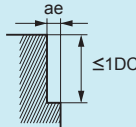


RECOMMENDED CUTTING CONDITIONS

Shoulder milling

(inch)

Work Material	Carbon Steel, Alloy Steel (≤280HB) Mild Steel			Carbon Steel, Alloy Steel (>280HB) Alloy Tool Steel Pre-hardened Steel			Austenitic Stainless Steels Titanium Alloys			Hardened Steel (40-55HRC)			
	DC	n (min ⁻¹)	vf (IPM)	ae	n (min ⁻¹)	vf (IPM)	ae	n (min ⁻¹)	vf (IPM)	ae	n (min ⁻¹)	vf (IPM)	ae
	1/32	30000	53.1	.006	30000	53.1	.006	28000	49.6	.006	20000	35.4	.002
	1/16	30000	70.9	.012	15000	35.4	.012	14000	33.1	.012	10000	23.6	.003
	3/32	13400	31.7	.019	10000	23.6	.019	9400	22.2	.019	6700	15.8	.006
	1/8	10000	35.4	.025	7500	26.6	.025	7000	24.8	.025	5000	17.7	.006
	5/32	8000	33.1	.031	6000	24.8	.031	5600	23.1	.031	4000	16.5	.008
	3/16	6700	31.7	.037	5000	23.6	.037	4700	22.2	.037	3300	15.6	.009
	7/32	5700	26.9	.044	4300	20.3	.044	4000	18.9	.044	2900	13.7	.011
	1/4	5000	26.6	.050	3800	20.2	.050	3500	18.6	.050	2500	13.3	.013
	5/16	4000	23.6	.062	3000	17.7	.062	2800	16.5	.062	2000	11.8	.016
	3/8	3300	23.4	.075	2500	17.7	.075	2300	16.3	.075	1700	12.0	.019
	1/2	2500	17.7	.100	1900	13.5	.100	1800	12.8	.100	1300	9.2	.025
Depth of Cut	 DC : Dia												

(Note 1) When cutting austenitic stainless steels, the use of water-soluble cutting fluid is especially effective.

(Note 2) If the depth of cut is smaller than this table, feed rate can be increased.

(Note 3) If the rigidity of the machine or the work materials installation is very low, or chattering and noise are generated, please reduce the revolution and the feed rate proportionately.