FULLERTON

SPEEDS & FEEDS
1535 Drill

Two RH Spiral Flutes | Cam Relieved | Solid Carbide NC Spotting Drills

		Imperial (in)						Metric (mm)					
		1/8	1/4	3/8	1/2	3/4	1	3	6	10	12	19	25
Brass & Copper	RPM	8,251	4,126	2,750	2,063	1,375	1,031	8,732	4,366	2,619	2,183	1,379	1,048
	IPM	25	21	19	19	14	12	629	524	489	472	349	314
	SFM	270	270	270	270	270	270	82	82	82	82	82	82
	IPR	.003	.005	.007	.009	.010	.012	0.07	0.12	0.19	0.22	0.25	0.30
Graphite	RPM	10,696	5,348	3,565	2,674	1,783	1,337	11,319	5,659	3,396	2,830	1,787	1,358
	IPM	32	27	23	21	16	13	815	679	589	543	407	340
	SFM	350	350	350	350	350	350	107	107	107	107	107	107
	IPR	.003	.005	.007	.008	.009	.010	0.07	0.12	0.17	0.19	0.23	0.25
Cast Iron	RPM	3,667	1,834	1,222	917	611	458	3,881	1,940	1,164	970	613	466
	IPM	11	9	8	7	6	5	279	233	202	186	140	116
	SFM	120	120	120	120	120	120	37	37	37	37	37	37
	IPR	.003	.005	.007	.008	.009	.010	0.07	0.12	0.17	0.19	0.23	0.25
Hardened Steels >48RC	RPM	1,834	917	611	458	306	229	1,940	970	582	485	306	233
	IPM	4	3	2	3	2	2	93	81	62	64	50	44
	SFM	60	60	60	60	60	60	18	18	18	18	18	18
	IPR	.002	.004	.004	.006	.007	.008	0.05	0.08	0.11	0.13	0.16	0.19
Steels	RPM	3,362	1,681	1,121	840	560	420	3,557	1,779	1,067	889	562	427
	IPM	8	7	6	5	4	4	213	171	157	139	107	91
	SFM	110	110	110	110	110	110	34	34	34	34	34	34
	IPR	.003	.004	.006	.007	.008	.009	0.06	0.10	0.15	0.16	0.19	0.21
Stainless Steels	RPM	2,445	1,222	815	611	407	306	2,587	1,294	776	647	408	310
	IPM	5	4	4	3	3	2	124	109	93	85	67	58
	SFM	80	80	80	80	80	80	24	24	24	24	24	24
	IPR	.002	.004	.005	.006	.007	.008	0.05	0.08	0.12	0.13	0.16	0.19
Super Alloys (Nickel based Inconel)	RPM	1,222	611	407	306	204	153	1,294	647	388	323	204	155
	IPM	1	2	1	1	1	1	31	39	31	31	26	25
	SFM	40	40	40	40	40	40	12	12	12	12	12	12
	IPR	.001	.003	.003	.004	.005	.007	0.02	0.06	0.08	0.10	0.13	0.16
Titanium	RPM	1,375	688	458	344	229	172	1,455	728	437	364	230	175
	IPM	3	2	2	2	1	1	70	61	47	48	38	33
	SFM	45	45	45	45	45	45	14	14	14	14	14	14
	IPR	.002	.004	.004	.006	.007	.008	0.05	0.08	0.11	0.13	0.16	0.19

Not Recommended for High Si Aluminum >10%, Low Si Aluminum <10%, or Plastics. Composites are only recommended in unique situations.

The parameters listed for tool series that are stocked uncoated are based on running an uncoated tool. If a coating is applied to the tools, the SFM can be increased by approximately 25%. All speed and feed recommendations should be considered only as a starting point. Start with conservative speeds and feeds while analyizing the rigidity of the process. Then cautiously progress incrementally to achieve optimum performance.

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