

**350 SERIES - 3 FLUTE NECKED WITH RADIUS FOR ALUMINUM**



DIA	SHANK DIA	LOC	OAL	(LBS) LENGTH BELOW SHK	RAD	ZIRCONIUM C5	LIST PRICE
5/8	5/8	3/4	3-1/2	1-5/8	.030	350-62512-N26-030-C5	\$ 167.84
5/8	5/8	3/4	3-1/2	1-5/8	.060	350-62512-N26-060-C5	\$ 167.84
5/8	5/8	3/4	3-1/2	1-5/8	.090	350-62512-N26-090-C5	\$ 167.84
5/8	5/8	3/4	3-1/2	1-5/8	.120	350-62512-N26-120-C5	\$ 167.84
5/8	5/8	3/4	5	2-3/8	.030	350-62512-NS38-030-C5	\$ 219.83
5/8	5/8	3/4	5	2-3/8	.060	350-62512-NS38-060-C5	\$ 219.83
5/8	5/8	3/4	5	2-3/8	.090	350-62512-NS38-090-C5	\$ 219.83
5/8	5/8	3/4	5	2-3/8	.120	350-62512-NS38-120-C5	\$ 219.83
5/8	5/8	3/4	6	3-3/8	.030	350-62512-NS54-030-C5	\$ 254.80
5/8	5/8	3/4	6	3-3/8	.060	350-62512-NS54-060-C5	\$ 254.80
5/8	5/8	3/4	6	3-3/8	.090	350-62512-NS54-090-C5	\$ 254.80
5/8	5/8	3/4	6	3-3/8	.120	350-62512-NS54-120-C5	\$ 254.80
5/8	5/8	1-5/8	6	3-3/8	.030	350-62526-NS54-030-C5	\$ 277.74
5/8	5/8	1-5/8	6	3-3/8	.060	350-62526-NS54-060-C5	\$ 277.74
5/8	5/8	1-5/8	6	3-3/8	.090	350-62526-NS54-090-C5	\$ 277.74
5/8	5/8	1-5/8	6	3-3/8	.120	350-62526-NS54-120-C5	\$ 277.74
3/4	3/4	1	4	1-5/8	.030	350-75016-N26-030-C5	\$ 221.24
3/4	3/4	1	4	1-5/8	.060	350-75016-N26-060-C5	\$ 221.24
3/4	3/4	1	4	1-5/8	.090	350-75016-N26-090-C5	\$ 221.24
3/4	3/4	1	4	1-5/8	.120	350-75016-N26-120-C5	\$ 221.24
3/4	3/4	1	5	2-1/2	.030	350-75016-NS40-030-C5	\$ 236.79
3/4	3/4	1	5	2-1/2	.060	350-75016-NS40-060-C5	\$ 236.79
3/4	3/4	1	5	2-1/2	.090	350-75016-NS40-090-C5	\$ 236.79
3/4	3/4	1	5	2-1/2	.120	350-75016-NS40-120-C5	\$ 236.79
3/4	3/4	1	6	3-3/8	.030	350-75016-NS54-030-C5	\$ 267.53
3/4	3/4	1	6	3-3/8	.060	350-75016-NS54-060-C5	\$ 267.53
3/4	3/4	1	6	3-3/8	.090	350-75016-NS54-090-C5	\$ 267.53
3/4	3/4	1	6	3-3/8	.120	350-75016-NS54-120-C5	\$ 267.53
3/4	3/4	1-5/8	6	3-3/8	.030	350-75026-NS54-030-C5	\$ 297.47
3/4	3/4	1-5/8	6	3-3/8	.060	350-75026-NS54-060-C5	\$ 297.47
3/4	3/4	1-5/8	6	3-3/8	.090	350-75026-NS54-090-C5	\$ 297.47
3/4	3/4	1-5/8	6	3-3/8	.120	350-75026-NS54-120-C5	\$ 297.47
1	1	1-1/4	5	2-1/8	.030	350-10020-N34-030-C5	\$ 333.11
1	1	1-1/4	5	2-1/8	.060	350-10020-N34-060-C5	\$ 333.11
1	1	1-1/4	5	2-1/8	.090	350-10020-N34-090-C5	\$ 333.11
1	1	1-1/4	5	2-1/8	.120	350-10020-N34-120-C5	\$ 333.11
1	1	1-1/4	6	3-3/8	.030	350-10020-NS54-030-C5	\$ 422.10
1	1	1-1/4	6	3-3/8	.060	350-10020-NS54-060-C5	\$ 422.10
1	1	1-1/4	6	3-3/8	.090	350-10020-NS54-090-C5	\$ 422.10
1	1	1-1/4	6	3-3/8	.120	350-10020-NS54-120-C5	\$ 422.10
1	1	1-1/4	7	4-3/8	.030	350-10020-NS70-030-C5	\$ 472.89
1	1	1-1/4	7	4-3/8	.060	350-10020-NS70-060-C5	\$ 472.89
1	1	1-1/4	7	4-3/8	.090	350-10020-NS70-090-C5	\$ 472.89
1	1	1-1/4	7	4-3/8	.120	350-10020-NS70-120-C5	\$ 472.89
1	1	2	7	4-3/8	.030	350-10032-NS70-030-C5	\$ 542.06
1	1	2	7	4-3/8	.060	350-10032-NS70-060-C5	\$ 542.06
1	1	2	7	4-3/8	.090	350-10032-NS70-090-C5	\$ 542.06
1	1	2	7	4-3/8	.120	350-10032-NS70-120-C5	\$ 542.06

**STARTING RECOMMENDED 250 Series Speeds/Feeds**

Highest RPM RANGE	Tool Size CPT	0.125 0.002		0.25 0.004		0.375 0.0065		0.5 0.008		0.625 0.01		0.75 0.012		1 0.015	
		SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM
		4,000	131	16	262	32	393	52	524	64	655	80	786	96	1048
2,900	95	12	190	23	285	38	380	46	475	58	570	70	760	87	
6,000	197	24	393	48	590	78	786	96	983	120	1179	144	1572	180	
4,280	140	17	280	34	421	56	561	68	701	86	841	103	1121	128	
8,000	262	32	524	64	786	104	1048	128	1310	160	1572	192	2096	240	
5,560	182	22	364	44	546	72	728	89	910	111	1093	133	1457	167	
10,000	328	40	655	80	983	130	1310	160	1638	200	1965	240	2620	300	
7,000	229	28	459	56	688	91	917	112	1146	140	1376	168	1834	210	
12,000	393	48	786	96	1179	156	1572	192	1965	240	2358	288	3144	360	
8,550	280	34	560	68	840	111	1120	137	1400	171	1680	205	2240	257	
15,000	491	60	983	120	1474	195	1965	240	2456	300	2948	360	3930	450	
10,500	344	42	688	84	1032	137	1376	168	1719	210	2063	252	2751	315	
18,000	590	72	1179	144	1769	234	2358	288	2948	360	3537	432	4716	540	
12,600	413	50	825	101	1238	164	1651	202	2063	252	2476	302	3301	378	

**STARTING RECOMMENDED 350 Series Speeds/Feeds**



MADE IN THE USA

Highest RPM RANGE	Tool Size	1/8"		1/4"		3/8"		1/2"		5/8"		3/4"		1"	
		.002"CPT		.004"CPT		.0065"CPT		.008"CPT		.010"CPT		.012"CPT		.015"CPT	
		SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM	SFM	IPM
4,000	130	24	260	48	400	79	525	96	660	121	800	147	1050	180	
2,900	95	17	191	33	284	56	380	67	476	85	571	103	760	126	
6,000	200	37	390	72	590	117	790	145	990	182	1175	215	1550	266	
4,280	141	26	282	50	419	82	561	101	702	127	843	151	1121	187	
8,000	260	48	525	96	790	157	1050	193	1300	238	1580	290	2100	361	
5,560	183	33	367	67	545	110	728	135	912	167	1095	203	1457	253	
10,000	328	60	650	119	975	194	1310	240	1650	303	1950	358	2500	430	
7,000	231	42	469	83	686	136	917	168	1148	212	1379	250	1834	301	
12,000	400	73	790	145	1180	234	1570	288	1950	358	2375	435	3150	541	
8,550	282	51	573	101	838	164	1120	202	1402	250	1684	305	2240	379	
15,000	490	90	985	181	1470	292	1950	358	2455	450	2950	541	3900	670	
10,500	347	63	704	126	103	204	1376	250	1722	315	2069	379	2751	469	
18,000	590	108	1175	215	1775	353	2358	431	2950	541	3550	651	4700	808	
12,600	416	76	844	151	1234	247	1651	302	2066	379	2482	456	3301	566	

RADIAL: 30% CUTTER DIAMETER (Full DOC)  
SLOTING DEPTH: 1 X CUTTER DIA.

Legend:

CPT:	Chip per tooth
SFM:	Surface feet per minute
IPM:	Inches per minute
DOC:	Depth of cut
FPT:	Feed per Turn

Formulas:

SFM=	.262 x Dia. X RPM
RPM=	3.82 x SFM/DIA.
IPM=	FPT x No. Teeth X RPM
FPT=	IPM/ (No. Teeth x RPM)
IPR=	IPM/RPM

Example: 1/2" cutter with .150" Radial engagement (30% of 1/2")  
at 4,000 RPM & 96 IPM, tool will have .008" CPT  
at 18,000 RPM & 431 IPM, tool will have .008" CPT



**BENCHMARK**  
CARBIDE

**ALUMINUM 350 SERIES**

**ALUMINUM 250 SERIES**



**EXPANDED NECK LENGTHS AND RADIUS OPTIONS**

250 SERIES - 2 FLUTE NECKED WITH RADIUS FOR ALUMINUM



DIA	SHANK DIA	LOC	OAL	(LBS) LENGTH BELOW SHK	RAD	ZIRCONIUM C5	LIST PRICE
1/8	1/8	1/4	1-1/2	1/2	.020	250-12504-N08-020C5	\$ 40.14
1/8	1/8	1/4	1-1/2	1/2	.030	250-12504-N08-030C5	\$ 40.14
1/8	1/8	1/4	3	1-3/8	.020	250-12504-NS22-020-C5	\$ 51.94
1/8	1/8	1/4	3	1-3/8	.030	250-12504-NS22-030-C5	\$ 51.94
3/16	3/16	5/16	2	1/2	.010	250-18705-N08-010-C5	\$ 41.03
3/16	3/16	5/16	2	1/2	.030	250-18705-N08-030-C5	\$ 41.03
3/16	3/16	5/16	3	1-3/8	.010	250-18705-NS22-010-C5	\$ 54.71
3/16	3/16	5/16	3	1-3/8	.030	250-18705-NS22-030-C5	\$ 54.71
1/4	1/4	3/8	2-1/2	1-1/8	.015	250-25006-N18-015-C5	\$ 58.10
1/4	1/4	3/8	2-1/2	1-1/8	.030	250-25006-N18-030-C5	\$ 58.10
1/4	1/4	3/8	2-1/2	1-1/8	.060	250-25006-N18-060-C5	\$ 58.10
1/4	1/4	3/8	2-1/2	1-1/8	.090	250-25006-N18-090-C5	\$ 58.10
1/4	1/4	3/8	4	2-1/8	.015	250-25006-NS34-015C5	\$ 74.74
1/4	1/4	3/8	4	2-1/8	.030	250-25006-NS34-030C5	\$ 74.74
1/4	1/4	3/8	4	2-1/8	.060	250-25006-NS34-060C5	\$ 74.74
1/4	1/4	3/8	4	2-1/8	.090	250-25006-NS34-090C5	\$ 74.74
1/4	1/4	3/4	4	2-1/8	.015	250-25012-NS34-015-C5	\$ 78.07
1/4	1/4	3/4	4	2-1/8	.030	250-25012-NS34-030-C5	\$ 78.07
1/4	1/4	3/4	4	2-1/8	.060	250-25012-NS34-060-C5	\$ 78.07
1/4	1/4	3/4	4	2-1/8	.090	250-25012-NS34-090-C5	\$ 78.07
5/16	5/16	7/16	2-1/2	1-1/8	.015	250-31207-N18-015-C5	\$ 73.82
5/16	5/16	13/16	4	2-1/8	.015	250-31213-NS34-015-C5	\$ 80.07
3/8	3/8	1/2	4	2-1/8	.030	250-37508-NS34-030-C5	\$ 78.50
1/2	1/2	5/8	3	1-3/8	.015	250-50010-N22-015-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.020	250-50010-N22-020-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.030	250-50010-N22-030-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.060	250-50010-N22-060-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.090	250-50010-N22-090-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.120	250-50010-N22-120-C5	\$ 93.95
1/2	1/2	5/8	4	2-3/8	.015	250-50010-NS38-015-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.020	250-50010-NS38-020-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.030	250-50010-NS38-030-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.060	250-50010-NS38-060-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.090	250-50010-NS38-090-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.120	250-50010-NS38-120-C5	\$ 134.97
1/2	1/2	5/8	6	3-3/8	.015	250-50010-NS54-015-C5	\$ 175.14
1/2	1/2	5/8	6	3-3/8	.020	250-50010-NS54-020-C5	\$ 175.14
1/2	1/2	5/8	6	3-3/8	.030	250-50010-NS54-030-C5	\$ 175.14
1/2	1/2	5/8	6	3-3/8	.060	250-50010-NS54-060-C5	\$ 175.14
1/2	1/2	5/8	6	3-3/8	.090	250-50010-NS54-090-C5	\$ 175.14
1/2	1/2	5/8	6	3-3/8	.120	250-50010-NS54-120-C5	\$ 175.14
1/2	1/2	1-1/4	6	3-3/8	.015	250-50020-NS54-015-C5	\$ 190.41
1/2	1/2	1-1/4	6	3-3/8	.030	250-50020-NS54-030-C5	\$ 190.41
1/2	1/2	1-1/4	6	3-3/8	.060	250-50020-NS54-060-C5	\$ 190.41
1/2	1/2	1-1/4	6	3-3/8	.090	250-50020-NS54-090-C5	\$ 190.41
1/2	1/2	1-1/4	6	3-3/8	.120	250-50020-NS54-120-C5	\$ 190.41

250 SERIES - 2 FLUTE NECKED WITH RADIUS FOR ALUMINUM



DIA	SHANK DIA	LOC	OAL	(LBS) LENGTH BELOW SHK	RAD	ZIRCONIUM C5	LIST PRICE
5/8	5/8	3/4	3-1/2	1-5/8	.030	250-62512-N26-030-C5	\$ 167.84
5/8	5/8	3/4	3-1/2	1-5/8	.060	250-62512-N26-060-C5	\$ 167.84
5/8	5/8	3/4	3-1/2	1-5/8	.090	250-62512-N26-090-C5	\$ 167.84
5/8	5/8	3/4	3-1/2	1-5/8	.120	250-62512-N26-120-C5	\$ 167.84
5/8	5/8	3/4	5	2-3/8	.030	250-62512-NS38-030-C5	\$ 219.83
5/8	5/8	3/4	5	2-3/8	.060	250-62512-NS38-060-C5	\$ 219.83
5/8	5/8	3/4	5	2-3/8	.090	250-62512-NS38-090-C5	\$ 219.83
5/8	5/8	3/4	5	2-3/8	.120	250-62512-NS38-120-C5	\$ 219.83
5/8	5/8	3/4	6	3-3/8	.030	250-62512-NS54-030-C5	\$ 254.80
5/8	5/8	3/4	6	3-3/8	.060	250-62512-NS54-060-C5	\$ 254.80
5/8	5/8	3/4	6	3-3/8	.090	250-62512-NS54-090-C5	\$ 254.80
5/8	5/8	3/4	6	3-3/8	.120	250-62512-NS54-120-C5	\$ 254.80
5/8	5/8	1-5/8	6	3-3/8	.030	250-62526-NS54-030-C5	\$ 277.74
5/8	5/8	1-5/8	6	3-3/8	.060	250-62526-NS54-060-C5	\$ 277.74
5/8	5/8	1-5/8	6	3-3/8	.090	250-62526-NS54-090-C5	\$ 277.74
5/8	5/8	1-5/8	6	3-3/8	.120	250-62526-NS54-120-C5	\$ 277.74
3/4	3/4	1	4	1-5/8	.030	250-75016-N26-030-C5	\$ 221.24
3/4	3/4	1	4	1-5/8	.060	250-75016-N26-060-C5	\$ 221.24
3/4	3/4	1	4	1-5/8	.090	250-75016-N26-090-C5	\$ 221.24
3/4	3/4	1	4	1-5/8	.120	250-75016-N26-120-C5	\$ 221.24
3/4	3/4	1	5	2-1/2	.030	250-75016-NS40-030-C5	\$ 236.79
3/4	3/4	1	5	2-1/2	.060	250-75016-NS40-060-C5	\$ 236.79
3/4	3/4	1	5	2-1/2	.090	250-75016-NS40-090-C5	\$ 236.79
3/4	3/4	1	5	2-1/2	.120	250-75016-NS40-120-C5	\$ 236.79
3/4	3/4	1	6	3-3/8	.030	250-75016-NS54-030-C5	\$ 267.53
3/4	3/4	1	6	3-3/8	.060	250-75016-NS54-060-C5	\$ 267.53
3/4	3/4	1	6	3-3/8	.090	250-75016-NS54-090-C5	\$ 267.53
3/4	3/4	1	6	3-3/8	.120	250-75016-NS54-120-C5	\$ 267.53
3/4	3/4	1-5/8	6	3-3/8	.030	250-75026-NS54-030-C5	\$ 297.47
3/4	3/4	1-5/8	6	3-3/8	.060	250-75026-NS54-060-C5	\$ 297.47
3/4	3/4	1-5/8	6	3-3/8	.090	250-75026-NS54-090-C5	\$ 297.47
3/4	3/4	1-5/8	6	3-3/8	.120	250-75026-NS54-120-C5	\$ 297.47
1	1	1-1/4	5	2-1/8	.030	250-10020-N34-030-C5	\$ 333.11
1	1	1-1/4	5	2-1/8	.060	250-10020-N34-060-C5	\$ 333.11
1	1	1-1/4	5	2-1/8	.090	250-10020-N34-090-C5	\$ 333.11
1	1	1-1/4	5	2-1/8	.120	250-10020-N34-120-C5	\$ 333.11
1	1	1-1/4	6	3-3/8	.030	250-10020-NS54-030-C5	\$ 422.10
1	1	1-1/4	6	3-3/8	.060	250-10020-NS54-060-C5	\$ 422.10
1	1	1-1/4	6	3-3/8	.090	250-10020-NS54-090-C5	\$ 422.10
1	1	1-1/4	6	3-3/8	.120	250-10020-NS54-120-C5	\$ 422.10
1	1	1-1/4	7	4-3/8	.030	250-10020-NS70-030-C5	\$ 472.89
1	1	1-1/4	7	4-3/8	.060	250-10020-NS70-060-C5	\$ 472.89
1	1	1-1/4	7	4-3/8	.090	250-10020-NS70-090-C5	\$ 472.89
1	1	1-1/4	7	4-3/8	.120	250-10020-NS70-120-C5	\$ 472.89
1	1	2	7	4-3/8	.030	250-10032-NS70-030-C5	\$ 542.06
1	1	2	7	4-3/8	.060	250-10032-NS70-060-C5	\$ 542.06
1	1	2	7	4-3/8	.090	250-10032-NS70-090-C5	\$ 542.06
1	1	2	7	4-3/8	.120	250-10032-NS70-120-C5	\$ 542.06

350 SERIES - 3 FLUTE NECKED WITH RADIUS FOR ALUMINUM



DIA	SHANK DIA	LOC	OAL	(LBS) LENGTH BELOW SHK	RAD	ZIRCONIUM C5	LIST PRICE
1/8	1/8	1/4	1-1/2	1/2	.020	350-12504-N08-020C5	\$ 40.14
1/8	1/8	1/4	1-1/2	1/2	.030	350-12504-N08-030C5	\$ 40.14
1/8	1/8	1/4	3	1-3/8	.020	350-12504-NS22-020-C5	\$ 51.94
1/8	1/8	1/4	3	1-3/8	.030	350-12504-NS22-030-C5	\$ 51.94
3/16	3/16	5/16	2	1/2	.010	350-18705-N08-010-C5	\$ 41.03
3/16	3/16	5/16	2	1/2	.030	350-18705-N08-030-C5	\$ 41.03
3/16	3/16	5/16	3	1-3/8	.010	350-18705-NS22-010-C5	\$ 54.71
3/16	3/16	5/16	3	1-3/8	.030	350-18705-NS22-030-C5	\$ 54.71
1/4	1/4	3/8	2-1/2	1-1/8	.015	350-25006-N18-015-C5	\$ 58.10
1/4	1/4	3/8	2-1/2	1-1/8	.030	350-25006-N18-030-C5	\$ 58.10
1/4	1/4	3/8	2-1/2	1-1/8	.060	350-25006-N18-060-C5	\$ 58.10
1/4	1/4	3/8	2-1/2	1-1/8	.090	350-25006-N18-090-C5	\$ 58.10
1/4	1/4	3/8	4	2-1/8	.015	350-25006-NS34-015C5	\$ 74.74
1/4	1/4	3/8	4	2-1/8	.030	350-25006-NS34-030C5	\$ 74.74
1/4	1/4	3/8	4	2-1/8	.060	350-25006-NS34-060C5	\$ 74.74
1/4	1/4	3/8	4	2-1/8	.090	350-25006-NS34-090C5	\$ 74.74
1/4	1/4	3/4	4	2-1/8	.015	350-25012-NS34-015-C5	\$ 78.07
1/4	1/4	3/4	4	2-1/8	.030	350-25012-NS34-030-C5	\$ 78.07
1/4	1/4	3/4	4	2-1/8	.060	350-25012-NS34-060-C5	\$ 78.07
1/4	1/4	3/4	4	2-1/8	.090	350-25012-NS34-090-C5	\$ 78.07
5/16	5/16	7/16	2-1/2	1-1/8	.015	350-31207-N18-015-C5	\$ 73.82
5/16	5/16	13/16	4	2-1/8	.015	350-31213-NS34-015-C5	\$ 80.07
3/8	3/8	1/2	4	2-1/8	.030	350-37508-NS34-030-C5	\$ 78.50
1/2	1/2	5/8	3	1-3/8	.015	350-50010-N22-015-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.020	350-50010-N22-020-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.030	350-50010-N22-030-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.060	350-50010-N22-060-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.090	350-50010-N22-090-C5	\$ 93.95
1/2	1/2	5/8	3	1-3/8	.120	350-50010-N22-120-C5	\$ 93.95
1/2	1/2	5/8	4	2-3/8	.015	350-50010-NS38-015-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.020	350-50010-NS38-020-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.030	350-50010-NS38-030-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.060	350-50010-NS38-060-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.090	350-50010-NS38-090-C5	\$ 134.97
1/2	1/2	5/8	4	2-3/8	.120	350-50010-NS38-120-C5	\$ 134.97
1/2	1/2	5/8	6	3-3/8	.015	350-50010-NS54-015-C5	\$ 175.14
1/2	1/2	5					