

WD-1721 / 1731

高速濕式鑽孔加工

High Speed Wet Drilling

| 被削材 Work Material | 構造用鋼 Structural Steels SS4 1 | | 中碳鋼 Mild Steels S45C | | 合金鋼 Alloy Steels SCM | | 模具鋼 Mold Steels 調質鋼 Hardened Steels (28~40HRC) | | 高硬度鋼 Extra Hard Steels (40~52HRC) | | 球墨鑄鐵 Ductile Cast Iron FCD | | |
|----------------------|------------------------------------|-----|----------------------------|-----|-------------------------|-----|--|----------------------|---|---------------------|----------------------------------|---------------------|---------------|
| | 切削速度 Cutting Speed V m/min | 90 | 90 | 80 | 55 | 40 | 75 | 鑽頭外徑 Dia Of Drill | 回轉速 R.P.M. | 進給速度 Feed mm/min | 回轉速 R.P.M. | 進給速度 Feed mm/min | 回轉速 R.P.M. |
| 2 | 14000 | 560 | 14000 | 880 | 12800 | 780 | 8800 | 590 | 6400 | 340 | 12000 | 450 | |
| 3 | 9500 | 510 | 9500 | 830 | 8500 | 740 | 5800 | 530 | 4200 | 320 | 8000 | 420 | |
| 4 | 7000 | 480 | 7000 | 770 | 6400 | 700 | 4400 | 510 | 3200 | 310 | 6000 | 400 | |
| 5 | 5700 | 450 | 5700 | 740 | 5100 | 660 | 3500 | 480 | 2500 | 290 | 4800 | 370 | |
| 6 | 4800 | 430 | 4800 | 710 | 4200 | 620 | 2900 | 450 | 2100 | 270 | 4000 | 350 | |
| 7 | 4100 | 410 | 4100 | 680 | 3600 | 590 | 2500 | 430 | 1800 | 260 | 3400 | 340 | |
| 8 | 3500 | 390 | 3500 | 630 | 3200 | 580 | 2200 | 420 | 1600 | 260 | 3000 | 330 | |
| 9 | 3200 | 390 | 3200 | 630 | 2800 | 550 | 1950 | 410 | 1400 | 250 | 2700 | 320 | |
| 10 | 2800 | 370 | 2800 | 600 | 2500 | 540 | 1750 | 400 | 1250 | 240 | 2400 | 310 | |
| 11 | 2600 | 360 | 2600 | 590 | 2300 | 520 | 1600 | 380 | 1150 | 230 | 2200 | 300 | |
| 12 | 2400 | 360 | 2400 | 580 | 2100 | 510 | 1450 | 370 | 1050 | 230 | 2000 | 290 | |
| 13 | 2200 | 350 | 2200 | 560 | 2000 | 510 | 1350 | 360 | 1000 | 230 | 1800 | 280 | |

WD-1721 / 1731

乾式鑽孔加工

Dry Drilling

| 被削材 Work Material | 構造用鋼 Structural Steels SS4 1 | | 中碳鋼 Mild Steels S45C | | 合金鋼 Alloy Steels SCM | | 模具鋼 Mold Steels 調質鋼 Hardened Steels (28~40HRC) | | 高硬度鋼 Extra Hard Steels (40~52HRC) | | 球墨鑄鐵 Ductile Cast Iron FCD | | |
|----------------------|------------------------------------|-----|----------------------------|-----|-------------------------|-----|--|----------------------|---|---------------------|----------------------------------|---------------------|---------------|
| | 切削速度 Cutting Speed V m/min | 65 | 60 | 55 | 28 | 18 | 55 | 鑽頭外徑 Dia Of Drill | 回轉速 R.P.M. | 進給速度 Feed mm/min | 回轉速 R.P.M. | 進給速度 Feed mm/min | 回轉速 R.P.M. |
| 2 | 10000 | 340 | 9600 | 450 | 8800 | 400 | 4400 | 220 | 2800 | 110 | 880 | 350 | |
| 3 | 6900 | 310 | 6400 | 420 | 5800 | 380 | 3000 | 210 | 1900 | 110 | 5800 | 330 | |
| 4 | 5000 | 270 | 4800 | 390 | 4400 | 360 | 2200 | 200 | 1400 | 100 | 4400 | 320 | |
| 5 | 4000 | 260 | 3800 | 360 | 3500 | 330 | 1800 | 190 | 1200 | 100 | 3500 | 300 | |
| 6 | 3400 | 260 | 3200 | 350 | 2900 | 320 | 1500 | 180 | 950 | 90 | 2900 | 280 | |
| 7 | 3000 | 250 | 2700 | 340 | 2500 | 310 | 1250 | 170 | 820 | 90 | 2500 | 270 | |
| 8 | 2500 | 230 | 2400 | 320 | 2200 | 300 | 1100 | 160 | 700 | 85 | 2200 | 260 | |
| 9 | 2300 | 230 | 2100 | 320 | 1950 | 300 | 1000 | 160 | 640 | 85 | 1950 | 250 | |
| 10 | 2000 | 220 | 1900 | 310 | 1750 | 290 | 900 | 160 | 600 | 85 | 1750 | 240 | |
| 11 | 1850 | 220 | 1700 | 300 | 1600 | 280 | 800 | 150 | 520 | 80 | 1600 | 240 | |
| 12 | 1700 | 220 | 1600 | 290 | 1450 | 270 | 700 | 150 | 480 | 80 | 1450 | 230 | |
| 13 | 1600 | 210 | 1450 | 280 | 1350 | 260 | 680 | 140 | 440 | 80 | 1350 | 230 | |

- 工件及機械若有震動或異聲時，請視情況降低切削條件。
- 乾式切削請用空氣冷卻及排屑並避免被高溫切屑燙傷。
- In case vibration or abnormal sound occurs on workpiece or machine, change machining conditions.
- When performing dry drilling, apply air for cooling and chip removing, care should be taken to avoid burned by hot chips.