

## RECOMMENDED CUTTING CONDITIONS

### Shoulder milling

Work material		Graphite	
Dia. (mm)	Neck length (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)
1	6	30000	1300
	8	25000	1000
	10	22000	700
1.5	10	25000	1200
	16	18000	800
2	10	22000	1500
	16	19000	1100
	20	16000	800
3	16	21000	1900
	20	18000	1500
	30	14000	1000
4	20	18000	2400
	40	13000	1500
6	30	14000	3200
8	30	10500	2900
10	30	8700	2600
12	30	7200	2200
Depth of cut		<p> <math>\leq 0.05D</math> (<math>D &lt; \phi 4</math>)  <math>\leq 0.1D</math> (<math>\phi 4 \leq D</math>)  <math>\leq 1D</math> </p> <p>D: Dia.</p>	

### Slotting

Work material		Graphite		
Dia. (mm)	Neck length (mm)	Revolution (min <sup>-1</sup> )	Feed rate (mm/min)	Depth of cut ap (mm)
1	6	30000	1000	0.1
	8	25000	700	0.08
	10	22000	500	0.06
1.5	10	25000	1100	0.14
	16	18000	600	0.1
2	10	22000	1200	0.2
	16	19000	800	0.16
	20	16000	600	0.12
3	16	21000	1400	0.3
	20	18000	1100	0.25
	30	14000	700	0.2
4	20	18000	1800	0.5
	40	13000	900	0.4
6	30	14000	2300	1.2
8	30	10500	2000	2
10	30	8700	1900	3
12	30	7200	1700	4
Depth of cut		<p>D: Dia.</p>		

- 1) When high machining accuracy is needed, or the workpiece becomes chipped, we recommend lowering the feed rate.
- 2) Use a milling machine dedicated for graphite.
- 3) If the rigidity of the machine or the work materials installation is very low, or chattering and noise are generated, reduce the revolution and feed rate proportionately.