

MRT425

切削参数参考表 Recommended Milling Conditions

加工材料 Work Material		碳素钢 Carbon Steels S50C			合金钢·调质钢 Alloy Steels·Prehardened Steels SKS·SKD·HPM·NAK (~40HRC)			淬火钢 Hardened Steels SKD61 (45~52HRC)		
切削速度 Cutting Speed		10~80m/min ($\phi 0.2\sim\phi 0.5$) 25~100m/min ($\phi 0.6\sim\phi 0.8$) 40~70m/min ($\phi 1\sim\phi 3$)			10~80m/min ($\phi 0.2\sim\phi 0.5$) 25~100m/min ($\phi 0.6\sim\phi 0.8$) 35~65m/min ($\phi 1\sim\phi 3$)			10~65m/min ($\phi 0.2\sim\phi 0.4$) 25~50m/min ($\phi 0.5\sim\phi 0.8$) 25~40m/min ($\phi 1\sim\phi 3$)		
前端刀径 Dia.	主轴转速 Spindle Speed	进给速度 Feed	切深量 Depth of Cut	主轴转速 Spindle Speed	进给速度 Feed	切深量 Depth of Cut	主轴转速 Spindle Speed	进给速度 Feed	切深量 Depth of Cut	
	min ⁻¹	mm/min	mm	min ⁻¹	mm/min	mm	min ⁻¹	mm/min	mm	
0.2	20,000~50,000	300~800	0.001~0.002	20,000~50,000	250~700	0.001~0.002	20,000~50,000	200~400	0.001~0.002	
0.3	20,000~50,000	300~800	0.002~0.003	20,000~50,000	250~700	0.002~0.003	20,000~50,000	200~400	0.002~0.003	
0.4	20,000~50,000	300~800	0.002~0.004	20,000~50,000	250~700	0.002~0.004	20,000~50,000	200~400	0.002~0.004	
0.5	20,000~50,000	300~800	0.01~0.025	20,000~50,000	250~700	0.01~0.025	15,000~30,000	200~400	0.005~0.01	
0.6	15,000~40,000	350~900	0.012~0.03	15,000~40,000	300~700	0.012~0.03	15,000~30,000	200~400	0.006~0.012	
0.7	15,000~40,000	350~900	0.014~0.035	15,000~40,000	300~700	0.014~0.035	10,000~20,000	200~400	0.007~0.014	
0.8	15,000~40,000	350~900	0.016~0.04	15,000~40,000	300~700	0.016~0.04	10,000~20,000	200~400	0.008~0.016	
1	14,000~20,000	500~1,000	0.02~0.05	12,000~20,000	400~700	0.02~0.05	8,000~11,000	200~400	0.01~0.02	
1.2	12,000~17,000	500~1,000	0.024~0.06	10,000~16,000	400~700	0.024~0.06	7,000~9,500	200~400	0.012~0.024	
1.3	10,000~16,000	500~1,000	0.026~0.065	9,000~15,000	400~700	0.026~0.065	6,500~8,500	200~400	0.013~0.026	
1.4	9,000~15,000	500~1,000	0.028~0.07	8,000~14,000	400~700	0.028~0.07	6,000~8,000	200~400	0.014~0.028	
1.5	8,000~14,000	500~1,000	0.03~0.075	7,000~13,000	400~700	0.03~0.075	5,500~7,500	200~400	0.015~0.03	
1.6	7,000~13,000	500~1,000	0.032~0.08	6,000~12,000	400~700	0.032~0.08	5,000~7,000	200~400	0.016~0.032	
1.8	6,500~12,000	500~1,000	0.036~0.09	5,000~11,000	400~700	0.036~0.09	4,500~6,000	200~400	0.018~0.036	
2	6,500~11,000	500~1,000	0.04~0.1	5,000~10,000	400~700	0.04~0.1	4,000~5,500	200~400	0.02~0.04	
2.5	6,000~9,000	500~1,000	0.05~0.125	4,000~8,000	400~700	0.05~0.125	3,500~4,500	200~400	0.025~0.05	
3	5,000~7,000	500~1,000	0.06~0.15	4,000~6,500	400~700	0.06~0.15	3,000~4,000	200~400	0.03~0.06	
备注 Notes		※ 设定切削条件时, 各种尺寸刃长较长类型的主轴转速、进给速度和切深量必须设为上述切削参数表范围内的较低值。 ※ 在进行R角加工时, 进给速度须降低50%。 ※ 请使用发烟性低的切削油。 ※ 建议采用来回切削加工方式。 ※ When length of cut is long, reduce the conditions listed above. ※ When cutting at the corner, reduce the feed by 50% from the above values. ※ Use cutting fluid with smoke retardant. ※ Recommend reciprocating cutting.								

- CBN铣刀
Cubic Boron Nitride
- PCD·涂层
PCD·Coating
- 钻石铣刀
Diamond
- 涂层
Coating
- 平底铣刀
Square
- 涂层
Coating
- 长颈平底铣刀
Long Neck Square
- 无涂层
Non-Coating
- 球头铣刀
Ball
- 涂层
Coating
- 长颈球头铣刀
Long Neck Ball
- 无涂层
Non-Coating
- 圆鼻铣刀
Radius
- 涂层
Coating
- 长颈圆鼻铣刀
Long Neck Radius
- 无涂层
Non-Coating
- 锥形铣刀
Taper
- 涂层
Coating
- 锥形球头铣刀
Taper Ball
- 无涂层
Non-Coating
- 锥形圆鼻铣刀
Taper Radius
- 无涂层
Non-Coating
- 钻头
Drilling
- 螺纹铣刀
Thread milling
- 倒角刀
Chamfering