MILLING Solid Carbide End Mills

Cutting parameters for AL series end mills

Workpiece material	Aluminum alloy		Silicon aluminum alloy Si≤10%	
Cutting speed	250m/min		200m/min	
Diameter (mm)	Rotating speed (min ⁻¹)	Feed speed (mm/min)	Rotating speed (min ⁻¹)	Feed speed (mm/min)
6	13000	3000	10600	1900
8	10000	3000	8000	1900
10	8000	2900	6500	1850
12	6600	2700	5300	1700
14	5700	2600	4600	1650
16	5000	2550	4000	1600
18	4400	2500	3500	1550
20	4000	2400	3200	1500
Maximum cutting depth	a _e =0.25D a _e =1D a _p =1.5D			

- 1. The above table shows the reference value of side milling. The feed speed in slot milling is 70% of the reference value stated in the table, and feed rate 50%.
- 2.Please select high rigidity and precision machine and tool holder. Vibration and abnormal noise may be generated if the machine rigidity and workpiece fixture stability is low. Please reduce the rotating speed and feed speed stated above correspondingly.
- 3.It is possible to increase the rotating speed and feed speed correspondingly if the cutting depth is low.
- 4. Please use water-soluble cutting liquid.
- 5. Down milling is recommended in the case of side milling.
- 6. Make overhang of tool as short as possible in conditions of non-interference.