



FULLERTON

S P E E D S / F E E D S

Two 30° RH Spiral Flutes | Sizes #70 to 1" Diameter 135° Notched Cam Point

	Imperial (in)							Metric (mm)					
		1/8	1/4	3/8	1/2	3/4	1	3	6	10	12	19	25
High Si Aluminum >10%	RPM	9,932	4,966	3,311	2,483	1,655	1,242	10,510	5,255	3,153	2,628	1,660	1,261
	IPM	12	15	13	15	13	12	303	378	336	378	336	315
	SFM	325	325	325	325	325	325	99	99	99	99	99	99
	IPR	.001	.003	.004	.006	.008	.010	0.03	0.07	0.11	0.14	0.20	0.25
Low Si Aluminum <10%	RPM	13,752	6,876	4,584	3,438	2,292	1,719	14,553	7,276	4,366	3,638	2,298	1,746
	IPM	23	17	14	17	18	17	594	437	349	437	466	437
	SFM	450	450	450	450	450	450	137	137	137	137	137	137
	IPR	.002	.003	.003	.005	.008	.010	0.04	0.06	0.08	0.12	0.20	0.25
Plastics	RPM	4,278	2,139	1,426	1,070	713	535	4,527	2,264	1,358	1,132	715	543
	IPM	5	6	7	7	6	5	130	163	181	177	145	136
	SFM	140	140	140	140	140	140	43	43	43	43	43	43
	IPR	.001	.003	.005	.007	.008	.010	0.03	0.07	0.13	0.16	0.20	0.25
Brass & Copper	RPM	7,640	3,820	2,547	1,910	1,273	955	8,085	4,042	2,425	2,021	1,277	970
	IPM	5	8	8	8	4	6	136	194	194	194	97	146
	SFM	250	250	250	250	250	250	76	76	76	76	76	76
	IPR	.001	.002	.003	.004	.003	.006	0.02	0.05	0.08	0.10	0.08	0.15
Graphite	RPM	12,224	6,112	4,075	3,056	2,037	1,528	12,936	6,468	3,881	3,234	2,042	1,552
	IPM	18	18	20	21	16	15	466	466	517	543	414	388
	SFM	400	400	400	400	400	400	122	122	122	122	122	122
	IPR	.002	.003	.005	.007	.008	.010	0.04	0.07	0.13	0.17	0.20	0.25
Cast Iron	RPM	6,876	3,438	2,292	1,719	1,146	860	7,276	3,638	2,183	1,819	1,149	873
	IPM	8	10	11	10	9	9	210	262	291	262	233	218
	SFM	225	225	225	225	225	225	69	69	69	69	69	69
	IPR	.001	.003	.005	.006	.008	.010	0.03	0.07	0.13	0.14	0.20	0.25
Hardened Steels >48RC	RPM	1,986	993	662	497	331	248	2,102	1,051	631	526	332	252
	IPM	2	2	3	2	2	1	50	50	67	63	46	38
	SFM	65	65	65	65	65	65	20	20	20	20	20	20
	IPR	.001	.002	.004	.005	.006	.006	0.02	0.05	0.11	0.12	0.14	0.15
Steels	RPM	4,584	2,292	1,528	1,146	764	573	4,851	2,425	1,455	1,213	766	582
	IPM	5	5	5	5	4	4	116	116	136	131	107	102
	SFM	150	150	150	150	150	150	46	46	46	46	46	46
	IPR	.001	.002	.004	.005	.006	.007	0.02	0.05	0.09	0.11	0.14	0.18
Stainless Steels	RPM	2,750	1,375	917	688	458	344	2,911	1,455	873	728	460	349
	IPM	3	3	3	3	2	2	70	80	81	70	58	57
	SFM	90	90	90	90	90	90	27	27	27	27	27	27
	IPR	.001	.002	.004	.004	.005	.007	0.02	0.06	0.09	0.10	0.13	0.16
Super Alloy (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	1,528	764	509	382	255	191	1,617	808	485	404	255	194
	IPM	2	2	2	2	1	1	39	39	45	44	32	29
	SFM	50	50	50	50	50	50	15	15	15	15	15	15
	IPR	.001	.002	.004	.005	.005	.006	0.02	0.05	0.09	0.11	0.13	0.15

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 analyzing the rigidity of the process. Then cautiously progress incrementally to achieve optimum performance.