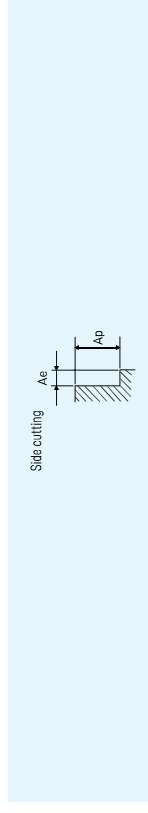


6 FLUTE RECOMMENDED CUTTING CONDITIONS (INCH)

ISO Hardness (BHN)	Work Materials	Speed and Feed Recommendations			Parameters
		Type of Cut	Ap x D1	Ae x D1	
P<300	CARBON STEEL 10**, 11**, 12**, 12L**, 15**	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED
300<P<380	ALLOY STEEL 41**, 42**, 51**, 86**	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED
P<380	TOOL STEEL A2, D2, H13, P20, T15	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED
M	STAINLESS STEELS 300 304, 316, 304L, 316L, SUS316	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED
M	STAINLESS STEELS 400 416, 420F, 430F, 440F	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED
M	STAINLESS STEELS (PH) 17-4PH, 15-5PH, 13-8PH	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED
S	TITANIUM Ti6Al4V, Ti6Al3V5Mo, Ti7Al4Mo	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED
S	HIGH-TEMPERATURE ALLOY INCONEL, HASTALLOY, RENE	Side Cutting	2 (*)	0.05	RPM
					Fz
					FEED



NOTES:
 • Feed to be reduced by approximately 50% if L.O.C. (Length Of Cut) is over 3x D
 • In profile operations, engaging more than 2xD, reduce the radial depth of cut by 50%-60%
 • Finish cuts typically require reduced cutting feeds and speeds; also, it is recommended the radial width of cut (AE) should not exceed 2% x D1

		Diameter						
		1/4	5/16	3/8	1/2	5/8	3/4	1
		984 (787-1181)						
15036			12028	10024	7518	6014	5012	3759
0.0027			0.0046	0.0057	0.0068	0.0080	0.0089	0.0091
241.52			329.60	340.96	307.22	286.98	246.38	206.00
		666 (533-799)						
10176			8141	6784	5088	4071	3392	2544
0.0020			0.0033	0.0042	0.0050	0.0059	0.0066	0.0069
120.19			163.46	169.88	153.85	143.27	133.82	104.57
		328 (262-394)						
5012			4009	3341	2506	2005	1671	1253
0.0016			0.0028	0.0035	0.0041	0.0048	0.0054	0.0057
48.54			67.25	69.46	62.15	58.25	54.06	42.62
		482 (386-578)						
7365			5892	4910	3682	2946	2455	1841
0.0016			0.0028	0.0035	0.0041	0.0048	0.0054	0.0056
71.33			98.82	102.07	91.34	85.60	79.45	62.20
		699 (559-839)						
10681			8545	7120	5340	4272	3560	2670
0.0019			0.0033	0.0041	0.0049	0.0057	0.0064	0.0066
123.63			169.55	174.93	157.69	147.34	136.24	105.97
		440 (352-528)						
6723			5379	4482	3362	2689	2241	1681
0.0016			0.0028	0.0035	0.0041	0.0048	0.0054	0.0056
65.11			90.21	93.17	83.38	78.14	72.53	56.38
		381 (305-457)						
5822			4657	3881	2911	2329	1941	1455
0.0013			0.0022	0.0028	0.0033	0.0038	0.0044	0.0046
45.38			60.51	64.18	57.07	53.36	51.80	40.22
		108 (85-130)						
1650			1320	1100	825	660	550	413
0.0013			0.0022	0.0028	0.0032	0.0038	0.0044	0.0045
12.86			17.15	18.19	15.98	15.13	14.55	11.21