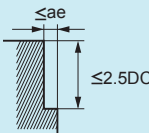
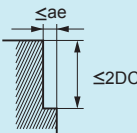


Recommended Cutting Conditions

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
1/16	18100	39.9	.012	14000	30.9	.012	12000	26.5	.012	10000	22.0	.0010
3/32	12000	26.5	.019	9400	20.7	.019	8000	17.6	.019	6700	14.8	.0020
1/8	9000	29.8	.025	7000	23.1	.025	6000	19.8	.025	5000	16.5	.0030
3/16	6000	26.5	.037	4700	20.7	.037	4000	17.6	.037	3300	14.6	.0040
1/4	4500	22.7	.050	3500	17.6	.050	3000	15.1	.050	2500	12.6	.0050
5/16	3600	19.8	.062	2800	15.4	.062	2400	13.2	.062	2000	11.0	.0060
3/8	3000	19.8	.075	2300	15.2	.075	2000	13.2	.075	1700	11.3	.0080
1/2	2300	15.2	.100	1800	11.9	.100	1500	9.9	.100	1300	8.6	.0100
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 workpiece installation is very low, or chattering and noise are generated, please reduce the revolution and the feed rate proportionately.