

切削参数参考表

Recommended Milling Conditions

加工材料 Work Material			铝合金 Aluminium Alloy A2017 · A5052 · A7075							
			一般参数 Normal Speed				高速参数 High Speed			
刀具伸出量 Tool Overhung			L / D ≥ 10				L / D < 10			
			(R)球头半径 Radius	刃长 Length of Cut	颈长 Under neck Length	主轴转速 Spindle Speed	进给速度 Feed	切深量 Depth of Cut		主轴转速 Spindle Speed
min ⁻¹	mm/min	ap mm				ae mm	min ⁻¹	mm/min	ap mm	ae mm
0.3	0.45	3	20,000	1,000	0.1	0.2	40,000	2,000	0.1	0.2
0.4	0.6	4	20,000	1,000	0.1	0.2	40,000	2,000	0.1	0.2
0.5	2	—	20,000	2,000	0.3	0.3	40,000	4,000	0.3	0.3
	0.75	5	20,000	1,500	0.3	0.3	30,000	3,000	0.3	0.3
	0.75	10	10,000	1,000	0.2	0.2	20,000	2,000	0.2	0.2
0.75	3	—	20,000	2,000	0.3	0.5	40,000	4,000	0.3	0.5
	1.1	7.5	16,000	1,600	0.3	0.5	30,000	3,000	0.3	0.5
	1.1	15	10,000	1,000	0.2	0.3	20,000	2,000	0.2	0.3
1	4	—	20,000	2,000	0.5	0.5	30,000	4,000	0.5	0.5
	1.5	10	15,000	1,500	0.3	0.5	20,000	3,000	0.3	0.5
	1.5	20	12,000	1,200	0.2	0.5	15,000	2,000	0.2	0.5
1.5	6	—	18,000	2,000	0.6	1	25,000	4,000	0.6	1
	2.5	15	15,000	1,600	0.6	1	20,000	3,000	0.6	1
	2.5	30	12,000	1,200	0.3	1	15,000	2,000	0.3	1
2	8	—	14,000	2,000	0.5	1.5	20,000	4,000	0.5	1.5
	3	20	12,000	1,500	0.5	1.5	16,000	3,000	0.5	1.5
	3	40	8,000	1,000	0.3	1.5	12,000	2,000	0.3	1.5
2.5	10	—	12,000	3,000	0.8	1.8	20,000	5,000	0.8	1.8
	3.5	25	8,000	2,000	0.8	1.8	15,000	3,000	0.8	1.8
	3.5	50	5,000	1,500	0.5	1.8	10,000	2,000	0.5	1.8
3	12	—	12,000	3,000	1	2	20,000	5,000	1	2
	6	30	8,000	2,000	1	2	15,000	4,000	1	2
	6	60	5,000	1,200	0.6	2	10,000	2,000	0.6	2
4	16	—	10,000	2,000	1	2	15,000	3,000	1	2
5	20	—	8,000	2,000	2	3	12,000	3,000	2	3
6	24	—	6,000	2,000	3	4	10,000	3,000	3	4

备注
Notes

- ※1 切深量的ap表示轴向切深量，ae表示步距量。
- ※2 请以相同的比率调整主轴转速和进给速度。
(机床主轴转速使用20,000转以上时，请进行相同的调整。)
- ※3 请使用刚性好、精度高的机床和夹具。
- ※4 因工件、机床或铣刀刀柄而导致出现振动或异响时，请变更切削参数。
- ※5 建议使用水溶性切削方式。
- ※1 Depth of Cut: ap=Axial Depth of Cut / ae=Radial Depth of Cut.
- ※2 Adjust both spindle speed and feed at the same rate.
(When using spindle speed 20,000 or more, the same adjustment is required.)
- ※3 Use a rigid and precise machine and chuck holder.
- ※4 Adjust milling conditions when vibration and abnormal sounds occur according to the rigidity of the machine and the chuck holder, or work clamping condition.
- ※5 Water-soluble fluid is recommended.

全刃长

Full Cutting Length

球头

长颈

Long Neck

涂层

Coating

Ball

N 铝合金
Aluminium Alloy

N 铜合金
Copper

O 树脂
Resin

铝合金加工
Aluminium Milling