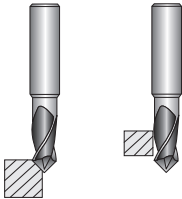


E5I31, E5I33 Uncoated

2 FLUTE DRILL MILL - CHAMFERING & SIDE CUTTING

SFM = ft./min. IPT = In./tooth
RPM = rev./min. IPM = In./min.

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)								
				1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4
P	1-2	Non-alloy steel	SFM	180	180	180	180	180	180	180	180	180
			RPM	5500	3670	2750	2200	1830	1570	1380	1100	920
			IPT	.00052	.00081	.00102	.00145	.00166	.00178	.00189	.00238	.00302
			IPM	6	6	6	6	6	6	5	5	6
	3-4		SFM	130	130	130	130	130	130	130	130	130
			RPM	4000	2670	2000	1600	1330	1140	1000	800	670
			IPT	.00038	.00061	.00077	.00116	.00138	.00171	.00205	.00227	.00292
			IPM	3	3	3	4	4	4	4	4	4
	5		SFM	115	115	115	115	115	115	115	115	115
			RPM	3510	2340	1760	1410	1170	1000	880	700	590
			IPT	.00039	.00058	.00085	.00138	.00149	.00164	.00179	.00233	.00299
			IPM	3	3	3	4	3	3	3	3	3
	6		SFM	180	180	180	180	180	180	180	180	180
			RPM	5500	3670	2750	2200	1830	1570	1380	1100	920
			IPT	.00052	.00081	.00102	.00145	.00166	.00178	.00189	.00238	.00302
			IPM	6	6	6	6	6	6	5	5	6
	7		SFM	130	130	130	130	130	130	130	130	130
			RPM	4000	2670	2000	1600	1330	1140	1000	800	670
			IPT	.00038	.00061	.00077	.00116	.00138	.00171	.00205	.00227	.00292
			IPM	3	3	3	4	4	4	4	4	4
	8-9		SFM	115	115	115	115	115	115	115	115	115
			RPM	3510	2340	1760	1410	1170	1000	880	700	590
			IPT	.00039	.00058	.00085	.00138	.00149	.00164	.00179	.00233	.00299
			IPM	3	3	3	4	3	3	3	3	3
	10	SFM	180	180	180	180	180	180	180	180	180	
		RPM	5500	3670	2750	2200	1830	1570	1380	1100	920	
		IPT	.00052	.00081	.00102	.00145	.00166	.00178	.00189	.00238	.00302	
		IPM	6	6	6	6	6	6	5	5	6	
	11.1	SFM	115	115	115	115	115	115	115	115	115	
		RPM	3510	2340	1760	1410	1170	1000	880	700	590	
		IPT	.00039	.00058	.00085	.00138	.00149	.00164	.00179	.00233	.00299	
		IPM	3	3	3	4	3	3	3	3	3	
M	14.1	Stainless steel	SFM	100	100	100	100	100	100	100	100	100
			RPM	2990	2000	1500	1200	1000	860	750	600	500
			IPT	.00043	.00058	.00073	.00093	.00102	.00146	.00190	.00194	.00291
			IPM	3	2	2	2	2	2	3	2	3
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	SFM	130	130	130	130	130	130	130	130	130
			RPM	4000	2670	2000	1600	1330	1140	1000	800	670
			IPT	.00038	.00061	.00077	.00116	.00138	.00171	.00205	.00227	.00292
			IPM	3	3	3	4	4	4	4	4	4
N	21-25	Aluminum-wrought alloy Aluminum-cast, alloyed	SFM	490	490	490	490	490	490	490	490	490
			RPM	15040	10020	7520	6010	5010	4300	3760	3010	2510
			IPT	.00080	.00129	.00166	.00229	.00266	.00284	.00302	.00419	.00531
			IPM	24	26	25	28	27	24	23	25	27



E5I31, E5I33 Uncoated

2 FLUTE DRILL MILL - V-GROOVING

SFM = ft./min. IPT = In./tooth
RPM = rev./min. IPM = In./min.

ISO	VDI 3323	Material Description	Parameter	Diameter (Ø)								
				1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4
P	1-2	Non-alloy steel	SFM	180	180	180	180	180	180	180	180	180
			RPM	5510	3680	2760	2210	1840	1580	1380	1100	920
			IPT	.00040	.00062	.00079	.00111	.00128	.00137	.00145	.00183	.00233
			IPM	4	5	4	5	5	4	4	4	4
	3-4		SFM	130	130	130	130	130	130	130	130	130
			RPM	4010	2670	2010	1600	1340	1150	1000	800	670
			IPT	.00030	.00047	.00059	.00089	.00106	.00132	.00157	.00175	.00225
			IPM	2	3	2	3	3	3	3	3	3
	5		SFM	115	115	115	115	115	115	115	115	115
			RPM	3510	2340	1750	1400	1170	1000	880	700	580
			IPT	.00030	.00045	.00066	.00106	.00115	.00126	.00138	.00179	.00230
			IPM	2	2	2	3	3	3	2	3	3
	6	Low alloy steel	SFM	180	180	180	180	180	180	180	180	180
			RPM	5510	3680	2760	2210	1840	1580	1380	1100	920
			IPT	.00040	.00062	.00079	.00111	.00128	.00137	.00145	.00183	.00233
			IPM	4	5	4	5	5	4	4	4	4
	7		SFM	130	130	130	130	130	130	130	130	130
			RPM	4010	2670	2010	1600	1340	1150	1000	800	670
			IPT	.00030	.00047	.00059	.00089	.00106	.00132	.00157	.00175	.00225
			IPM	2	3	2	3	3	3	3	3	3
	8-9		SFM	115	115	115	115	115	115	115	115	115
			RPM	3510	2340	1750	1400	1170	1000	880	700	580
			IPT	.00030	.00045	.00066	.00106	.00115	.00126	.00138	.00179	.00230
			IPM	2	2	2	3	3	3	2	3	3
	10	High alloyed steel, and tool steel	SFM	180	180	180	180	180	180	180	180	180
			RPM	5510	3680	2760	2210	1840	1580	1380	1100	920
			IPT	.00040	.00062	.00079	.00111	.00128	.00137	.00145	.00183	.00233
			IPM	4	5	4	5	5	4	4	4	4
	11.1		SFM	115	115	115	115	115	115	115	115	115
			RPM	3510	2340	1750	1400	1170	1000	880	700	580
			IPT	.00030	.00045	.00066	.00106	.00115	.00126	.00138	.00179	.00230
			IPM	2	2	2	3	3	3	2	3	3
M	14.1	Stainless steel	SFM	100	100	100	100	100	100	100	100	100
			RPM	3010	2010	1500	1200	1000	860	750	600	500
			IPT	.00033	.00045	.00056	.00072	.00079	.00112	.00146	.00149	.00224
			IPM	2	2	2	2	2	2	2	2	2
K	15-20	Grey cast iron Nodular cast iron Malleable cast iron	SFM	130	130	130	130	130	130	130	130	130
			RPM	4010	2670	2010	1600	1340	1150	1000	800	670
			IPT	.00030	.00047	.00059	.00089	.00106	.00132	.00157	.00175	.00225
			IPM	2	3	2	3	3	3	3	3	3
N	21-25	Aluminum-wrought alloy Aluminum-cast, alloyed	SFM	490	490	490	490	490	490	490	490	490
			RPM	15040	10030	7520	6020	5010	4300	3760	3010	2510
			IPT	.00062	.00099	.00128	.00176	.00205	.00219	.00233	.00322	.00409
			IPM	19	20	19	21	21	19	17	19	20

