



APRB (High Speed Milling Condition)



Danger of fire by spark incidence or heat caused by tool breakage can happen during processing.
Confirm fire prevention countermeasure beforehand necessarily before use.

Work Material	PREHARDENED STEELS NAK			HARDENED STEELS SKD61, STAVAX			COPPER ALLOYS		
Hardness (HRc)	HRc30 ~ 45			HRc45 ~ 55					
Radius of Ball Nose	Depth of Cut	SPEED (min ⁻¹)	FEED (mm/min)	Depth of Cut Ad(mm)	SPEED (min ⁻¹)	FEED (mm/min)	Depth of Cut	SPEED (min ⁻¹)	FEED (mm/min)
R0.25	0.006~0.010	20,000~40,000	300~600	0.003~0.010	20,000~40,000	200~400	0.010~0.020	20,000~40,000	300~600
R0.3	0.010~0.030	20,000~40,000	600~1,000	0.003~0.030	20,000~40,000	400~800	0.020~0.040	20,000~40,000	600~1,000
R0.4	0.005~0.050	17,000~40,000	400~1,200	0.006~0.030	20,000~40,000	250~1,000	0.010~0.030	17,000~40,000	400~1,200
R0.5	0.010~0.050	15,000~38,000	400~1,400	0.010~0.030	15,000~38,000	300~1,200	0.050~0.100	15,000~40,000	800~3,000
R0.6	0.030~0.050	15,000~30,000	500~1,000	0.020~0.030	15,000~30,000	400~800	0.050~0.100	15,000~30,000	1,000~1,400
R0.75	0.030~0.050	12,000~30,000	400~1,900	0.030~0.050	12,000~30,000	300~1,400	0.050~0.100	12,000~30,000	1,000~3,000
R1.0	0.050~0.100	8,000~20,000	600~2,200	0.050~0.100	8,000~20,000	500~1,700	0.050~0.300	12,000~20,000	1,000~3,000
R1.5	0.050~0.100	12,000~20,000	1,000~2,600	0.050~0.100	12,000~20,000	1,000~2,100	0.100~0.300	12,000~20,000	1,600~3,500
R2.0	0.050~0.100	12,000~20,000	1,200~2,700	0.050~0.100	12,000~20,000	1,000~2,200	0.100~0.300	12,000~20,000	1,800~4,000
DEPTH OF CUT									

1. Use a rigid and precise machine and holder.
2. Adjust milling condition when corner processing.
3. The above condition should be adjusted according to the machining shape and machine type.
4. For milling steels, air blow or MQL(Oil Mist) are recommended. When using cutting fluids, use cutting fluid with smoke retardant.
(For milling copper, water soluble fluids are recommended.)