

DRB230

切削条件参数参考表 Recommended Milling Conditions

加工材料 Work Material			铜 Copper				钨铜 Copper Tungsten (W70% - Cu30%)			
(R) 球头半径 Radius	有效长 Effective Length	L(有效长)/ D(刀径) L/D	切深量 Depth of Cut		进给速度 Feed	主轴转速 Spindle Speed	切深量 Depth of Cut		进给速度 Feed	主轴转速 Spindle Speed
			ap mm	ae mm	mm/min	min ⁻¹	ap mm	ae mm	mm/min	min ⁻¹
0.05	0.3	3	0.01	0.01	200	40,000	0.008	0.008	150	30,000
	0.5	5	0.007	0.007	150	40,000	0.005	0.005	100	30,000
0.1	0.5	2.5	0.025	0.05	500	40,000	0.02	0.04	350	30,000
	1	5	0.02	0.04	400	40,000	0.015	0.03	250	30,000
0.15	1.5	7.5	0.015	0.03	300	40,000	0.008	0.02	150	30,000
	1	3.3	0.03	0.07	700	40,000	0.03	0.07	500	30,000
0.2	1.5	5	0.025	0.05	500	40,000	0.02	0.05	300	30,000
	2	6.7	0.015	0.03	400	40,000	0.01	0.02	200	30,000
0.25	1	2.5	0.05	0.1	1000	40,000	0.04	0.08	700	30,000
	2	5	0.035	0.06	600	40,000	0.02	0.05	350	30,000
	3	7.5	0.02	0.04	400	30,000	0.01	0.03	200	25,000
	4	10	0.008	0.015	250	25,000	0.005	0.01	100	18,000
0.3	2	4	0.08	0.15	800	40,000	0.08	0.15	500	30,000
	3	6	0.06	0.1	600	35,000	0.06	0.08	400	27,000
	4	8	0.04	0.08	400	30,000	0.025	0.05	200	22,000
	5	10	0.02	0.04	300	25,000	0.01	0.02	150	18,000
0.4	2	3.3	0.12	0.2	1,600	40,000	0.12	0.2	1,200	30,000
	3	5	0.1	0.14	1,000	40,000	0.08	0.1	700	30,000
	4	6.7	0.07	0.1	700	30,000	0.04	0.06	400	25,000
	5	8.3	0.05	0.08	600	27,000	0.02	0.04	300	22,000
0.5	6	10	0.04	0.06	500	25,000	0.01	0.03	200	20,000
	3	3.8	0.15	0.3	2,000	40,000	0.15	0.3	1,400	30,000
	4	5	0.12	0.2	1,600	35,000	0.1	0.16	1,000	27,000
	6	7.5	0.08	0.15	1,000	30,000	0.05	0.1	500	20,000
0.75	8	10	0.05	0.06	700	22,000	0.02	0.025	300	16,000
	3	3	0.25	0.4	2,800	40,000	0.25	0.4	2,000	30,000
	4	4	0.2	0.4	2,400	40,000	0.2	0.4	1,600	30,000
	5	5	0.16	0.3	2,000	35,000	0.12	0.25	1,400	27,000
	6	6	0.14	0.3	1,600	30,000	0.1	0.25	1,000	25,000
	8	8	0.12	0.2	1,000	25,000	0.06	0.1	500	18,000
1	10	10	0.08	0.15	800	20,000	0.03	0.05	300	16,000
	12	12	0.06	0.1	600	16,000	0.015	0.04	200	12,000
	6	4	0.3	0.6	2,400	30,000	0.3	0.6	1,800	25,000
	12	8	0.15	0.3	1,000	16,000	0.1	0.2	500	12,000
	18	12	0.08	0.12	700	10,000	0.02	0.06	200	8,000
	4	2	0.45	0.8	4,000	30,000	0.45	0.8	2,400	22,000
	6	3	0.45	0.8	3,000	27,000	0.45	0.8	1,800	20,000
1.5	8	4	0.4	0.8	2,400	25,000	0.4	0.8	1,600	18,000
	10	5	0.3	0.6	2,000	22,000	0.25	0.5	1,400	16,000
	12	6	0.3	0.6	1,400	16,000	0.25	0.5	900	12,000
	16	8	0.25	0.5	1,000	12,000	0.12	0.25	500	9,000
	20	10	0.15	0.3	800	10,000	0.06	0.1	350	8,000
	25	12.5	0.08	0.15	600	8,000	0.03	0.05	200	6,000
	10	3.3	0.7	1.5	3,400	20,000	0.6	1.2	2,400	16,000
2	15	5	0.6	1	3,000	18,000	0.6	1.2	2,000	14,000
	20	6.7	0.5	0.8	2,400	16,000	0.4	0.6	1,400	12,000
	25	8.3	0.4	0.6	1,800	12,000	0.2	0.3	900	10,000
	30	10	0.2	0.4	1,200	8,000	0.08	0.15	500	6,000
	10	2.5	1	1.6	4,000	16,000	0.8	1.6	2,800	12,000
3	15	3.8	0.8	1.6	3,400	16,000	0.8	1.6	2,400	12,000
	20	5	0.8	1.6	3,000	14,000	0.8	1.6	2,000	10,000
	25	6.3	0.6	1.2	3,000	14,000	0.5	1	2,000	10,000
	30	7.5	0.5	1	2,400	12,000	0.3	0.5	1,200	7,000
	40	10	0.4	0.8	1,200	8,000	0.15	0.3	500	5,000
3	20	3.3	1	2	3,600	12,000	1	2	2,400	9,000
	30	5	0.8	1.6	3,000	10,000	0.4	0.8	1,800	7,000
	50	8.3	0.5	1	1,800	6,000	0.25	0.5	800	4,000

备注
Notes

※ 上方切削参数表仅为参考值。请根据实际的加工形状及使用设备调整切削条件。
 ※ 切深量的 ap 表示轴向切入量，ae 表示步距。
 ※ 发生振刀时，请以相同的比率降低主轴转速和进给速度。
 此外，主轴转速过低时，也以相同的比率降低。
 ※ 建议使用油冷冷却方式。
 ※ These recommended cutting conditions indicate just reference. It should be adjusted according to milling shape and machine type.
 ※ Depth of Cut : ap=Axial Depth of Cut / ae=Radial Depth of Cut.
 ※ Reduce both spindle speed and feed at same rate for chattering and also for insufficient spindle speed of a machine.
 ※ Water-insoluble cutting fluid is recommended.