

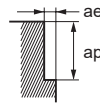
Recommended Cutting Conditions

Shoulder Milling

(inch)

Workpiece Material	Carbon Steels, Alloy Steels, Mild Steels				Titanium Alloys, Austenitic Stainless Steels, Ferritic and Martensitic Stainless Steels				Precipitation Hardening Stainless Steels			
	AISI 1045, AISI 4140				Ti-6Al-4V, AISI 304, AISI 316LN, AISI 410, AISI 420J2				AISI 630, AISI 631			
DC	Revolution n (min ⁻¹)	Feed Rate vf (IPM)	Depth of Cut ap	Width of Cut ae	Revolution n (min ⁻¹)	Feed Rate vf (IPM)	Depth of Cut ap	Width of Cut ae	Revolution n (min ⁻¹)	Feed Rate vf (IPM)	Depth of Cut ap	Width of Cut ae
10 .3937	4800	33.9	.315	.157	2000	12.6	.315	.157	1900	9.1	.315	.157
12 .4724	4000	31.5	.378	.189	1900	13.4	.378	.189	1600	9.1	.378	.189
16 .6299	3000	23.6	.504	.252	1400	11.0	.504	.252	1200	7.9	.504	.252
20 .7874	2400	20.9	.630	.315	1100	8.7	.630	.315	950	7.1	.630	.315

Depth of Cut

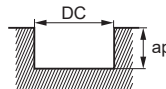


Slot Milling

(inch)

Workpiece Material	Carbon Steels, Alloy Steels, Mild Steels			Titanium Alloys, Austenitic Stainless Steels, Ferritic and Martensitic Stainless Steels			Precipitation Hardening Stainless Steels		
	AISI 1045, AISI 4140			Ti-6Al-4V, AISI 304, AISI 316LN, AISI 410, AISI 420J2			AISI 630, AISI 631		
DC	Revolution n (min ⁻¹)	Feed Rate vf (IPM)	Depth of Cut ap	Revolution n (min ⁻¹)	Feed Rate vf (IPM)	Depth of Cut ap	Revolution n (min ⁻¹)	Feed Rate vf (IPM)	Depth of Cut ap
10 .3937	3200	20.1	.197	1900	9.1	.197	1300	3.9	.197
12 .4724	2700	19.3	.236	1600	10.2	.236	1100	4.3	.236
16 .6299	2000	15.7	.315	1200	8.7	.315	800	3.8	.315
20 .7874	1600	13.8	.394	950	6.7	.394	640	3.5	.394

Depth of Cut



DC= Dia.

Note 1) Vibration may occur if the rigidity of machine or workpiece is low. In this case, please reduce the revolution and feed rate proportionately, or set a lower depth of cut.

Note 2) If the depth of cut is shallow, the revolution and feed rate can be increased.

Note 3) For stainless steel, titanium alloy, the use of water-soluble coolant is effective.