

NHR-2

切削参数参考表 Recommended Milling Conditions

| 加工材料 Work Material | | 碳素钢·合金钢·调质钢 Carbon Steels·Alloy Steels·Prehard- ened Steels S50C·SCM·SKD·SUS·HPM·NAK | | 铝合金 Aluminum | | 铜合金 Copper | | 树脂 Plastics | |
|-----------------------|---------------------|---|--------------|-----------------------|--------------|-----------------------|--------------|-----------------------|--------------|
| 切削速度 Cutting Speed | | 30~50m/min | | 100~200m/min | | 50~150m/min | | 50~80m/min | |
| 刃径 Dia. | 切深量 Depth of Cut | 主轴转速 Spindle Speed | 进给速度 Feed | 主轴转速 Spindle Speed | 进给速度 Feed | 主轴转速 Spindle Speed | 进给速度 Feed | 主轴转速 Spindle Speed | 进给速度 Feed |
| | mm | min ⁻¹ | mm/min | min ⁻¹ | mm/min | min ⁻¹ | mm/min | min ⁻¹ | mm/min |
| 0.5 | 0.003~0.05 | 19,100~31,800 | 200~500 | 50,000~ | 200~1,000 | 31,800~ | 200~1,000 | 31,800~ | 200~400 |
| 0.6 | 0.006~0.06 | 15,900~26,500 | 200~500 | 50,000~ | 200~1,250 | 26,500~ | 200~1,000 | 26,500~42,500 | 200~400 |
| 0.7 | 0.01~0.07 | 13,600~22,700 | 200~500 | 45,500~ | 200~1,250 | 22,700~ | 200~1,000 | 22,700~36,400 | 200~400 |
| 0.8 | 0.01~0.06 | 11,900~19,900 | 200~500 | 39,800~ | 200~1,500 | 19,900~ | 200~1,250 | 19,900~31,800 | 200~400 |
| 0.9 | 0.009~0.03 | 10,600~17,700 | 200~500 | 35,400~ | 200~2,000 | 17,700~ | 200~1,500 | 17,700~28,300 | 200~400 |
| 1 | 0.01~0.06 | 9,600~15,900 | 200~650 | 31,800~ | 200~2,600 | 15,900~47,800 | 200~1,950 | 15,900~25,500 | 200~400 |
| 1.2 | 0.016~0.12 | 8,000~13,300 | 200~550 | 26,500~ | 200~2,200 | 13,300~39,800 | 200~1,650 | 13,300~21,200 | 200~400 |
| 1.4 | 0.012~0.15 | 6,800~11,400 | 200~450 | 22,700~45,500 | 200~1,800 | 11,400~34,100 | 200~1,350 | 11,400~18,200 | 200~400 |
| 1.5 | 0.008~0.17 | 6,400~10,600 | 200~450 | 21,200~42,500 | 200~1,800 | 10,600~31,800 | 200~1,350 | 10,600~17,000 | 200~400 |
| 1.6 | 0.012~0.2 | 6,000~10,000 | 200~450 | 19,900~39,800 | 200~1,800 | 10,000~29,900 | 200~1,350 | 10,000~15,900 | 200~400 |
| 1.8 | 0.02~0.22 | 5,300~ 8,800 | 200~350 | 17,700~35,400 | 200~1,400 | 8,800~26,500 | 200~1,050 | 8,800~14,200 | 200~400 |
| 2 | 0.03~0.25 | 4,800~ 8,000 | 200~350 | 15,900~31,800 | 200~1,400 | 8,000~23,900 | 200~1,050 | 8,000~12,700 | 200~400 |
| 2.5 | 0.08~0.25 | 3,800~ 6,400 | 150~250 | 12,700~25,500 | 150~1,000 | 6,400~19,100 | 150~ 750 | 6,400~10,200 | 150~300 |
| 3 | 0.09~0.25 | 3,200~ 5,300 | 130~250 | 10,600~21,200 | 130~1,000 | 5,300~15,900 | 130~ 750 | 5,300~ 8,500 | 130~260 |
| 3.5 | 0.09~0.25 | 2,700~ 4,500 | 110~220 | 9,100~18,200 | 110~ 900 | 4,500~13,600 | 110~ 650 | 4,500~ 7,300 | 110~220 |
| 4 | 0.1~0.25 | 2,400~ 4,000 | 100~200 | 8,000~15,900 | 100~ 800 | 4,000~11,900 | 100~ 600 | 4,000~ 6,400 | 100~200 |
| 5 | 0.18~0.25 | 1,900~ 3,200 | 80~200 | 6,400~12,700 | 80~ 800 | 3,200~ 9,600 | 80~ 600 | 3,200~ 5,100 | 80~160 |
| 备注 Notes | | ※请根据刀具的有效长调整切深量和主轴转速及进给速度。 ※请使用发烟性低的切削油。 ※建议采用来回切削加工方式。 ※Adjust depth of cut, spindle speed and feed according to effective length. ※Use cutting fluid with smoke retardant. ※Recommend reciprocating cutting. | | | | | | | |

CBN铣刀
PCD·单晶金刚石
涂层
平底铣刀
长颈平底铣刀
球头铣刀
长颈球头铣刀
圆鼻铣刀
长颈圆鼻铣刀
形型铣刀
锥形球头铣刀
锥形圆鼻铣刀
钻头
螺纹铣刀
倒角刀