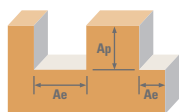


2 Flute: Square, Double, Stub, Long Reach, Ball
3 Flute: Square, Long Reach, Ball
4 Flute: Square, Double, Stub, Long Reach, Ball, Corner Radius

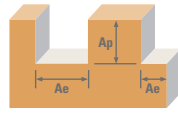


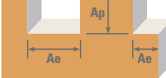
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2 Flute: Square, Double, Stub, Long Reach, Ball

3 Flute: Square, Long Reach, Ball

4 Flute: Square, Double, Stub, Long Reach, Ball, Corner Radius



Series 1M, 3M, 5M, 14M, 15M, 16M, 17M, 59M Metric								DC • mm									
Hardness	Flutes	Ae x DC	Ap x DC	Vc (m/min)	DC • mm												
					0.4	0.75	1.5	3	6	10	12	20	25				
ALUMINUM ALLOYS 2017, 2024, 356, 6061, 7075	≤ 150 Bhn or ≤ 88 HRb	 Profile		268	RPM	213272	113745	56872	28436	14218	8531	7109	4265	3412			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	640	728	682	796	1081	1365	1365	1092	955					
		 Slot		195	RPM	155107	82724	41362	20681	10340	6204	5170	3102	2482			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	465	529	496	579	786	993	993	794	695					
	≤ 140 Bhn or ≤ 3 HRc	 Profile		148	RPM	117542	62689	31344	15672	7836	4702	3918	2351	1881			
			Fz	0.0008	0.0015	0.0031	0.007	0.019	0.040	0.048	0.064	0.070					
			Feed (mm/min)	188	188	194	219	298	376	376	301	263					
		 Slot		(118-177)	RPM	84824	45239	22620	11310	5655	3393	2827	1696	1357			
			Fz	0.0008	0.0015	0.0031	0.007	0.019	0.040	0.048	0.064	0.070					
			Feed (mm/min)	282	282	292	329	447	564	564	451	395					
COPPER ALLOYS Alum Bronze, C110, Muntz Brass	≤ 140 Bhn or ≤ 3 HRc	 Profile		268	RPM	213272	113745	56872	28436	14218	8531	7109	4265	3412			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	960	1092	1024	1194	1621	2047	2047	1638	1433					
		 Slot		195	RPM	155107	82724	41362	20681	10340	6204	5170	3102	2482			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	698	794	745	869	1179	1489	1489	1191	1042					
	≤ 140 Bhn or ≤ 3 HRc	 Profile		201	RPM	159954	85309	42654	21327	10664	6398	5332	3199	2559			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	931	1059	993	1158	1572	1985	1985	1588	1390					
		 Slot		146	RPM	116330	62043	31021	15511	7755	4653	3878	2327	1861			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	698	794	745	869	1179	1489	1489	1191	1042					
PLASTICS Polycarbonate, PVC, Polypropylene	≤ 140 Bhn or ≤ 3 HRc	 Profile		268	RPM	213272	113745	56872	28436	14218	8531	7109	4265	3412			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	960	1092	1024	1194	1621	2047	2047	1638	1433					
		 Slot		195	RPM	155107	82724	41362	20681	10340	6204	5170	3102	2482			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	698	794	745	869	1179	1489	1489	1191	1042					
	≤ 140 Bhn or ≤ 3 HRc	 Profile		201	RPM	159954	85309	42654	21327	10664	6398	5332	3199	2559			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	931	1059	993	1158	1572	1985	1985	1588	1390					
		 Slot		146	RPM	116330	62043	31021	15511	7755	4653	3878	2327	1861			
			Fz	0.0015	0.0032	0.0060	0.014	0.038	0.080	0.096	0.128	0.140					
			Feed (mm/min)	698	794	745	869	1179	1489	1489	1191	1042					
HIGH TEMP ALLOYS (NICKEL, COBALT, IRON BASE) Inconel 601, 617, 625, 718, Incoloy 800, Monel 400, Rene, Waspalloy	≤ 300 Bhn or ≤ 32 HRc	 Profile		20	RPM	15753	8402	4201	2100	1050	630	525	315	252			
			Fz	0.0005	0.0007	0.0014	0.004	0.010	0.021	0.024	0.032	0.035					
			Feed (mm/min)	16	12	12	17	21	26	25	20	18					
		 Slot		14	RPM	10906	5816	2908	1454	727	436	364	218	174			
			Fz	0.0005	0.0007	0.0014	0.004	0.010	0.021	0.024	0.032	0.035					
			Feed (mm/min)	11	8	8	12	15	18	17	14	12					
	≤ 350 Bhn or ≤ 38 HRc	 Profile		55	RPM	43624	23266	11633	5816	2908	1745	1454	872	698			
			Fz	0.0005	0.0010	0.0019	0.004	0.012	0.024	0.029	0.037	0.042					
			Feed (mm/min)	44	47	44	47	70	84	84	65	59					
		Slot		40	RPM	31506	16803	8402	4201	2100	1260	1050	630	504			
			Fz	0.0005	0.0010	0.0019	0.004	0.012	0.024	0.029	0.037	0.042					
			Feed (mm/min)	32	34	32	34	50	60	61	47	42					
TITANIUM ALLOYS Ti6Al4V, Ti6Al2Sn4Zr2Mo, Ti4Al4Mo2Sn0.5Si, Ti10V2Fe3Al, Ti5Al53Mo3Cr, Ti7Al4Mo, Ti3Al8V6Cr4Zr4Mo, Ti6Al6V6Sn, Ti152 Cr3Sn3Al	≤ 350 Bhn or ≤ 38 HRc	Profile		44	RPM	31506	16803	8402	4201	2100	1260	1050	630	504			
			Fz	0.0005	0.0010	0.0019	0.004	0.012	0.024	0.029	0.037	0.042					
			Feed (mm/min)	32	34	32	34	50	60	61	47	42					
		Slot		40	RPM	31506	16803	8402	4201	2100	1260	1050	630	504			
			Fz	0.0005	0.0010	0.0019	0.004	0.012	0.024	0.029	0.037	0.042					
			Feed (mm/min)	32	34	32	34	50	60	61	47	42					