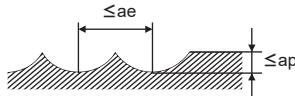


Recommended Cutting Conditions

(inch)

Workpiece Material		Hardened steel (45—55HRC)						Hardened steel (55—62HRC)						Hardened steel (62—70HRC)					
		AISI H13						AISI D2						AISI W1, AISI M2					
Corner Radius RE		$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		Depth of cut ap	Depth of cut ae	$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		Depth of cut ap	Depth of cut ae	$\alpha \leq 15^\circ$		$\alpha > 15^\circ$		Depth of cut ap	Depth of cut ae
(mm)	(inch)	Revolution (min ⁻¹)	Feed rate (IPM)	Revolution (min ⁻¹)	Feed rate (IPM)			Revolution (min ⁻¹)	Feed rate (IPM)	Revolution (min ⁻¹)	Feed rate (IPM)			Revolution (min ⁻¹)	Feed rate (IPM)	Revolution (min ⁻¹)	Feed rate (IPM)		
0.1	.004	40000	12.6	40000	9.4	.0001	.0008	40000	12.6	40000	6.3	.0001	.0008	40000	12.6	40000	6.3	.0001	.0008
0.15	.006	40000	25.2	40000	22.0	.0004	.0012	40000	25.2	40000	15.7	.0003	.0012	40000	25.2	40000	15.7	.0002	.0012
0.2	.008	40000	63.0	40000	47.2	.0008	.0016	40000	55.1	40000	39.4	.0006	.0016	40000	47.2	40000	39.4	.0004	.0016
0.3	.012	40000	126.0	40000	63.0	.0012	.0024	40000	110.2	40000	47.2	.0010	.0024	40000	78.7	40000	47.2	.0008	.0024
0.4	.016	40000	252.0	40000	94.5	.0020	.0031	40000	157.5	40000	63.0	.0016	.0031	40000	110.2	40000	63.0	.0012	.0031
0.5	.020	40000	315.0	40000	126.0	.0024	.0039	40000	220.5	40000	94.5	.0020	.0039	40000	141.7	32000	51.2	.0016	.0039
0.75	.030	40000	378.0	40000	157.5	.0035	.0059	40000	283.5	32000	98.4	.0030	.0059	32000	177.2	21000	47.2	.0020	.0059
1	.039	40000	378.0	39000	185.0	.0043	.0079	40000	315.0	24000	94.5	.0039	.0079	24000	149.6	16000	39.4	.0028	.0079
1.25	.049	40000	409.4	32000	177.2	.0047	.0098	37000	318.9	19000	90.6	.0043	.0098	19000	133.9	13000	39.4	.0031	.0098
1.5	.059	40000	472.4	27000	169.3	.0051	.0118	32000	303.1	16000	86.6	.0047	.0118	16000	126.0	11000	34.6	.0035	.0118
2	.079	32000	428.3	20000	141.7	.0059	.0157	24000	244.1	12000	74.8	.0051	.0157	12000	94.5	8000	31.5	.0039	.0157
2.5	.098	25000	354.3	16000	114.2	.0079	.0197	19000	208.7	9600	66.9	.0059	.0197	9600	82.7	6000	23.6	.0039	.0197
3	.118	21000	330.7	13000	102.4	.0098	.0236	16000	189.0	8000	63.0	.0079	.0236	8000	66.9	5000	23.6	.0043	.0236
4	.157	16000	252.0	10000	78.7	.0118	.0315	12000	141.7	6000	47.2	.0079	.0315	6000	55.1	4000	18.9	.0043	.0315
5	.197	13000	204.7	8000	66.9	.0197	.0394	10000	126.0	4800	37.8	.0079	.0394	4800	43.3	3000	16.5	.0047	.0394
6	.236	9000	141.7	6000	51.2	.0197	.0472	7000	86.6	3600	28.3	.0118	.0472	3600	33.9	2200	12.2	.0047	.0472
8	.315	6000	94.5	4000	39.4	.0197	.0630	5000	63.0	2500	19.7	.0118	.0630	2500	25.6	1500	9.4	.0059	.0630
10	.394	4500	70.9	3000	30.7	.0197	.0787	4000	51.2	1800	14.2	.0118	.0787	1800	18.5	1000	6.3	.0059	.0787

Depth of cut

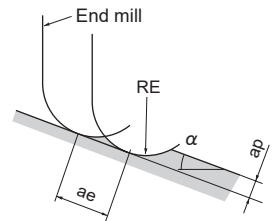


Note 1) If the rigidity of the machine or the work materials installation is very low, or chattering and noise are generated, reduce the revolution and feed rate proportionately.

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

Please reduce the feed rate when the surface finish is important.

Note 3) α is the inclination angle of the machined surface.



ae:Pick Feed