

產品規格表 **P56-59**
Specification page

● P-TTA 2 Flutes Standard Cutting Conditions 標準切削

| WORK MATERIAL 被切削材 | Copper 銅 | | | Carbon Steels, Alloy Steels, S50C, SCM, 鑄鐵FC250等 AISI 1049, Cast iron 碳素鋼, 合金鋼~HRC30 | | | HRC30~45 Alloy Steels, Tool Steels, 調質鋼, SKD61, NAK等 Prehardened steels, AISI H13 合金鋼, 工具鋼 | | | Austenitic stainless steels SUS304, SUS316等 沃斯田鐵系列不鏽鋼 | | | Hardened steels SKD61, SKD11, NAK, STAVAX等 AISI H13 熱處理鋼HRC45~50 | | |
|-----------------------|--------------------------------------|-------------------------------|----------------------|---|-------------------------------|----------------------|--|-------------------------------|----------------------|---|-------------------------------|----------------------|--|-------------------------------|----------------------|
| Cutting Speed 切削速度 | 80~150m/min | | | 50~100m/min | | | 50~70m/min | | | 30~60m/min | | | 20~40m/min | | |
| Shank 柄徑(mm) | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | |
| | | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 |
| 4 | 12,000 | 1,000 | 330 | 7,500 | 600 | 480 | 5,200 | 400 | 320 | 3,100 | 300 | 180 | 2,400 | 75 | 60 |
| 6 | 8,000 | 1,000 | 330 | 5,000 | 600 | 480 | 3,500 | 400 | 320 | 2,100 | 300 | 180 | 1,600 | 75 | 60 |
| 8 | 6,000 | 1,000 | 330 | 4,000 | 520 | 410 | 2,800 | 350 | 280 | 1,600 | 260 | 150 | 1,200 | 65 | 50 |
| 10 | 4,800 | 1,000 | 330 | 3,200 | 450 | 360 | 2,200 | 300 | 240 | 1,300 | 230 | 130 | 1,000 | 65 | 50 |
| 12 | 4,000 | 1,000 | 330 | 2,700 | 410 | 320 | 1,900 | 270 | 210 | 1,100 | 210 | 120 | 800 | 65 | 50 |
| 16 | 3,000 | 1,000 | 330 | 2,000 | 240 | 190 | 1,400 | 210 | 160 | 840 | 160 | 100 | 600 | 60 | 45 |

| DEPTH OF CUT 加工深度 | $\leq 0.1D$ ($D \leq \phi 3$) $\leq 0.2D$ ($D > \phi 3$) | | $\leq 1.5D$ | $\leq 0.1D$ ($D < \phi 2$) $\leq 0.2D$ ($D \geq \phi 2$) | | $\leq 0.02D$ $\leq 0.05D$ ($\phi 0.5 \leq D \leq \phi 2$) $\leq 0.1D$ ($D > \phi 2$) |
|----------------------|---|----------------------|-------------|---|----------------------|--|
| | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 | |
| | | | | | | |

產品規格表 **P60-61**
Specification page

● P-LTTA 2 Flutes Standard Cutting Conditions 標準切削

| WORK MATERIAL 被切削材 | Carbon Steels, Alloy Steels, S50C, SCM, 鑄鐵FC250等 AISI 1049, Cast iron 碳素鋼, 合金鋼~HRC30 | | | HRC30~45 Alloy Steels, Tool Steels, 調質鋼, SKD61, NAK等 Prehardened steels, AISI H13 合金鋼, 工具鋼 | | | Austenitic stainless steels SUS304, SUS316等 沃斯田鐵系列不鏽鋼 | | | Hardened steels SKD61, SKD11, NAK, STAVAX等 AISI H13 熱處理鋼HRC45~50 | | |
|-----------------------|---|-------------------------------|----------------------|--|-------------------------------|----------------------|---|-------------------------------|----------------------|--|-------------------------------|----------------------|
| Cutting Speed 切削速度 | 30~50m/min | | | 30~40m/min | | | 20~30m/min | | | 15~25m/min | | |
| Shank 柄徑(mm) | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | | SPEED (min ⁻¹) 迴轉速 | Feed Rate (mm/min) 進給速度 | |
| | | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 |
| 4 | 3,400 | 80 | 60 | 2,700 | 65 | 45 | 2,100 | 50 | | 1,700 | 35 | 25 |
| | | | | | | | 1,600 | 30 | | | | |
| 6 | 2,500 | 120 | 60 | 2,000 | 100 | 50 | 1,500 | 75 | | 1,300 | 50 | 25 |
| | | | | | | | 1,100 | 30 | | | | |
| 8 | 1,900 | 130 | 60 | 1,500 | 100 | 50 | 1,200 | 80 | | 1,000 | 50 | 25 |
| | | | | | | | 900 | 30 | | | | |
| 10 | 1,600 | 130 | 60 | 1,300 | 100 | 50 | 950 | 75 | | 800 | 50 | 25 |
| | | | | | | | 710 | 30 | | | | |
| 12 | 1,300 | 120 | 60 | 1,100 | 100 | 50 | 800 | 75 | | 670 | 50 | 25 |
| | | | | | | | 600 | 30 | | | | |

| DEPTH OF CUT 加工深度 | $\leq 0.05D$ (Max 0.5mm) $\leq 2.5D$ | | $\leq 0.1D$ ($D < \phi 2$) $\leq 0.2D$ ($D \geq \phi 2$) (Max 3mm) | $\leq 0.02D$ (Max 0.3mm) $\leq 2D$ | | $\leq 0.05D$ (Max 0.5mm) |
|----------------------|--|----------------------|--|--|----------------------|-----------------------------|
| | Side Milling 側銑 | Slotting 溝銑 切削 | | Side Milling 側銑 | Slotting 溝銑 切削 | |
| | | | | | | |

Unit/單位: mm