1650                    | 16                   | 950                     | 10                   |
| D3.0             | 3700                    | 60                   | 2250                    | 40                   | 2000                    | 34                   | 1800                    | 30                   | 750                     | 13                   |
| D4.0             | 3200                    | 80                   | 1900                    | 50                   | 1700                    | 43                   | 1500                    | 40                   | 620                     | 16                   |
| D5.0             | 2850                    | 100                  | 1700                    | 70                   | 1550                    | 55                   | 1350                    | 48                   | 570                     | 20                   |
| D6.0             | 2650                    | 128                  | 1600                    | 76                   | 1450                    | 68                   | 1250                    | 60                   | 530                     | 25                   |
| D8.0             | 2000                    | 128                  | 1200                    | 76                   | 1100                    | 68                   | 950                     | 60                   | 400                     | 25                   |
| D10.0            | 1600                    | 128                  | 950                     | 76                   | 850                     | 68                   | 750                     | 60                   | 320                     | 25                   |
| D12.0            | 1300                    | 124                  | 800                     | 76                   | 720                     | 68                   | 650                     | 60                   | 260                     | 25                   |
| D16.0            | 1000                    | 96                   | 600                     | 58                   | 550                     | 52                   | 470                     | 46                   | 200                     | 19                   |
| D18.0            | 900                     | 88                   | 550                     | 52                   | 500                     | 48                   | 430                     | 40                   | 170                     | 16                   |
| D20.0            | 800                     | 76                   | 475                     | 46                   | 430                     | 42                   | 380                     | 36                   | 160                     | 15                   |

#### 側銑 Side Milling



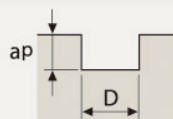
ap=2.5D以下, ae=0.025D以下(最大0.5mm)  
ap=2.5D under, ae=0.05D under(max.0.5mm)



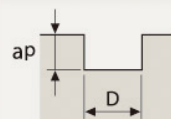
ap=2D以下, ae=0.015D以下(最大0.3mm)  
ap=2D under, ae=0.015D under(max.0.3mm)

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D2.0             | 4800                    | 35                   | 2850                    | 22                   | 2250                    | 18                   | 1650                    | 13                   | 950                     | 8                    |
| D3.0             | 3700                    | 48                   | 2250                    | 32                   | 2000                    | 27                   | 1800                    | 24                   | 750                     | 10                   |
| D4.0             | 3200                    | 64                   | 1900                    | 40                   | 1700                    | 35                   | 1500                    | 32                   | 620                     | 13                   |
| D5.0             | 2850                    | 80                   | 1700                    | 35                   | 1550                    | 44                   | 1350                    | 39                   | 570                     | 16                   |
| D6.0             | 2650                    | 102                  | 1600                    | 61                   | 1450                    | 55                   | 1250                    | 48                   | 530                     | 20                   |
| D8.0             | 2000                    | 102                  | 1200                    | 61                   | 1100                    | 55                   | 950                     | 48                   | 400                     | 20                   |
| D10.0            | 1600                    | 102                  | 950                     | 61                   | 850                     | 55                   | 750                     | 48                   | 320                     | 20                   |
| D12.0            | 1300                    | 100                  | 800                     | 61                   | 720                     | 55                   | 650                     | 48                   | 260                     | 20                   |
| D16.0            | 1000                    | 77                   | 600                     | 46                   | 550                     | 42                   | 470                     | 37                   | 200                     | 15                   |
| D18.0            | 900                     | 70                   | 550                     | 42                   | 500                     | 39                   | 430                     | 32                   | 170                     | 13                   |
| D20.0            | 800                     | 60                   | 475                     | 37                   | 430                     | 34                   | 380                     | 29                   | 160                     | 12                   |

#### 溝銑 Slot Milling



ap=0.15D以下(最大3.0mm)  
ap=0.15D under(max.0.3mm)



Dap=0.025D以下(最大3.0mm)  
ap=0.025D under(max.0.3mm)

1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.

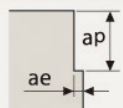
JCSLL4 / ACSLL4 四刃長刃長柄平刀

標準切削條件表

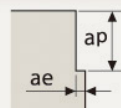
| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, S41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刀徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 3700                    | 88                   | 2250                    | 56                   | 2000                    | 52                   | 1800                    | 45                   | 750                     | 18                   |
| D4.0             | 3200                    | 150                  | 1900                    | 70                   | 1700                    | 64                   | 1500                    | 60                   | 620                     | 24                   |
| D5.0             | 2850                    | 150                  | 1700                    | 88                   | 1550                    | 80                   | 1350                    | 72                   | 560                     | 30                   |
| D6.0             | 2650                    | 190                  | 1600                    | 120                  | 1450                    | 104                  | 1250                    | 88                   | 530                     | 38                   |
| D8.0             | 2000                    | 190                  | 1200                    | 120                  | 1100                    | 104                  | 950                     | 88                   | 400                     | 38                   |
| D10.0            | 1600                    | 190                  | 950                     | 120                  | 850                     | 104                  | 750                     | 88                   | 320                     | 38                   |
| D12.0            | 1300                    | 180                  | 800                     | 120                  | 720                     | 104                  | 650                     | 88                   | 270                     | 38                   |
| D16.0            | 1000                    | 140                  | 600                     | 88                   | 550                     | 80                   | 470                     | 68                   | 200                     | 29                   |
| D18.0            | 900                     | 130                  | 550                     | 80                   | 500                     | 72                   | 430                     | 60                   | 170                     | 25                   |
| D20.0            | 800                     | 120                  | 475                     | 70                   | 430                     | 60                   | 380                     | 55                   | 160                     | 23                   |

側銑 Side Milling



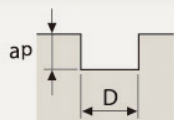
ap=2.5D以下, ae=0.05D以下(最大0.5mm)  
ap=2.5D under, ae=0.05D under(max.0.5mm)



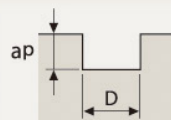
ap=2D以下, ae=0.02D以下(最大0.3mm)  
ap=2D under, ae=0.02D under(max.0.3mm)

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刀徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 3700                    | 70                   | 2250                    | 45                   | 2000                    | 42                   | 1800                    | 36                   | 750                     | 15                   |
| D4.0             | 3200                    | 120                  | 1900                    | 56                   | 1700                    | 51                   | 1500                    | 48                   | 630                     | 19                   |
| D5.0             | 2850                    | 120                  | 1700                    | 70                   | 1550                    | 64                   | 1350                    | 58                   | 560                     | 24                   |
| D6.0             | 2650                    | 150                  | 1600                    | 96                   | 1450                    | 83                   | 1250                    | 70                   | 530                     | 30                   |
| D8.0             | 2000                    | 150                  | 1200                    | 96                   | 1100                    | 83                   | 950                     | 70                   | 400                     | 30                   |
| D10.0            | 1600                    | 150                  | 950                     | 96                   | 850                     | 83                   | 750                     | 70                   | 320                     | 30                   |
| D12.0            | 1300                    | 145                  | 800                     | 96                   | 720                     | 83                   | 650                     | 70                   | 270                     | 30                   |
| D16.0            | 1000                    | 110                  | 600                     | 70                   | 550                     | 64                   | 470                     | 55                   | 200                     | 23                   |
| D18.0            | 900                     | 104                  | 550                     | 64                   | 500                     | 58                   | 430                     | 48                   | 170                     | 20                   |
| D20.0            | 800                     | 100                  | 475                     | 56                   | 430                     | 48                   | 380                     | 44                   | 160                     | 19                   |

溝銑 Slot Milling



ap=0.10D以下  
ap=0.10D under



ap=0.05D以下(最大0.5mm)  
ap=0.05D under(max.0.5mm)

1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.



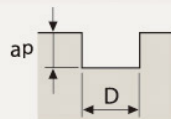
JDS2 / ADS2 二刃長頸平刀

標準切削條件表

| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>Hardened Steels |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|

| 工件硬度 Hardness   |                              |           | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      |
|-----------------|------------------------------|-----------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia. | 有效長<br>Length<br>under shank | ap        | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D1.0            | M6.0                         | 0.03-0.06 | 16000                   | 320-420              | 12800                   | 260-340              | 10200                   | 210-270              | 8200                    | 170-220              |
| D1.0            | M10.0                        | 0.02-0.03 | 12800                   | 260-340              | 10200                   | 200-260              | 8200                    | 160-210              | 6600                    | 130-170              |
| D1.5            | M8.0                         | 0.06-0.12 | 10600                   | 320-420              | 8500                    | 260-340              | 6800                    | 210-270              | 5400                    | 170-220              |
| D1.5            | M16.0                        | 0.02-0.03 | 8500                    | 260-340              | 6800                    | 200-260              | 5500                    | 160-210              | 4400                    | 130-170              |
| D2.0            | M8.0                         | 0.07-0.14 | 8000                    | 320-420              | 6400                    | 260-340              | 5200                    | 210-270              | 4200                    | 170-220              |
| D2.0            | M16.0                        | 0.04-0.08 | 6400                    | 260-340              | 5200                    | 200-260              | 4200                    | 160-210              | 3400                    | 130-170              |
| D2.0            | M20.0                        | 0.02-0.04 | 4800                    | 210-280              | 3800                    | 150-200              | 3100                    | 120-160              | 2500                    | 100-130              |
| D2.5            | M12.0                        | 0.10-0.20 | 6400                    | 320-420              | 5200                    | 260-340              | 4200                    | 210-270              | 3400                    | 170-220              |
| D2.5            | M20.0                        | 0.07-0.14 | 5200                    | 260-340              | 4200                    | 200-260              | 3400                    | 160-210              | 2700                    | 130-170              |
| D3.0            | M12.0                        | 0.12-0.24 | 5300                    | 320-420              | 4200                    | 260-340              | 3400                    | 210-270              | 2700                    | 170-220              |
| D3.0            | M20.0                        | 0.07-0.12 | 4200                    | 260-340              | 3400                    | 200-260              | 2700                    | 160-210              | 2200                    | 130-170              |
| D4.0            | M20.0                        | 0.16-0.32 | 4000                    | 320-420              | 3200                    | 260-340              | 2600                    | 210-270              | 2100                    | 170-220              |
| D4.0            | M30.0                        | 0.10-0.20 | 3200                    | 260-340              | 2600                    | 200-260              | 2100                    | 160-210              | 1700                    | 130-170              |

溝銑 Slot Milling



1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.



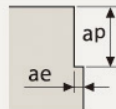
## JHS3 45度 三刃平刀

### 標準切削條件表

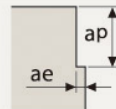
| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 7400                    | 180                  | 4500                    | 115                  | 4000                    | 100                  | 3600                    | 90                   | 1500                    | 38                   |
| D4.0             | 6400                    | 240                  | 3800                    | 145                  | 3400                    | 130                  | 3000                    | 120                  | 1270                    | 48                   |
| D5.0             | 5700                    | 300                  | 3400                    | 180                  | 3100                    | 165                  | 2700                    | 145                  | 1150                    | 60                   |
| D6.0             | 5300                    | 380                  | 3200                    | 230                  | 2900                    | 200                  | 2500                    | 180                  | 1060                    | 75                   |
| D8.0             | 4000                    | 380                  | 2400                    | 230                  | 2200                    | 200                  | 1900                    | 180                  | 800                     | 75                   |
| D10.0            | 3200                    | 380                  | 1900                    | 230                  | 1700                    | 200                  | 1500                    | 180                  | 640                     | 75                   |
| D12.0            | 2600                    | 380                  | 1600                    | 230                  | 1450                    | 200                  | 1300                    | 180                  | 530                     | 75                   |
| D16.0            | 2000                    | 290                  | 1200                    | 170                  | 1100                    | 155                  | 950                     | 140                  | 400                     | 57                   |

#### 側銑 Side Milling



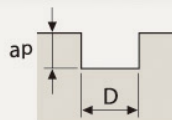
ap=1.5D以下, ae=0.2D以下  
ap=1.5D under, ae=0.2D under



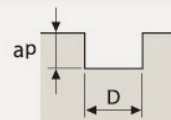
ap=1D以下, ae=0.05D以下  
ap=1D under, ae=0.05D under

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D3.0             | 7400                    | 180                  | 4500                    | 115                  | 4000                    | 100                  | 3600                    | 90                   | 1500                    | 38                   |
| D4.0             | 6400                    | 240                  | 3800                    | 145                  | 3400                    | 130                  | 3000                    | 120                  | 1270                    | 48                   |
| D5.0             | 5700                    | 300                  | 3400                    | 180                  | 3100                    | 165                  | 2700                    | 145                  | 1150                    | 60                   |
| D6.0             | 5300                    | 380                  | 3200                    | 230                  | 2900                    | 200                  | 2500                    | 180                  | 1060                    | 75                   |
| D8.0             | 4000                    | 380                  | 2400                    | 230                  | 2200                    | 200                  | 1900                    | 180                  | 800                     | 75                   |
| D10.0            | 3200                    | 380                  | 1900                    | 230                  | 1700                    | 200                  | 1500                    | 180                  | 640                     | 75                   |
| D12.0            | 2600                    | 380                  | 1600                    | 230                  | 1450                    | 200                  | 1300                    | 180                  | 530                     | 75                   |
| D16.0            | 2000                    | 290                  | 1200                    | 170                  | 1100                    | 155                  | 950                     | 140                  | 400                     | 57                   |

#### 溝銑 Slot Milling



ap=0.25D以下  
ap=0.25D under



ap=0.10D以下  
ap=0.10D under

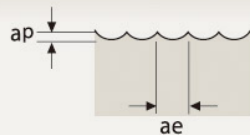
- 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
- 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
- 請使用準確性與高剛性之機器與刀把。
- The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
- Adjust milling condition when unusual vibration and sound occur by cutting.
- Use highly rigid and precise machine and holder.

## JBS2 / ABS2 二刃球刀

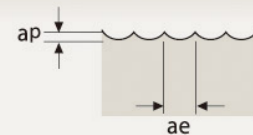
### 標準切削條件表

| 被切削材<br>Work Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 熱處理鋼<br>Hardened Steels |
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      |                         |                      | HRC30-45                |                      |                         |                      | HRC45-50                |                      |                         |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
|                  | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      |
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| R0.5             | 45000                   | 880                  | 31000                   | 620                  | 35700                   | 570                  | 25000                   | 400                  | 19000                   | 210                  | 13300                   | 150                  |
| R1.0             | 22000                   | 880                  | 15500                   | 620                  | 17800                   | 570                  | 12500                   | 400                  | 9500                    | 210                  | 6600                    | 150                  |
| R1.5             | 15000                   | 900                  | 10600                   | 630                  | 12100                   | 570                  | 8500                    | 400                  | 6400                    | 210                  | 4500                    | 150                  |
| R2.0             | 11400                   | 900                  | 8000                    | 630                  | 9100                    | 640                  | 6400                    | 450                  | 4800                    | 270                  | 3400                    | 190                  |
| R2.5             | 9100                    | 900                  | 6400                    | 630                  | 7100                    | 640                  | 5000                    | 450                  | 3800                    | 290                  | 2700                    | 200                  |
| R3.0             | 7600                    | 960                  | 5300                    | 670                  | 6000                    | 670                  | 4200                    | 470                  | 3200                    | 300                  | 2200                    | 210                  |
| R4.0             | 5700                    | 1140                 | 4000                    | 800                  | 4600                    | 790                  | 3200                    | 550                  | 2300                    | 320                  | 1600                    | 220                  |
| R5.0             | 4600                    | 1070                 | 3200                    | 750                  | 3600                    | 740                  | 2500                    | 520                  | 1900                    | 330                  | 1300                    | 230                  |
| R6.0             | 3900                    | 1000                 | 2700                    | 700                  | 3000                    | 700                  | 2100                    | 490                  | 1600                    | 310                  | 1100                    | 220                  |
| R8.0             | 2900                    | 930                  | 2000                    | 650                  | 2300                    | 670                  | 1600                    | 470                  | 1100                    | 270                  | 770                     | 190                  |
| R10.0            | 2300                    | 810                  | 1600                    | 570                  | 1900                    | 640                  | 1300                    | 450                  | 950                     | 250                  | 660                     | 180                  |



ae=0.06R以下, ap=0.2R以下  
ae=0.06R under, ap=0.2R under



ae=0.03R以下, ap=0.05R以下  
ae=0.03R under, ap=0.05R under

1. 此切銷條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
  1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
  2. Adjust milling condition when unusual vibration and sound occur by cutting.
  3. Use highly rigid and precise machine and holder.

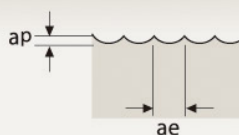
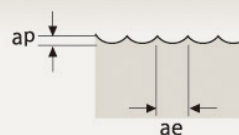
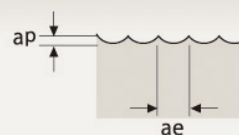


JBS4 四刃球刀

標準切削條件表

| 工件硬度<br>Hardness | ~HRC30                  |                      |                         |                      | HRC30-45                |                      |                         |                      | HRC45-50                |                      |                         |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
|                  | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      |
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| R3.0             | 7600                    | 960                  | 5300                    | 670                  | 6000                    | 670                  | 4200                    | 470                  | 3200                    | 300                  | 2200                    | 210                  |
| R4.0             | 5700                    | 1140                 | 4000                    | 800                  | 4600                    | 790                  | 3200                    | 550                  | 2300                    | 320                  | 1600                    | 220                  |
| R5.0             | 4600                    | 1070                 | 3200                    | 750                  | 3600                    | 740                  | 2500                    | 520                  | 1900                    | 330                  | 1330                    | 230                  |
| R6.0             | 3900                    | 1000                 | 2700                    | 700                  | 3000                    | 700                  | 2100                    | 490                  | 1600                    | 310                  | 1100                    | 220                  |
| R8.0             | 2900                    | 930                  | 2000                    | 650                  | 2300                    | 670                  | 1600                    | 470                  | 1100                    | 270                  | 770                     | 190                  |

|                                                                                                                                                       |                                                                                                                                                       |                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>ap=0.1R以下<br/>ae=0.3R以下<br/>ap=0.1R under<br/>ae=0.3R under</p> |  <p>ap=0.3R以下<br/>ae=0.1R以下<br/>ap=0.3R under<br/>ae=0.1R under</p> |  <p>ap=0.05R以下<br/>ae=0.15R以下<br/>ap=0.05R under<br/>ae=0.15R under</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|

1. 此切銷條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.

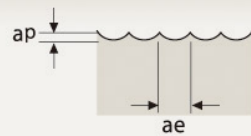


JBSL2 / ABSL2 二刃長柄球刀

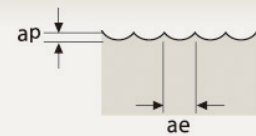
標準切削條件表

|                       |                                                                                           |                                                                        |                         |
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|
| 被切削材<br>Work Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 熱處理鋼<br>Hardened Steels |
|-----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      |                         |                      | HRC30-45                |                      |                         |                      | HRC45-50                |                      |                         |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
|                  | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      | 溝銑<br>Slot Milling      |                      | 曲面切削<br>3D Milling      |                      |
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| R0.5             | 45000                   | 880                  | 31000                   | 620                  | 35700                   | 570                  | 25000                   | 400                  | 19000                   | 210                  | 13300                   | 150                  |
| R1.0             | 22000                   | 880                  | 15500                   | 620                  | 17800                   | 570                  | 12500                   | 400                  | 9500                    | 210                  | 6600                    | 150                  |
| R1.5             | 15000                   | 900                  | 10600                   | 630                  | 12100                   | 570                  | 8500                    | 400                  | 6400                    | 210                  | 4500                    | 150                  |
| R2.0             | 11400                   | 900                  | 8000                    | 630                  | 9100                    | 640                  | 6400                    | 450                  | 4800                    | 270                  | 3400                    | 190                  |
| R2.5             | 9100                    | 900                  | 6400                    | 630                  | 7100                    | 640                  | 5000                    | 450                  | 3800                    | 290                  | 2700                    | 200                  |
| R3.0             | 7600                    | 960                  | 5300                    | 670                  | 6000                    | 670                  | 4200                    | 470                  | 3200                    | 300                  | 2200                    | 210                  |
| R4.0             | 5700                    | 1140                 | 4000                    | 800                  | 4600                    | 790                  | 3200                    | 550                  | 2300                    | 320                  | 1600                    | 220                  |
| R5.0             | 4600                    | 1070                 | 3200                    | 750                  | 3600                    | 740                  | 2500                    | 520                  | 1900                    | 330                  | 1300                    | 230                  |
| R6.0             | 3900                    | 1000                 | 2700                    | 700                  | 3000                    | 700                  | 2100                    | 490                  | 1600                    | 310                  | 1100                    | 220                  |
| R8.0             | 2900                    | 930                  | 2000                    | 650                  | 2300                    | 670                  | 1600                    | 470                  | 1100                    | 270                  | 770                     | 190                  |
| R10.0            | 2300                    | 810                  | 1600                    | 570                  | 1900                    | 640                  | 1300                    | 450                  | 950                     | 250                  | 660                     | 180                  |



ae=0.06R以下, 粗銑切削時, ap=0.2R以下  
ae=0.06R under, ap=0.2R under



ae=0.03R以下, ap=0.05R以下  
ae=0.03R under, ap=0.05R under

1. 此切銷條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
  2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
  3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
  3. Use highly rigid and precise machine and holder.

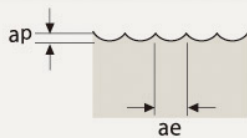
JDS2 / ADS2 微小徑球刀-長徑型

標準切削條件表

| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|

| 工件硬度 Hardness   |                              |       | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      |
|-----------------|------------------------------|-------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia. | 有效長<br>Length<br>under shank | ap    | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| R0.25           | 0.015                        | 0.025 | 32000                   | 640                  | 32000                   | 570                  | 32000                   | 510                  |
| R0.30           | 0.018                        | 0.030 | 32000                   | 690                  | 32000                   | 690                  | 32000                   | 610                  |
| R0.35           | 0.021                        | 0.035 | 32000                   | 800                  | 32000                   | 800                  | 32000                   | 710                  |
| R0.40           | 0.024                        | 0.040 | 32000                   | 920                  | 32000                   | 920                  | 32000                   | 810                  |
| R0.45           | 0.027                        | 0.045 | 32000                   | 1040                 | 32000                   | 1040                 | 32000                   | 900                  |

| 工件硬度 Hardness   |                              |           | ~HRC30                  |                      | HRC30-38                |                      | HRC38-45                |                      |
|-----------------|------------------------------|-----------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia. | 有效長<br>Length<br>under shank | ap        | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| R0.5            | M6.0                         | 0.03-0.06 | 19000-25000             | 225-450              | 17500-22500             | 170-320              | 15500-20000             | 120-240              |
| R0.5            | M10.0                        | 0.02-0.03 | 19000-25000             | 225-450              | 17500-22500             | 170-320              | 15500-20000             | 120-240              |
| R0.75           | M8.0                         | 0.04-0.09 | 12500-16500             | 225-450              | 12500-16000             | 170-320              | 10500-13000             | 120-240              |
| R0.75           | M16.0                        | 0.02-0.04 | 12500-16500             | 225-450              | 12500-16000             | 170-320              | 10500-13000             | 120-240              |
| R1.0            | M8.0                         | 0.06-0.12 | 9500-12500              | 225-450              | 8900-11000              | 170-320              | 8000-10000              | 120-240              |
| R1.0            | M16.0                        | 0.04-0.08 | 9500-12500              | 225-450              | 8900-11000              | 170-320              | 8000-10000              | 120-240              |
| R1.0            | M20.0                        | 0.02-0.06 | 9500-12500              | 225-450              | 8900-11000              | 170-320              | 8000-10000              | 120-240              |
| R1.25           | M12.0                        | 0.08-0.15 | 8000-10500              | 225-450              | 7500-8300               | 170-320              | 6600-8400               | 120-240              |
| R1.25           | M20.0                        | 0.04-0.08 | 8000-10500              | 225-450              | 7500-8300               | 170-320              | 6000-8400               | 120-240              |
| R1.5            | M12.0                        | 0.09-0.18 | 6400-8500               | 225-450              | 6000-7600               | 170-320              | 5300-6600               | 120-240              |
| R1.5            | M20.0                        | 0.08-0.15 | 6400-8500               | 225-450              | 6000-7600               | 170-320              | 5300-6600               | 120-240              |
| R2.0            | M20.0                        | 0.12-0.24 | 4800-6400               | 225-450              | 4400-5700               | 170-320              | 4000-5000               | 120-240              |
| R2.0            | M30.0                        | 0.10-0.20 | 4800-6400               | 225-450              | 4400-5700               | 170-320              | 4000-5000               | 120-240              |



1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
  2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
  3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
  3. Use highly rigid and precise machine and holder.



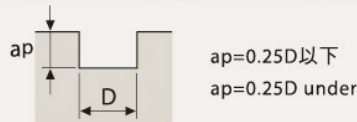
JCR2 / ACR2 二刃圓鼻刀

標準切削條件表

| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

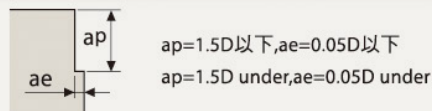
| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刀徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D1.0             | 16000                   | 64                   | 9500                    | 40                   | 8600                    | 38                   | 7600                    | 36                   | 3200                    | 13                   |
| D2.0             | 9500                    | 88                   | 5700                    | 56                   | 5100                    | 50                   | 4500                    | 44                   | 1900                    | 19                   |
| D3.0             | 7400                    | 120                  | 4500                    | 76                   | 4000                    | 68                   | 3600                    | 60                   | 1500                    | 25                   |
| D4.0             | 6400                    | 160                  | 3800                    | 96                   | 3400                    | 86                   | 3000                    | 80                   | 1270                    | 32                   |
| D5.0             | 5700                    | 200                  | 3400                    | 120                  | 3100                    | 116                  | 2700                    | 96                   | 1150                    | 40                   |
| D6.0             | 5300                    | 256                  | 3200                    | 152                  | 2900                    | 136                  | 2500                    | 120                  | 2000                    | 100                  |
| D8.0             | 4000                    | 256                  | 2400                    | 152                  | 2200                    | 136                  | 1900                    | 120                  | 1500                    | 100                  |
| D10.0            | 3200                    | 256                  | 1900                    | 152                  | 1700                    | 136                  | 1500                    | 120                  | 1200                    | 100                  |
| D12.0            | 2600                    | 250                  | 1600                    | 130                  | 1450                    | 120                  | 1300                    | 104                  | 1050                    | 85                   |

溝銑 Slot Milling



| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刀徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D1.0             | 16000                   | 80                   | 9500                    | 50                   | 8600                    | 48                   | 7600                    | 40                   | 3200                    | 16                   |
| D2.0             | 9500                    | 110                  | 5700                    | 70                   | 5100                    | 62                   | 4500                    | 55                   | 1900                    | 23                   |
| D3.0             | 7400                    | 150                  | 4500                    | 95                   | 4000                    | 85                   | 3600                    | 75                   | 1500                    | 31                   |
| D4.0             | 6400                    | 200                  | 3800                    | 120                  | 3400                    | 107                  | 3000                    | 100                  | 1270                    | 40                   |
| D5.0             | 5700                    | 250                  | 3400                    | 150                  | 3100                    | 137                  | 2700                    | 120                  | 1150                    | 51                   |
| D6.0             | 5300                    | 320                  | 3200                    | 190                  | 2900                    | 170                  | 2500                    | 150                  | 2000                    | 120                  |
| D8.0             | 4000                    | 326                  | 2400                    | 190                  | 2200                    | 170                  | 1900                    | 150                  | 1500                    | 120                  |
| D10.0            | 3200                    | 320                  | 1900                    | 190                  | 1700                    | 170                  | 1500                    | 150                  | 1200                    | 120                  |
| D12.0            | 2600                    | 310                  | 1600                    | 160                  | 1450                    | 145                  | 1300                    | 130                  | 1050                    | 105                  |

側銑 Side Milling



1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.



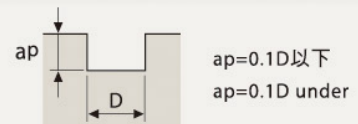
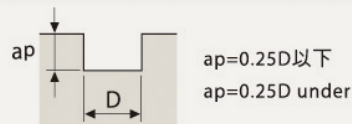
## JCR4 / ACR4 四刃圓鼻刀

### 標準切削條件表

| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, SS41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

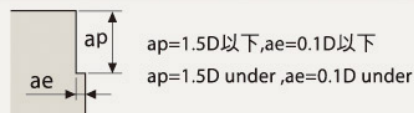
| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D6.0             | 6400                    | 570                  | 6400                    | 460                  | 4100                    | 370                  | 3200                    | 290                  | 1600                    | 145                  |
| D8.0             | 4800                    | 570                  | 4800                    | 460                  | 3100                    | 370                  | 2400                    | 290                  | 1200                    | 145                  |
| D10.0            | 3800                    | 570                  | 3800                    | 460                  | 2400                    | 370                  | 2000                    | 290                  | 1000                    | 145                  |
| D12.0            | 3200                    | 480                  | 3200                    | 380                  | 2100                    | 310                  | 1600                    | 240                  | 800                     | 120                  |

#### 溝銑 Slot Milling



| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D6.0             | 8000                    | 950                  | 6400                    | 760                  | 5100                    | 600                  | 4000                    | 490                  | 2000                    | 240                  |
| D8.0             | 6000                    | 950                  | 4800                    | 760                  | 3850                    | 600                  | 3000                    | 490                  | 1500                    | 240                  |
| D10.0            | 4800                    | 950                  | 3800                    | 760                  | 3000                    | 600                  | 2400                    | 490                  | 1200                    | 240                  |
| D12.0            | 4000                    | 800                  | 3200                    | 640                  | 2600                    | 500                  | 2000                    | 410                  | 1000                    | 200                  |

#### 側銑 Side Milling



1. 此切銷條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。

1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.

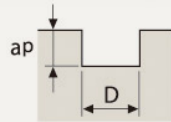
## JCRL4 / ACRL4 四刃長柄圓鼻刀

### 標準切削條件表

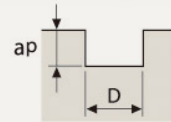
| 被切削材<br>Work<br>Material | 鐵材・碳素鋼・鑄鐵<br>合金鋼・工具鋼<br>模具鋼, S41, S45C, FC<br>FCD, SCr, SCM, SNCM,<br>SK, SKD, PDS, YK30 | 合金鋼・碳素鋼<br>模具鋼・熱處理鋼<br>SCr, SCM, SNC, SNCM<br>SKD, NAK101<br>PDS5, P20 | 合金鋼・工具鋼<br>不鏽鋼・模具鋼<br>熱處理鋼, SCr, SCM,<br>SNC, SNCM, SKD, NAK<br>P20S, FDAC, SUS | 熱處理鋼<br>鈦合金<br>Hardened Steels<br>Titanium Alloys | 熱處理鋼<br>鎳基合金<br>Hardened Steels<br>Nickel Alloys |
|--------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
|--------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------|--------------------------------------------------|

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D6.0             | 6400                    | 570                  | 6400                    | 460                  | 4100                    | 370                  | 3200                    | 290                  | 1600                    | 145                  |
| D8.0             | 4800                    | 570                  | 4800                    | 460                  | 3100                    | 370                  | 2400                    | 290                  | 1200                    | 145                  |
| D10.0            | 3800                    | 570                  | 3800                    | 460                  | 2400                    | 370                  | 2000                    | 290                  | 1000                    | 145                  |
| D12.0            | 3200                    | 480                  | 3200                    | 380                  | 2100                    | 310                  | 1600                    | 240                  | 800                     | 120                  |

#### 溝銑 Slot Milling



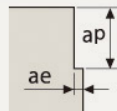
$a_p = 0.25D$  以下  
 $a_p = 0.25D$  under



$a_p = 0.1D$  以下  
 $a_p = 0.1D$  under

| 工件硬度<br>Hardness | ~HRC30                  |                      | HRC30-35                |                      | HRC35-40                |                      | HRC40-45                |                      | HRC50-55                |                      |
|------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|-------------------------|----------------------|
| 刃徑<br>Mill Dia.  | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min | 轉速<br>Rotation<br>R.P.M | 進給<br>Feed<br>mm/min |
| D6.0             | 8000                    | 950                  | 6400                    | 760                  | 5100                    | 600                  | 4000                    | 490                  | 2000                    | 240                  |
| D8.0             | 6000                    | 950                  | 4800                    | 760                  | 3850                    | 600                  | 3000                    | 490                  | 1500                    | 240                  |
| D10.0            | 4750                    | 950                  | 3800                    | 760                  | 3000                    | 600                  | 2400                    | 490                  | 1200                    | 240                  |
| D12.0            | 4000                    | 800                  | 3200                    | 640                  | 2600                    | 500                  | 2000                    | 410                  | 1000                    | 200                  |

#### 側銑 Side Milling



$a_p = 1.0D$  以下,  $a_e = 0.05D$  以下  
 $a_p = 1.0D$  under,  $a_e = 0.05D$  under

1. 此切削條件僅為一般加工參考，因加工機之廠牌不同，機型不同，機器剛性與主軸扭力值亦不同，故需視實際加工情況調整之。
2. 在切削中如果產生異常之震動或聲音時，請調降主軸轉速、進給速度與切削量至情況改善為止。
3. 請使用準確性與高剛性之機器與刀把。
1. The milling conditions shown above is just for general guide. When the machine is different, the rigidity and spindle torque is different as well. The milling conditions are always adjusted base on real machining status.
2. Adjust milling condition when unusual vibration and sound occur by cutting.
3. Use highly rigid and precise machine and holder.

## 鎢鋼銑刀柄短刃鑽頭(白刀) 頂角140°

h6



(m/m/元/支)

| 刃徑  | 溝長 | 全長 | 柄徑 | 單價  |
|-----|----|----|----|-----|
| D   | ℓ  | L  | d  | NT  |
| 1.0 | 6  | 26 | 3  | 200 |
| 1.1 | 7  | 28 | 3  | 200 |
| 1.2 | 8  | 30 | 3  | 200 |
| 1.3 | 8  | 30 | 3  | 200 |
| 1.4 | 9  | 32 | 3  | 200 |
| 1.5 | 9  | 32 | 3  | 200 |
| 1.6 | 10 | 34 | 3  | 200 |
| 1.7 | 10 | 34 | 3  | 200 |
| 1.8 | 11 | 36 | 3  | 200 |
| 1.9 | 11 | 36 | 3  | 200 |
| 2.0 | 12 | 38 | 3  | 240 |
| 2.1 | 12 | 38 | 3  | 240 |
| 2.2 | 13 | 50 | 3  | 240 |
| 2.3 | 13 | 50 | 3  | 240 |
| 2.4 | 14 | 50 | 3  | 240 |
| 2.5 | 14 | 50 | 3  | 240 |
| 2.6 | 14 | 50 | 3  | 240 |
| 2.7 | 16 | 50 | 3  | 250 |
| 2.8 | 16 | 50 | 3  | 250 |
| 2.9 | 16 | 50 | 3  | 250 |
| 3.0 | 16 | 50 | 3  | 220 |
| 3.1 | 18 | 50 | 4  | 300 |
| 3.2 | 18 | 50 | 4  | 300 |
| 3.3 | 18 | 50 | 4  | 300 |
| 3.4 | 20 | 50 | 4  | 300 |
| 3.5 | 20 | 50 | 4  | 300 |

| 刃徑  | 溝長 | 全長 | 柄徑 | 單價  |
|-----|----|----|----|-----|
| D   | ℓ  | L  | d  | NT  |
| 3.6 | 20 | 60 | 4  | 340 |
| 3.7 | 20 | 60 | 4  | 340 |
| 3.8 | 22 | 60 | 4  | 340 |
| 3.9 | 22 | 60 | 4  | 340 |
| 4.0 | 22 | 60 | 4  | 300 |
| 4.1 | 22 | 60 | 5  | 430 |
| 4.2 | 22 | 60 | 5  | 430 |
| 4.3 | 24 | 60 | 5  | 430 |
| 4.4 | 24 | 60 | 5  | 430 |
| 4.5 | 24 | 60 | 5  | 430 |
| 4.6 | 24 | 60 | 5  | 460 |
| 4.7 | 24 | 60 | 5  | 460 |
| 4.8 | 26 | 60 | 5  | 460 |
| 4.9 | 26 | 60 | 5  | 460 |
| 5.0 | 26 | 60 | 5  | 410 |
| 5.1 | 26 | 65 | 6  | 600 |
| 5.2 | 26 | 65 | 6  | 600 |
| 5.3 | 26 | 65 | 6  | 600 |
| 5.4 | 28 | 65 | 6  | 600 |
| 5.5 | 28 | 65 | 6  | 600 |
| 5.6 | 28 | 65 | 6  | 680 |
| 5.7 | 28 | 65 | 6  | 680 |
| 5.8 | 28 | 65 | 6  | 680 |
| 5.9 | 28 | 65 | 6  | 680 |
| 6.0 | 28 | 65 | 6  | 600 |

\*非標準品，另行報價(訂製品)



# 價目表

新泰鋁精密科技有限公司

STC Precision Technology Co., Ltd.

## 鎢鋼直柄短刃鑽頭 DIN (同柄徑)



1.0~6.0 120°  
6.1~13.0 140°



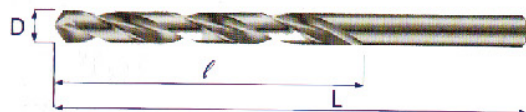
(m/m/元/支)

| 直徑  | 全長 | 溝長 | 單價  | 直徑  | 全長 | 溝長 | 單價   | 直徑   | 全長  | 溝長 | 單價   |
|-----|----|----|-----|-----|----|----|------|------|-----|----|------|
| D   | L  | ℓ  | NT  | D   | L  | ℓ  |      | D    | L   | ℓ  | NT   |
| 1.0 | 26 | 6  | 160 | 5.1 | 62 | 26 | 530  | 9.1  | 84  | 40 | 1500 |
| 1.1 | 28 | 7  | 180 | 5.2 | 62 | 26 |      | 9.2  | 84  | 40 |      |
| 1.2 | 30 | 8  |     | 5.3 | 62 | 26 |      | 9.3  | 84  | 40 |      |
| 1.3 | 30 | 8  |     | 5.4 | 66 | 28 |      | 9.4  | 84  | 40 |      |
| 1.4 | 32 | 9  |     | 5.5 | 66 | 28 |      | 9.5  | 84  | 40 |      |
| 1.5 | 32 | 9  |     | 5.6 | 66 | 28 | 600  | 9.6  | 89  | 43 | 1600 |
| 1.6 | 34 | 10 |     | 5.7 | 66 | 28 |      | 9.7  | 89  | 43 |      |
| 1.7 | 34 | 10 |     | 5.8 | 66 | 28 |      | 9.8  | 89  | 43 |      |
| 1.8 | 36 | 11 |     | 5.9 | 66 | 28 |      | 9.9  | 89  | 43 |      |
| 1.9 | 36 | 11 |     | 6.0 | 66 | 28 |      | 10.0 | 89  | 43 |      |
| 2.0 | 38 | 12 | 200 | 6.1 | 70 | 31 | 700  | 10.1 | 89  | 43 | 1700 |
| 2.1 | 38 | 12 |     | 6.2 | 70 | 31 |      | 10.2 | 89  | 43 |      |
| 2.2 | 40 | 13 |     | 6.3 | 70 | 31 |      | 10.3 | 89  | 43 |      |
| 2.3 | 40 | 13 |     | 6.4 | 70 | 31 |      | 10.4 | 89  | 43 |      |
| 2.4 | 43 | 14 |     | 6.5 | 70 | 31 |      | 10.5 | 89  | 43 |      |
| 2.5 | 43 | 14 |     | 6.6 | 70 | 31 | 780  | 10.6 | 89  | 43 | 1800 |
| 2.6 | 43 | 14 | 220 | 6.7 | 70 | 31 |      | 10.7 | 95  | 47 |      |
| 2.7 | 46 | 16 |     | 6.8 | 74 | 34 |      | 10.8 | 95  | 47 |      |
| 2.8 | 46 | 16 |     | 6.9 | 74 | 34 |      | 10.9 | 95  | 47 |      |
| 2.9 | 46 | 16 |     | 7.0 | 74 | 34 | 860  | 11.0 | 95  | 47 |      |
| 3.0 | 46 | 16 | 270 | 7.1 | 74 | 34 |      | 11.1 | 95  | 47 | 1900 |
| 3.1 | 49 | 18 |     | 7.2 | 74 | 34 |      | 11.2 | 95  | 47 |      |
| 3.2 | 49 | 18 |     | 7.3 | 74 | 34 |      | 11.3 | 95  | 47 |      |
| 3.3 | 49 | 18 |     | 7.4 | 74 | 34 |      | 11.4 | 95  | 47 |      |
| 3.4 | 52 | 20 |     | 7.5 | 74 | 34 |      | 11.5 | 95  | 47 |      |
| 3.5 | 52 | 20 |     | 7.6 | 79 | 37 | 1000 | 11.6 | 95  | 47 | 2100 |
| 3.6 | 52 | 20 | 300 | 7.7 | 79 | 37 |      | 11.7 | 95  | 47 |      |
| 3.7 | 52 | 20 |     | 7.8 | 79 | 37 |      | 11.8 | 95  | 47 |      |
| 3.8 | 55 | 22 |     | 7.9 | 79 | 37 |      | 11.9 | 102 | 51 |      |
| 3.9 | 55 | 22 |     | 8.0 | 79 | 37 |      | 12.0 | 102 | 51 |      |
| 4.0 | 55 | 22 | 380 | 8.1 | 79 | 37 | 1200 | 12.1 | 102 | 51 | 2300 |
| 4.1 | 55 | 22 |     | 8.2 | 79 | 37 |      | 12.2 | 102 | 51 |      |
| 4.2 | 55 | 22 |     | 8.3 | 79 | 37 |      | 12.3 | 102 | 51 |      |
| 4.3 | 58 | 24 |     | 8.4 | 79 | 37 |      | 12.4 | 102 | 51 |      |
| 4.4 | 58 | 24 |     | 8.5 | 79 | 37 |      | 12.5 | 102 | 51 |      |
| 4.5 | 58 | 24 |     | 8.6 | 84 | 40 | 1400 | 12.6 | 102 | 51 | 2400 |
| 4.6 | 58 | 24 | 410 | 8.7 | 84 | 40 |      | 12.7 | 102 | 51 |      |
| 4.7 | 58 | 24 |     | 8.8 | 84 | 40 |      | 12.8 | 102 | 51 |      |
| 4.8 | 62 | 26 |     | 8.9 | 84 | 40 |      | 12.9 | 102 | 51 |      |
| 4.9 | 62 | 26 |     | 9.0 | 84 | 40 |      | 13.0 | 102 | 51 |      |
| 5.0 | 62 | 26 |     |     |    |    |      |      |     |    |      |

\*非標準品，另行報價(訂製品)

## 鎢鋼直柄標準長鑽頭(同柄徑)

h6

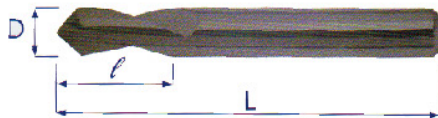


(m/m/元/支)

| 直徑  | 全長 | 溝長 | 單價  | 直徑  | 全長  | 溝長 | 單價   | 直徑   | 全長  | 溝長 | 單價   |
|-----|----|----|-----|-----|-----|----|------|------|-----|----|------|
| D   | L  | ℓ  | NT  | D   | L   | ℓ  |      | D    | L   | ℓ  | NT   |
| 1.0 | 34 | 12 | 220 | 5.1 | 86  | 52 | 840  | 9.1  | 125 | 75 | 2300 |
| 1.1 | 36 | 12 |     | 5.2 | 86  | 52 |      | 9.2  | 125 | 75 |      |
| 1.2 | 38 | 16 |     | 5.3 | 93  | 52 |      | 9.3  | 125 | 75 |      |
| 1.3 | 38 | 16 |     | 5.4 | 93  | 57 |      | 9.4  | 125 | 75 |      |
| 1.4 | 40 | 18 |     | 5.5 | 93  | 57 |      | 9.5  | 125 | 75 |      |
| 1.5 | 40 | 18 |     | 5.6 | 93  | 57 | 900  | 9.6  | 133 | 80 | 2500 |
| 1.6 | 43 | 20 | 240 | 5.7 | 93  | 57 |      | 9.7  | 133 | 80 |      |
| 1.7 | 43 | 20 |     | 5.8 | 93  | 57 |      | 9.8  | 133 | 80 |      |
| 1.8 | 46 | 22 |     | 5.9 | 93  | 57 |      | 9.9  | 133 | 80 |      |
| 1.9 | 46 | 22 |     | 6.0 | 93  | 57 |      | 10.0 | 133 | 80 |      |
| 2.0 | 49 | 24 |     | 6.1 | 101 | 63 | 1100 | 10.1 | 133 | 80 | 2900 |
| 2.1 | 49 | 24 | 300 | 6.2 | 101 | 63 |      | 10.2 | 133 | 80 |      |
| 2.2 | 53 | 27 |     | 6.3 | 101 | 63 |      | 10.3 | 133 | 80 |      |
| 2.3 | 53 | 27 |     | 6.4 | 101 | 63 |      | 10.4 | 133 | 80 |      |
| 2.4 | 57 | 30 |     | 6.5 | 101 | 63 |      | 10.5 | 133 | 80 |      |
| 2.5 | 57 | 30 |     | 6.6 | 101 | 63 | 1300 | 10.6 | 133 | 80 | 3100 |
| 2.6 | 57 | 30 | 360 | 6.7 | 101 | 63 |      | 10.7 | 142 | 80 |      |
| 2.7 | 61 | 33 |     | 6.8 | 101 | 69 |      | 10.8 | 142 | 80 |      |
| 2.8 | 61 | 33 |     | 6.9 | 109 | 69 |      | 10.9 | 142 | 80 |      |
| 2.9 | 61 | 33 |     | 7.0 | 109 | 69 |      | 11.0 | 142 | 80 |      |
| 3.0 | 61 | 33 |     | 7.1 | 109 | 69 | 1400 | 11.1 | 142 | 80 | 3300 |
| 3.1 | 65 | 36 | 440 | 7.2 | 109 | 69 |      | 11.2 | 142 | 80 |      |
| 3.2 | 65 | 36 |     | 7.3 | 109 | 69 |      | 11.3 | 142 | 80 |      |
| 3.3 | 65 | 36 |     | 7.4 | 109 | 69 |      | 11.4 | 142 | 80 |      |
| 3.4 | 70 | 39 |     | 7.5 | 109 | 69 |      | 11.5 | 142 | 80 |      |
| 3.5 | 70 | 39 |     | 7.6 | 117 | 75 | 1600 | 11.6 | 142 | 80 | 3500 |
| 3.6 | 70 | 39 | 500 | 7.7 | 117 | 75 |      | 11.7 | 142 | 80 |      |
| 3.7 | 70 | 39 |     | 7.8 | 117 | 75 |      | 11.8 | 142 | 80 |      |
| 3.8 | 75 | 43 |     | 7.9 | 117 | 75 |      | 11.9 | 151 | 80 |      |
| 3.9 | 75 | 43 |     | 8.0 | 117 | 75 |      | 12.0 | 151 | 80 |      |
| 4.0 | 75 | 43 |     | 8.1 | 117 | 75 | 1800 | 12.1 | 151 | 80 | 4000 |
| 4.1 | 75 | 43 | 600 | 8.2 | 117 | 75 |      | 12.2 | 151 | 80 |      |
| 4.2 | 75 | 43 |     | 8.3 | 117 | 75 |      | 12.3 | 151 | 80 |      |
| 4.3 | 80 | 47 |     | 8.4 | 117 | 75 |      | 12.4 | 151 | 80 |      |
| 4.4 | 80 | 47 |     | 8.5 | 117 | 75 |      | 12.5 | 151 | 80 |      |
| 4.5 | 80 | 47 |     | 8.6 | 125 | 75 | 2000 | 12.6 | 151 | 80 |      |
| 4.6 | 80 | 47 | 660 | 8.7 | 125 | 75 |      | 12.7 | 151 | 80 |      |
| 4.7 | 80 | 47 |     | 8.8 | 125 | 75 |      | 12.8 | 151 | 80 |      |
| 4.8 | 86 | 52 |     | 8.9 | 125 | 75 |      | 12.9 | 151 | 80 |      |
| 4.9 | 86 | 52 |     | 9.0 | 125 | 75 |      | 13.0 | 151 | 80 |      |
| 5.0 | 86 | 52 |     |     |     |    |      |      |     |    |      |

\*非標準品，另行報價(訂製品)

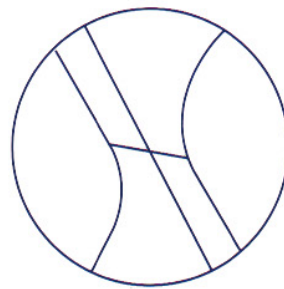
## 鎢鋼NC定位鑽



(m/m/元/支)

| 直徑 | 溝長  | 全長 | 單價   |
|----|-----|----|------|
| D  | $l$ | L  | NT   |
| 2  | 5   | 40 | 140  |
| 3  | 8   | 50 | 160  |
| 4  | 10  | 50 | 180  |
| 5  | 12  | 50 | 220  |
| 6  | 12  | 50 | 240  |
| 8  | 18  | 60 | 480  |
| 10 | 20  | 75 | 840  |
| 12 | 22  | 75 | 1040 |

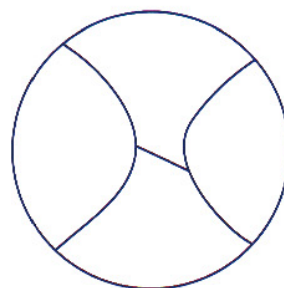
\*非標準品，另行報價(訂製品)



A 四面 60° / 90° / 120°

| 直徑 | 溝長  | 全長 | 單價   |
|----|-----|----|------|
| D  | $l$ | L  | NT   |
| 3  | 8   | 50 | 180  |
| 4  | 10  | 50 | 200  |
| 5  | 12  | 50 | 240  |
| 6  | 12  | 50 | 260  |
| 8  | 18  | 60 | 520  |
| 10 | 20  | 75 | 900  |
| 12 | 22  | 75 | 1100 |

\*非標準品，另行報價(訂製品)

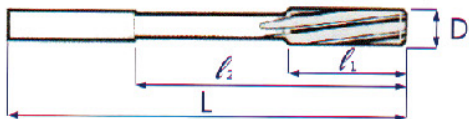


B 偏心 90°



## 全鋁鋼直柄機械紋刀(同柄徑)

H7

A-左旋右刃 7°  
直徑公差:+0.002~-+0.008

(m/m/元/支)

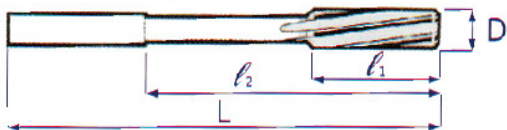
| 直徑  | 刃長 | 全長  | 有效長 | 刃數 | 單價   |
|-----|----|-----|-----|----|------|
| D   | L1 | L   | L2  | T  | NT   |
| 2.0 | 11 | 49  | 24  | 4  | 400  |
| 2.1 | 11 | 49  | 24  | 4  | 500  |
| 2.2 | 12 | 53  | 26  | 4  |      |
| 2.3 | 12 | 53  | 26  | 4  |      |
| 2.4 | 14 | 57  | 28  | 4  |      |
| 2.5 | 14 | 57  | 28  | 4  |      |
| 2.6 | 14 | 57  | 28  | 4  |      |
| 2.7 | 15 | 61  | 32  | 4  | 600  |
| 2.8 | 15 | 61  | 32  | 4  |      |
| 2.9 | 15 | 61  | 32  | 4  |      |
| 3.0 | 15 | 61  | 32  | 4  | 700  |
| 3.1 | 16 | 65  | 35  | 4  |      |
| 3.2 | 16 | 65  | 35  | 4  |      |
| 3.3 | 16 | 65  | 35  | 4  |      |
| 3.4 | 18 | 70  | 40  | 4  |      |
| 3.5 | 18 | 70  | 40  | 4  |      |
| 3.6 | 18 | 70  | 40  | 4  |      |
| 3.7 | 18 | 70  | 40  | 4  |      |
| 3.8 | 19 | 75  | 43  | 4  |      |
| 3.9 | 19 | 75  | 43  | 4  |      |
| 4.0 | 19 | 75  | 43  | 4  | 800  |
| 4.1 | 19 | 75  | 43  | 4  |      |
| 4.2 | 19 | 75  | 43  | 4  |      |
| 4.3 | 21 | 80  | 47  | 4  |      |
| 4.4 | 21 | 80  | 47  | 4  |      |
| 4.5 | 21 | 80  | 47  | 4  |      |
| 4.6 | 21 | 80  | 47  | 4  |      |
| 4.7 | 21 | 80  | 52  | 4  |      |
| 4.8 | 23 | 86  | 52  | 4  |      |
| 4.9 | 23 | 86  | 52  | 4  |      |
| 5.0 | 23 | 86  | 52  | 4  | 1000 |
| 5.1 | 23 | 86  | 52  | 4  |      |
| 5.2 | 23 | 86  | 52  | 4  |      |
| 5.3 | 23 | 86  | 52  | 4  |      |
| 5.4 | 26 | 93  | 57  | 4  |      |
| 5.5 | 26 | 93  | 57  | 4  |      |
| 5.6 | 26 | 93  | 57  | 4  |      |
| 5.7 | 26 | 93  | 57  | 4  |      |
| 5.8 | 26 | 93  | 57  | 4  |      |
| 5.9 | 26 | 93  | 57  | 4  |      |
| 6.0 | 26 | 93  | 57  | 6  | 1100 |
| 6.1 | 28 | 101 | 63  | 6  |      |

| 直徑   | 刃長 | 全長  | 有效長 | 刃數 | 單價   |
|------|----|-----|-----|----|------|
| D    | L1 | L   | L2  | T  | NT   |
| 6.2  | 28 | 101 | 63  | 6  | 1100 |
| 6.3  | 28 | 101 | 63  | 6  |      |
| 6.4  | 28 | 101 | 63  | 6  |      |
| 6.5  | 28 | 101 | 63  | 6  |      |
| 6.6  | 28 | 101 | 63  | 6  |      |
| 6.7  | 28 | 101 | 63  | 6  |      |
| 6.8  | 31 | 109 | 69  | 6  |      |
| 6.9  | 31 | 109 | 69  | 6  |      |
| 7.0  | 31 | 109 | 69  | 6  | 1200 |
| 7.1  | 31 | 109 | 69  | 6  | 1300 |
| 7.2  | 31 | 109 | 69  | 6  |      |
| 7.3  | 31 | 109 | 69  | 6  |      |
| 7.4  | 31 | 109 | 69  | 6  |      |
| 7.5  | 31 | 109 | 69  | 6  |      |
| 7.6  | 33 | 117 | 75  | 6  |      |
| 7.7  | 33 | 117 | 75  | 6  |      |
| 7.8  | 33 | 117 | 75  | 6  |      |
| 7.9  | 33 | 117 | 75  | 6  |      |
| 8.0  | 33 | 117 | 75  | 6  |      |
| 8.1  | 33 | 117 | 75  | 6  | 1700 |
| 8.2  | 33 | 117 | 75  | 6  |      |
| 8.3  | 33 | 117 | 75  | 6  |      |
| 8.4  | 33 | 117 | 75  | 6  |      |
| 8.5  | 33 | 117 | 75  | 6  |      |
| 8.6  | 36 | 125 | 80  | 6  |      |
| 8.7  | 36 | 125 | 80  | 6  |      |
| 8.8  | 36 | 125 | 80  | 6  |      |
| 8.9  | 36 | 125 | 80  | 6  |      |
| 9.0  | 36 | 125 | 80  | 6  |      |
| 9.1  | 36 | 125 | 80  | 6  | 2000 |
| 9.2  | 36 | 125 | 80  | 6  |      |
| 9.3  | 36 | 125 | 80  | 6  |      |
| 9.4  | 36 | 125 | 80  | 6  |      |
| 9.5  | 36 | 125 | 80  | 6  |      |
| 9.6  | 38 | 133 | 90  | 6  |      |
| 9.7  | 38 | 133 | 90  | 6  |      |
| 9.8  | 38 | 133 | 90  | 6  |      |
| 9.9  | 38 | 133 | 90  | 6  |      |
| 10.0 | 38 | 133 | 90  | 6  |      |
| 11.0 | 41 | 142 | 95  | 6  | 2200 |
| 12.0 | 44 | 151 | 105 | 6  | 2600 |
| 12.0 | 44 | 151 | 105 | 6  | 2800 |

\*非標準品，另行報價(訂製品)

## 全鎢鋼直柄機械紋刀(同柄徑)B加長型

H7

A-左旋右刃 7  
直徑公差: +0.002 ~ +0.008

(m/m/元/支)

| 直徑 | 刃長    | 全長  | 有效長   | 刃數 | 單價   |
|----|-------|-----|-------|----|------|
| D  | $l_1$ | L   | $l_2$ | T  | NT   |
| 3  | 15    | 100 | 32    | 4  | 1000 |
| 4  | 19    | 120 | 43    | 4  | 1200 |
| 5  | 23    | 132 | 52    | 4  | 1600 |
| 6  | 26    | 150 | 57    | 6  | 1700 |
| 7  | 31    | 150 | 69    | 6  | 2000 |
| 8  | 33    | 150 | 75    | 6  | 2400 |
| 9  | 36    | 180 | 80    | 6  | 3000 |
| 10 | 38    | 180 | 90    | 6  | 3400 |
| 14 | 44    | 151 | 105   | 7  | 3600 |
| 15 | 44    | 151 | 105   | 8  | 4400 |
| 16 | 44    | 151 | 105   | 9  | 4800 |





# STC TOOL

鎢鋼切削刀具 專業設計製造

**新 泰 鋁** 精密科技有限公司

STC Precision Technology Co., Ltd.

新北市泰山區泰林路二段352號

No.352, Tailin Road Sec2, New Taipei City, Taiwan.

TEL: 02-22978888 統編: 54847341

FAX: 02-22978877

E-mail: stc.tool1888@msa.hinet.net