



# Titanium & High Temp Alloys



Carbide	4 Flute Center Cutting	Variable	AlTiSiN	+0.00 / -.002	HRC <54			Series: Ti4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	4		1/4	1-1/2	SQ	Ti4-S-.1250-SQ	400000	\$ 21.88
1/8	1/8	4		1/4	1-1/2	0.010	Ti4-S-.1250-R.010	400010	\$ 22.20
1/8	1/8	4		1/4	1-1/2	0.015	Ti4-S-.1250-R.015	400020	\$ 22.20
1/8	1/8	4		1/4	1-1/2	BALL	Ti4-S-.1250-BN	400030	\$ 29.36
1/8	1/8	4		1/2	2	SQ	Ti4-R-.1250-SQ	400040	\$ 22.51
1/8	1/8	4		1/2	2	0.010	Ti4-R-.1250-R.010	400050	\$ 22.85
1/8	1/8	4		1/2	2	0.015	Ti4-R-.1250-R.015	400060	\$ 22.85
1/8	1/8	4		1/2	2	BALL	Ti4-R-.1250-BN	400070	\$ 30.16
1/8	1/8	4		3/4	2-1/2	SQ	Ti4-M-.1250-SQ	400080	\$ 26.00
1/8	1/8	4		3/4	2-1/2	0.010	Ti4-M-.1250-R.010	400090	\$ 35.11
1/8	1/8	4		3/4	2-1/2	0.015	Ti4-M-.1250-R.015	400100	\$ 35.11
1/8	1/8	4		3/4	2-1/2	BALL	Ti4-M-.1250-BN	400110	\$ 34.59
3/16	3/16	4		5/16	2	SQ	Ti4-S-.1875-SQ	400120	\$ 26.17
3/16	3/16	4		5/16	2	0.010	Ti4-S-.1875-R.010	400130	\$ 26.53
3/16	3/16	4		5/16	2	0.015	Ti4-S-.1875-R.015	400140	\$ 26.53
3/16	3/16	4		5/16	2	0.030	Ti4-S-.1875-R.030	400150	\$ 30.91
3/16	3/16	4		5/16	2	BALL	Ti4-S-.1875-BN	400160	\$ 34.83
3/16	3/16	4		9/16	2	SQ	Ti4-R-.1875-SQ	400170	\$ 28.22
3/16	3/16	4		9/16	2	0.010	Ti4-R-.1875-R.010	400180	\$ 28.63
3/16	3/16	4		9/16	2	0.015	Ti4-R-.1875-R.015	400190	\$ 28.63
3/16	3/16	4		9/16	2	0.030	Ti4-R-.1875-R.030	400200	\$ 33.64
3/16	3/16	4		9/16	2	BALL	Ti4-R-.1875-BN	400210	\$ 37.45
3/16	3/16	4		3/4	2-1/2	SQ	Ti4-M-.1875-SQ	400220	\$ 29.19
3/16	3/16	4		3/4	2-1/2	0.010	Ti4-M-.1875-R.010	400230	\$ 38.82
3/16	3/16	4		3/4	2-1/2	0.015	Ti4-M-.1875-R.015	400240	\$ 38.82
3/16	3/16	4		3/4	2-1/2	0.030	Ti4-M-.1875-R.030	400250	\$ 38.82
3/16	3/16	4		3/4	2-1/2	BALL	Ti4-M-.1875-BN	400260	\$ 39.66
1/4	1/4	4		3/8	2	SQ	Ti4-S-.2500-SQ	400270	\$ 32.04
1/4	1/4	4		3/8	2	0.015	Ti4-S-.2500-R.015	400280	\$ 35.58
1/4	1/4	4		3/8	2	0.030	Ti4-S-.2500-R.030	400290	\$ 35.58
1/4	1/4	4		3/8	2	0.060	Ti4-S-.2500-R.060	400300	\$ 38.97
1/4	1/4	4		3/8	2	BALL	Ti4-S-.2500-BN	400310	\$ 42.49
1/4	1/4	4		1/2	2-1/2	SQ	Ti4-T-.2500-SQ	400320	\$ 36.82
1/4	1/4	4		1/2	2-1/2	0.015	Ti4-T-.2500-R.015	400330	\$ 38.65
1/4	1/4	4		1/2	2-1/2	0.030	Ti4-T-.2500-R.030	400340	\$ 38.65
1/4	1/4	4		1/2	2-1/2	0.060	Ti4-T-.2500-R.060	400350	\$ 41.35
1/4	1/4	4		1/2	2-1/2	BALL	Ti4-T-.2500-BN	400360	\$ 48.67
1/4	1/4	4		3/4	2-1/2	SQ	Ti4-R-.2500-SQ	400370	\$ 39.01
1/4	1/4	4		3/4	2-1/2	0.015	Ti4-R-.2500-R.015	400380	\$ 41.51
1/4	1/4	4		3/4	2-1/2	0.030	Ti4-R-.2500-R.030	400390	\$ 41.51
1/4	1/4	4		3/4	2-1/2	0.060	Ti4-R-.2500-R.060	400400	\$ 44.42
1/4	1/4	4		3/4	2-1/2	BALL	Ti4-R-.2500-BN	400410	\$ 49.55
1/4	1/4	4		1-1/4	3	SQ	Ti4-L-.2500-SQ	400420	\$ 47.39
1/4	1/4	4		1-1/4	3	0.015	Ti4-L-.2500-R.015	400430	\$ 57.77
1/4	1/4	4		1-1/4	3	0.030	Ti4-L-.2500-R.030	400440	\$ 57.77
1/4	1/4	4		1-1/4	3	0.060	Ti4-L-.2500-R.060	400450	\$ 59.40
1/4	1/4	4		1-1/4	3	BALL	Ti4-L-.2500-BN	400460	\$ 61.78
5/16	5/16	4		7/16	2	SQ	Ti4-S-.3125-SQ	400470	\$ 40.88
5/16	5/16	4		7/16	2	0.015	Ti4-S-.3125-R.015	400480	\$ 45.68
5/16	5/16	4		7/16	2	0.030	Ti4-S-.3125-R.030	400490	\$ 45.68
5/16	5/16	4		7/16	2	0.060	Ti4-S-.3125-R.060	400500	\$ 53.40
5/16	5/16	4		7/16	2	BALL	Ti4-S-.3125-BN	400510	\$ 54.71
5/16	5/16	4		13/16	2-1/2	SQ	Ti4-R-.3125-SQ	400520	\$ 48.54
5/16	5/16	4		13/16	2-1/2	0.015	Ti4-R-.3125-R.015	400530	\$ 52.75
5/16	5/16	4		13/16	2-1/2	0.030	Ti4-R-.3125-R.030	400540	\$ 52.75
5/16	5/16	4		13/16	2-1/2	0.060	Ti4-R-.3125-R.060	400550	\$ 61.64
5/16	5/16	4		13/16	2-1/2	BALL	Ti4-R-.3125-BN	400560	\$ 65.60
5/16	5/16	4		1	3	SQ	Ti4-M-.3125-SQ	400570	\$ 56.17
5/16	5/16	4		1	3	0.015	Ti4-M-.3125-R.015	400580	\$ 67.27
5/16	5/16	4		1	3	0.030	Ti4-M-.3125-R.030	400590	\$ 67.27
5/16	5/16	4		1	3	0.060	Ti4-M-.3125-R.060	400600	\$ 68.89
5/16	5/16	4		1	3	BALL	Ti4-M-.3125-BN	400610	\$ 74.74
3/8	3/8	4		1/2	2	SQ	Ti4-S-.3750-SQ	400620	\$ 54.37
3/8	3/8	4		1/2	2	0.015	Ti4-S-.3750-R.015	400630	\$ 57.33
3/8	3/8	4	1-1/8	1/2	4	0.015	Ti4-S-.3750-R.015-RN1	400631	\$ 89.49
3/8	3/8	4	2-1/8	1/2	4	0.015	Ti4-SR-.3750-R.015-RN2	400632	\$ 94.83
3/8	3/8	4	3-1/8	1/2	6	0.015	Ti4-SM-.3750-R.015-RN3	400633	\$ 126.42
3/8	3/8	4	4-1/8	1/2	6	0.015	Ti4-SL-.3750-R.015-RN4	400634	\$ 135.52
3/8	3/8	4		1/2	2	0.030	Ti4-S-.3750-R.030	400640	\$ 57.33
3/8	3/8	4		1/2	2	0.060	Ti4-S-.3750-R.060	400650	\$ 61.86
3/8	3/8	4		1/2	2	BALL	Ti4-S-.3750-BN	400660	\$ 68.90

## Titanium & High Temp Alloys



Carbide	4 Flute Center Cutting	Variable	AlTiSiN	+0.000 / -.002	HRC <54			Series: Ti4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
3/8	3/8	4		1	2-1/2	SQ	Ti4-R-.3750-SQ	400670	\$ 58.41
3/8	3/8	4		1	2-1/2	0.015	Ti4-R-.3750-R.015	400680	\$ 63.18
3/8	3/8	4		1	2-1/2	0.030	Ti4-R-.3750-R.030	400690	\$ 63.18
3/8	3/8	4		1	2-1/2	0.060	Ti4-R-.3750-R.060	400700	\$ 65.20
3/8	3/8	4		1	2-1/2	BALL	Ti4-R-.3750-BN	400710	\$ 74.81
3/8	3/8	4		1-1/4	3	SQ	Ti4-M-.3750-SQ	400720	\$ 67.64
3/8	3/8	4		1-1/4	3	0.015	Ti4-M-.3750-R.015	400730	\$ 75.81
3/8	3/8	4		1-1/4	3	0.030	Ti4-M-.3750-R.030	400740	\$ 75.81
3/8	3/8	4		1-1/4	3	0.060	Ti4-M-.3750-R.060	400750	\$ 77.75
3/8	3/8	4		1-1/4	3	BALL	Ti4-M-.3750-BN	400760	\$ 84.56
3/8	3/8	4		1-3/4	4	SQ	Ti4-L-.3750-SQ	400770	\$ 72.59
3/8	3/8	4		1-3/4	4	0.015	Ti4-L-.3750-R.015	400780	\$ 81.12
3/8	3/8	4		1-3/4	4	0.030	Ti4-L-.3750-R.030	400790	\$ 81.12
3/8	3/8	4		1-3/4	4	0.060	Ti4-L-.3750-R.060	400800	\$ 82.98
3/8	3/8	4		1-3/4	4	BALL	Ti4-L-.3750-BN	400810	\$ 90.78
1/2	1/2	4		5/8	2-1/2	SQ	Ti4-S-.5000-SQ	400820	\$ 86.93
1/2	1/2	4	1-1/2	5/8	4	SQ	Ti4-S-.5000-SQ-RN1	400821	\$ 123.06
1/2	1/2	4	2-1/4	5/8	4	SQ	Ti4-SR-.5000-SQ-RN2	400822	\$ 132.31
1/2	1/2	4	3-3/8	5/8	6	SQ	Ti4-SM-.5000-SQ-RN3	400823	\$ 191.85
1/2	1/2	4	4-1/8	5/8	6	SQ	Ti4-SL-.5000-SQ-RN4	400824	\$ 198.26
1/2	1/2	4		5/8	2-1/2	0.015	Ti4-S-.5000-R.015	400830	\$ 91.64
1/2	1/2	4	1-1/2	5/8	4	0.015	Ti4-S-.5000-R.015-RN1	400831	\$ 131.76
1/2	1/2	4	2-1/4	5/8	4	0.015	Ti4-SR-.5000-R.015-RN2	400832	\$ 141.47
1/2	1/2	4	3-3/8	5/8	6	0.015	Ti4-SM-.5000-R.015-RN3	400833	\$ 202.76
1/2	1/2	4	4-1/8	5/8	6	0.015	Ti4-SL-.5000-R.015-RN4	400834	\$ 209.00
1/2	1/2	4		5/8	2-1/2	0.030	Ti4-S-.5000-R.030	400840	\$ 91.64
1/2	1/2	4	1-1/2	5/8	4	0.030	Ti4-S-.5000-R.030-RN1	400841	\$ 131.76
1/2	1/2	4	2-1/4	5/8	4	0.030	Ti4-SR-.5000-R.030-RN2	400842	\$ 141.47
1/2	1/2	4	3-3/8	5/8	6	0.030	Ti4-SM-.5000-R.030-RN3	400843	\$ 202.76
1/2	1/2	4	4-1/8	5/8	6	0.030	Ti4-SL-.5000-R.030-RN4	400844	\$ 209.00
1/2	1/2	4		5/8	2-1/2	0.060	Ti4-S-.5000-R.060	400850	\$ 98.71
1/2	1/2	4	1-1/2	5/8	4	0.060	Ti4-S-.5000-R.060-RN1	400851	\$ 131.76
1/2	1/2	4	2-1/4	5/8	4	0.060	Ti4-SR-.5000-R.060-RN2	400852	\$ 141.47
1/2	1/2	4	3-3/8	5/8	6	0.060	Ti4-SM-.5000-R.060-RN3	400853	\$ 202.76
1/2	1/2	4	4-1/8	5/8	6	0.060	Ti4-SL-.5000-R.060-RN4	400854	\$ 209.00
1/2	1/2	4		5/8	2-1/2	BALL	Ti4-S-.5000-BN	400860	\$ 106.82
1/2	1/2	4	1-1/2	5/8	4	BALL	Ti4-S-.5000-BN-RN1	400861	\$ 155.30
1/2	1/2	4	2-1/4	5/8	4	BALL	Ti4-SR-.5000-BN-RN2	400862	\$ 164.18
1/2	1/2	4	3-3/8	5/8	6	BALL	Ti4-SM-.5000-BN-RN3	400863	\$ 221.85
1/2	1/2	4	4-1/8	5/8	6	BALL	Ti4-SL-.5000-BN-RN4	400864	\$ 229.01
1/2	1/2	4		1	3	SQ	Ti4-T-.5000-SQ	400870	\$ 91.72
1/2	1/2	4		1	3	0.015	Ti4-T-.5000-R.015	400880	\$ 95.32
1/2	1/2	4		1	3	0.030	Ti4-T-.5000-R.030	400890	\$ 95.32
1/2	1/2	4		1	3	0.060	Ti4-T-.5000-R.060	400900	\$ 101.79
1/2	1/2	4		1	3	BALL	Ti4-T-.5000-BN	400910	\$ 109.99
1/2	1/2	4		1-1/4	3	SQ	Ti4-R-.5000-SQ	400920	\$ 95.05
1/2	1/2	4		1-1/4	3	0.015	Ti4-R-.5000-R.015	400930	\$ 98.66
1/2	1/2	4		1-1/4	3	0.030	Ti4-R-.5000-R.030	400940	\$ 98.66
1/2	1/2	4		1-1/4	3	0.060	Ti4-R-.5000-R.060	400950	\$ 103.19
1/2	1/2	4		1-1/4	3	BALL	Ti4-R-.5000-BN	400960	\$ 112.71
1/2	1/2	4		1-5/8	4	SQ	Ti4-M-.5000-SQ	400970	\$ 117.19
1/2	1/2	4		1-5/8	4	0.015	Ti4-M-.5000-R.015	400980	\$ 122.89
1/2	1/2	4		1-5/8	4	0.030	Ti4-M-.5000-R.030	400990	\$ 122.89
1/2	1/2	4		1-5/8	4	0.060	Ti4-M-.5000-R.060	401000	\$ 124.95
1/2	1/2	4		1-5/8	4	BALL	Ti4-M-.5000-BN	401010	\$ 135.47
1/2	1/2	4		2	4	SQ	Ti4-L-.5000-SQ	401020	\$ 119.31
1/2	1/2	4		2	4	0.015	Ti4-L-.5000-R.015	401030	\$ 127.85
1/2	1/2	4		2	4	0.030	Ti4-L-.5000-R.030	401040	\$ 127.85
1/2	1/2	4		2	4	0.060	Ti4-L-.5000-R.060	401050	\$ 129.60
1/2	1/2	4		2	4	BALL	Ti4-L-.5000-BN	401060	\$ 137.59
5/8	5/8	4		3/4	3	SQ	Ti4-S-.6250-SQ	401070	\$ 165.69
5/8	5/8	4		3/4	3	0.015	Ti4-S-.6250-R.015	401080	\$ 170.76
5/8	5/8	4		3/4	3	0.030	Ti4-S-.6250-R.030	401090	\$ 170.76
5/8	5/8	4		3/4	3	0.060	Ti4-S-.6250-R.060	401100	\$ 174.46
5/8	5/8	4		3/4	3	BALL	Ti4-S-.6250-BN	401110	\$ 192.75
5/8	5/8	4		1-1/4	3-1/2	SQ	Ti4-T-.6250-SQ	401120	\$ 167.70
5/8	5/8	4		1-1/4	3-1/2	0.015	Ti4-T-.6250-R.015	401130	\$ 176.46
5/8	5/8	4		1-1/4	3-1/2	0.030	Ti4-T-.6250-R.030	401140	\$ 176.46
5/8	5/8	4		1-1/4	3-1/2	0.060	Ti4-T-.6250-R.060	401150	\$ 180.32
5/8	5/8	4		1-1/4	3-1/2	BALL	Ti4-T-.6250-BN	401160	\$ 196.85
5/8	5/8	4		1-5/8	3-1/2	SQ	Ti4-R-.6250-SQ	401170	\$ 182.48
5/8	5/8	4		1-5/8	3-1/2	0.015	Ti4-R-.6250-R.015	401180	\$ 187.10
5/8	5/8	4		1-5/8	3-1/2	0.030	Ti4-R-.6250-R.030	401190	\$ 187.10
5/8	5/8	4		1-5/8	3-1/2	0.060	Ti4-R-.6250-R.060	401200	\$ 197.27
5/8	5/8	4		1-5/8	3-1/2	BALL	Ti4-R-.6250-BN	401210	\$ 214.40

## Titanium & High Temp Alloys



Carbide	4 Flute Center Cutting	Variable	AlTiSiN	+ .000 / -.002	HRC <54			Series: Ti4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
5/8	5/8	4		2-1/8	4	SQ	Ti4-M-.6250-SQ	401220	\$ 194.64
5/8	5/8	4		2-1/8	4	0.015	Ti4-M-.6250-R.015	401230	\$ 204.34
5/8	5/8	4		2-1/8	4	0.030	Ti4-M-.6250-R.030	401240	\$ 204.34
5/8	5/8	4		2-1/8	4	0.060	Ti4-M-.6250-R.060	401250	\$ 206.72
5/8	5/8	4		2-1/8	4	BALL	Ti4-M-.6250-BN	401260	\$ 222.33
5/8	5/8	4		2-1/2	5	SQ	Ti4-L-.6250-SQ	401270	\$ 230.69
5/8	5/8	4		2-1/2	5	0.015	Ti4-L-.6250-R.015	401280	\$ 239.55
5/8	5/8	4		2-1/2	5	0.030	Ti4-L-.6250-R.030	401290	\$ 239.55
5/8	5/8	4		2-1/2	5	0.060	Ti4-L-.6250-R.060	401300	\$ 241.12
5/8	5/8	4		2-1/2	5	BALL	Ti4-L-.6250-BN	401310	\$ 257.04
3/4	3/4	4		1	3	SQ	Ti4-S-.7500-SQ	401320	\$ 256.51
3/4	3/4	4	2	1	4	SQ	Ti4-S-.7500-SQ-RN1	401321	\$ 274.27
3/4	3/4	4	2-1/2	1	4	SQ	Ti4-SR-.7500-SQ-RN2	401322	\$ 337.70
3/4	3/4	4	3-3/8	1	6	SQ	Ti4-SM-.7500-SQ-RN3	401323	\$ 353.75
3/4	3/4	4	4-1/8	1	6	SQ	Ti4-SL-.7500-SQ-RN4	401324	\$ 359.79
3/4	3/4	4		1	3	0.015	Ti4-S-.7500-R.015	401330	\$ 263.47
3/4	3/4	4		1	3	0.030	Ti4-S-.7500-R.030	401340	\$ 263.47
3/4	3/4	4		1	3	0.060	Ti4-S-.7500-R.060	401350	\$ 267.10
3/4	3/4	4		1	3	BALL	Ti4-S-.7500-BN	401360	\$ 295.94
3/4	3/4	4		1-5/8	4	SQ	Ti4-R-.7500-SQ	401370	\$ 264.23
3/4	3/4	4		1-5/8	4	0.015	Ti4-R-.7500-R.015	401380	\$ 271.33
3/4	3/4	4		1-5/8	4	0.030	Ti4-R-.7500-R.030	401390	\$ 271.33
3/4	3/4	4		1-5/8	4	0.060	Ti4-R-.7500-R.060	401400	\$ 275.78
3/4	3/4	4		1-5/8	4	BALL	Ti4-R-.7500-BN	401410	\$ 307.79
3/4	3/4	4		2-1/4	5	SQ	Ti4-M-.7500-SQ	401420	\$ 284.23
3/4	3/4	4		2-1/4	5	0.015	Ti4-M-.7500-R.015	401430	\$ 294.55
3/4	3/4	4		2-1/4	5	0.030	Ti4-M-.7500-R.030	401440	\$ 297.55
3/4	3/4	4		2-1/4	5	0.060	Ti4-M-.7500-R.060	401450	\$ 302.15
3/4	3/4	4		2-1/4	5	BALL	Ti4-M-.7500-BN	401460	\$ 333.18
3/4	3/4	4		2-3/4	5	SQ	Ti4-L-.7500-SQ	401470	\$ 305.78
3/4	3/4	4		2-3/4	5	0.015	Ti4-L-.7500-R.015	401480	\$ 314.59
3/4	3/4	4		2-3/4	5	0.030	Ti4-L-.7500-R.030	401490	\$ 314.59
3/4	3/4	4		2-3/4	5	0.060	Ti4-L-.7500-R.060	401500	\$ 316.52
3/4	3/4	4		3-1/4	6	SQ	Ti4-X-.750-SQ	401510	\$ 341.34
3/4	3/4	4		3-1/4	6	0.015	Ti4-X-.750-R015	401520	\$ 350.04
3/4	3/4	4		3-1/4	6	0.030	Ti4-X-.750-R030	401530	\$ 350.04
3/4	3/4	4		3-1/4	6	0.060	Ti4-X-.750-R060	401540	\$ 339.72
3/4	3/4	4		3-1/4	6	0.120	Ti4-X-.750-R120	401550	\$ 365.79

# Titanium & High Temp Alloys



Carbide	5 Flute Center Cutting	Variable	AlTiSiN	+0.00 / -.002	HRC <54			Series: Ti5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	5		1/4	1-1/2	SQ	Ti5-S-.1250-SQ	500000	\$ 21.88
1/8	1/8	5		1/4	1-1/2	0.010	Ti5-S-.1250-R.010	500010	\$ 22.20
1/8	1/8	5		1/4	1-1/2	0.015	Ti5-S-.1250-R.015	500020	\$ 22.20
1/8	1/8	5		1/4	1-1/2	BALL	Ti5-S-.1250-BN	500030	\$ 29.36
1/8	1/8	5		1/2	2	SQ	Ti5-R-.1250-SQ	500040	\$ 22.51
1/8	1/8	5		1/2	2	0.010	Ti5-R-.1250-R.010	500050	\$ 22.85
1/8	1/8	5		1/2	2	0.015	Ti5-R-.1250-R.015	500060	\$ 22.85
1/8	1/8	5		1/2	2	BALL	Ti5-R-.1250-BN	500070	\$ 30.16
1/8	1/8	5		3/4	2-1/2	SQ	Ti5-M-.1250-SQ	500080	\$ 26.00
1/8	1/8	5		3/4	2-1/2	0.010	Ti5-M-.1250-R.010	500090	\$ 35.11
1/8	1/8	5		3/4	2-1/2	0.015	Ti5-M-.1250-R.015	500100	\$ 35.11
1/8	1/8	5		3/4	2-1/2	BALL	Ti5-M-.1250-BN	500110	\$ 34.59
3/16	3/16	5		5/16	2	SQ	Ti5-S-.1875-SQ	500120	\$ 26.17
3/16	3/16	5		5/16	2	0.010	Ti5-S-.1875-R.010	500130	\$ 26.53
3/16	3/16	5		5/16	2	0.015	Ti5-S-.1875-R.015	500140	\$ 26.53
3/16	3/16	5		5/16	2	0.030	Ti5-S-.1875-R.030	500150	\$ 30.91
3/16	3/16	5		5/16	2	BALL	Ti5-S-.1875-BN	500160	\$ 34.83
3/16	3/16	5		9/16	2	SQ	Ti5-R-.1875-SQ	500170	\$ 28.22
3/16	3/16	5		9/16	2	0.010	Ti5-R-.1875-R.010	500180	\$ 28.63
3/16	3/16	5		9/16	2	0.015	Ti5-R-.1875-R.015	500190	\$ 28.63
3/16	3/16	5		9/16	2	0.030	Ti5-R-.1875-R.030	500200	\$ 33.64
3/16	3/16	5		9/16	2	BALL	Ti5-R-.1875-BN	500210	\$ 37.45
3/16	3/16	5		3/4	2-1/2	SQ	Ti5-M-.1875-SQ	500220	\$ 29.19
3/16	3/16	5		3/4	2-1/2	0.010	Ti5-M-.1875-R.010	500230	\$ 38.82
3/16	3/16	5		3/4	2-1/2	0.015	Ti5-M-.1875-R.015	500240	\$ 38.82
3/16	3/16	5		3/4	2-1/2	0.030	Ti5-M-.1875-R.030	500250	\$ 38.82
3/16	3/16	5		3/4	2-1/2	BALL	Ti5-M-.1875-BN	500260	\$ 39.66
1/4	1/4	5		3/8	2	SQ	Ti5-S-.2500-SQ	500270	\$ 32.04
1/4	1/4	5		3/8	2	0.015	Ti5-S-.2500-R.015	500280	\$ 36.87
1/4	1/4	5		3/8	2	0.030	Ti5-S-.2500-R.030	500290	\$ 36.87
1/4	1/4	5		3/8	2	0.060	Ti5-S-.2500-R.060	500300	\$ 38.97
1/4	1/4	5		3/8	2	BALL	Ti5-S-.2500-BN	500310	\$ 42.49
1/4	1/4	5		1/2	2-1/2	SQ	Ti5-T-.2500-SQ	500320	\$ 37.14
1/4	1/4	5		1/2	2-1/2	0.015	Ti5-T-.2500-R.015	500330	\$ 40.42
1/4	1/4	5		1/2	2-1/2	0.030	Ti5-T-.2500-R.030	500340	\$ 40.42
1/4	1/4	5		1/2	2-1/2	0.060	Ti5-T-.2500-R.060	500350	\$ 43.25
1/4	1/4	5		1/2	2-1/2	BALL	Ti5-T-.2500-BN	500360	\$ 48.67
1/4	1/4	5		3/4	2-1/2	SQ	Ti5-R-.2500-SQ	500370	\$ 39.37
1/4	1/4	5		3/4	2-1/2	0.015	Ti5-R-.2500-R.015	500380	\$ 44.09
1/4	1/4	5		3/4	2-1/2	0.030	Ti5-R-.2500-R.030	500390	\$ 44.09
1/4	1/4	5		3/4	2-1/2	0.060	Ti5-R-.2500-R.060	500400	\$ 51.81
1/4	1/4	5		3/4	2-1/2	BALL	Ti5-R-.2500-BN	500410	\$ 53.54
1/4	1/4	5		1-1/4	3	SQ	Ti5-L-.2500-SQ	500420	\$ 47.39
1/4	1/4	5		1-1/4	3	0.015	Ti5-L-.2500-R.015	500430	\$ 57.77
1/4	1/4	5		1-1/4	3	0.030	Ti5-L-.2500-R.030	500440	\$ 57.77
1/4	1/4	5		1-1/4	3	0.060	Ti5-L-.2500-R.060	500450	\$ 59.40
1/4	1/4	5		1-1/4	3	BALL	Ti5-L-.2500-BN	500460	\$ 61.78
5/16	5/16	5		7/16	2	SQ	Ti5-S-.3125-SQ	500470	\$ 40.88
5/16	5/16	5		7/16	2	0.015	Ti5-S-.3125-R.015	500480	\$ 51.64
5/16	5/16	5		7/16	2	0.030	Ti5-S-.3125-R.030	500490	\$ 51.64
5/16	5/16	5		7/16	2	0.060	Ti5-S-.3125-R.060	500500	\$ 53.40
5/16	5/16	5		7/16	2	BALL	Ti5-S-.3125-BN	500510	\$ 54.71
5/16	5/16	5		13/16	2-1/2	SQ	Ti5-R-.3125-SQ	500520	\$ 48.87
5/16	5/16	5		13/16	2-1/2	0.015	Ti5-R-.3125-R.015	500530	\$ 55.21
5/16	5/16	5		13/16	2-1/2	0.030	Ti5-R-.3125-R.030	500540	\$ 55.21
5/16	5/16	5		13/16	2-1/2	0.060	Ti5-R-.3125-R.060	500550	\$ 61.64
5/16	5/16	5		13/16	2-1/2	BALL	Ti5-R-.3125-BN	500560	\$ 65.60
5/16	5/16	5		1	3	SQ	Ti5-M-.3125-SQ	500570	\$ 56.64
5/16	5/16	5		1	3	0.015	Ti5-M-.3125-R.015	500580	\$ 67.79
5/16	5/16	5		1	3	0.030	Ti5-M-.3125-R.030	500590	\$ 67.79
5/16	5/16	5		1	3	0.060	Ti5-M-.3125-R.060	500600	\$ 69.40
5/16	5/16	5		1	3	BALL	Ti5-M-.3125-BN	500610	\$ 75.26
3/8	3/8	5		1/2	2	SQ	Ti5-S-.3750-SQ	500620	\$ 55.87
3/8	3/8	5		1/2	2	0.015	Ti5-S-.3750-R.015	500630	\$ 63.27
3/8	3/8	5		1/2	2	0.030	Ti5-S-.3750-R.030	500640	\$ 63.27
3/8	3/8	5		1/2	2	0.060	Ti5-S-.3750-R.060	500650	\$ 65.35
3/8	3/8	5		1/2	2	BALL	Ti5-S-.3750-BN	500660	\$ 69.88
3/8	3/8	5		1	2-1/2	SQ	Ti5-R-.3750-SQ	500670	\$ 60.67
3/8	3/8	5		1	2-1/2	0.015	Ti5-R-.3750-R.015	500680	\$ 66.82
3/8	3/8	5		1	2-1/2	0.030	Ti5-R-.3750-R.030	500690	\$ 66.82
3/8	3/8	5		1	2-1/2	0.060	Ti5-R-.3750-R.060	500700	\$ 68.90
3/8	3/8	5		1	2-1/2	BALL	Ti5-R-.3750-BN	500710	\$ 75.85

## Titanium & High Temp Alloys



Carbide	5 Flute Center Cutting	Variable	AlTiSiN	+0.00 / -.002	Hrc <54			Series: Ti5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
3/8	3/8	5		1-1/4	3	SQ	Ti5-M-.3750-SQ	500720	\$ 67.64
3/8	3/8	5		1-1/4	3	0.015	Ti5-M-.3750-R.015	500730	\$ 79.37
3/8	3/8	5		1-1/4	3	0.030	Ti5-M-.3750-R.030	500740	\$ 79.37
3/8	3/8	5		1-1/4	3	0.060	Ti5-M-.3750-R.060	500750	\$ 81.13
3/8	3/8	5		1-1/4	3	BALL	Ti5-M-.3750-BN	500760	\$ 84.56
3/8	3/8	5		1-3/4	4	SQ	Ti5-L-.3750-SQ	500770	\$ 72.59
3/8	3/8	5		1-3/4	4	0.015	Ti5-L-.3750-R.015	500780	\$ 84.37
3/8	3/8	5		1-3/4	4	0.030	Ti5-L-.3750-R.030	500790	\$ 84.37
3/8	3/8	5		1-3/4	4	0.060	Ti5-L-.3750-R.060	500800	\$ 86.29
3/8	3/8	5		1-3/4	4	BALL	Ti5-L-.3750-BN	500810	\$ 90.78
1/2	1/2	5		5/8	2-1/2	SQ	Ti5-S-.5000-SQ	500820	\$ 88.56
1/2	1/2	5		5/8	2-1/2	0.015	Ti5-S-.5000-R.015	500830	\$ 100.80
1/2	1/2	5		5/8	2-1/2	0.030	Ti5-S-.5000-R.030	500840	\$ 100.80
1/2	1/2	5		5/8	2-1/2	0.060	Ti5-S-.5000-R.060	500850	\$ 103.28
1/2	1/2	5		5/8	2-1/2	BALL	Ti5-S-.5000-BN	500860	\$ 106.82
1/2	1/2	5		1	3	SQ	Ti5-T-.5000-SQ	500870	\$ 92.98
1/2	1/2	5		1	3	0.015	Ti5-T-.5000-R.015	500880	\$ 105.59
1/2	1/2	5		1	3	0.030	Ti5-T-.5000-R.030	500890	\$ 105.59
1/2	1/2	5		1	3	0.060	Ti5-T-.5000-R.060	500900	\$ 107.88
1/2	1/2	5		1	3	BALL	Ti5-T-.5000-BN	500910	\$ 111.25
1/2	1/2	5		1-1/4	3	SQ	Ti5-R-.5000-SQ	500920	\$ 96.44
1/2	1/2	5		1-1/4	3	0.015	Ti5-R-.5000-R.015	500930	\$ 107.88
1/2	1/2	5		1-1/4	3	0.030	Ti5-R-.5000-R.030	500940	\$ 107.88
1/2	1/2	5		1-1/4	3	0.060	Ti5-R-.5000-R.060	500950	\$ 109.86
1/2	1/2	5		1-1/4	3	BALL	Ti5-R-.5000-BN	500960	\$ 114.73
1/2	1/2	5		1-5/8	4	SQ	Ti5-M-.5000-SQ	500970	\$ 121.40
1/2	1/2	5		1-5/8	4	0.015	Ti5-M-.5000-R.015	500980	\$ 132.18
1/2	1/2	5		1-5/8	4	0.030	Ti5-M-.5000-R.030	500990	\$ 132.18
1/2	1/2	5		1-5/8	4	0.060	Ti5-M-.5000-R.060	501000	\$ 134.33
1/2	1/2	5		1-5/8	4	BALL	Ti5-M-.5000-BN	501010	\$ 139.66
1/2	1/2	5		2	4	SQ	Ti5-L-.5000-SQ	501020	\$ 122.81
1/2	1/2	5		2	4	0.015	Ti5-L-.5000-R.015	501030	\$ 136.62
1/2	1/2	5		2	4	0.030	Ti5-L-.5000-R.030	501040	\$ 136.62
1/2	1/2	5		2	4	0.060	Ti5-L-.5000-R.060	501050	\$ 138.42
1/2	1/2	5		2	4	BALL	Ti5-L-.5000-BN	501060	\$ 141.07
5/8	5/8	5		3/4	3	SQ	Ti5-S-.6250-SQ	501070	\$ 175.50
5/8	5/8	5		3/4	3	0.015	Ti5-S-.6250-R.015	501080	\$ 184.98
5/8	5/8	5		3/4	3	0.030	Ti5-S-.6250-R.030	501090	\$ 184.98
5/8	5/8	5		3/4	3	0.060	Ti5-S-.6250-R.060	501100	\$ 186.54
5/8	5/8	5		3/4	3	BALL	Ti5-S-.6250-BN	501110	\$ 201.84
5/8	5/8	5		1-1/4	3-1/2	SQ	Ti5-T-.6250-SQ	501120	\$ 181.97
5/8	5/8	5		1-1/4	3-1/2	0.015	Ti5-T-.6250-R.015	501130	\$ 191.30
5/8	5/8	5		1-1/4	3-1/2	0.030	Ti5-T-.6250-R.030	501140	\$ 191.30
5/8	5/8	5		1-1/4	3-1/2	0.060	Ti5-T-.6250-R.060	501150	\$ 193.03
5/8	5/8	5		1-1/4	3-1/2	BALL	Ti5-T-.6250-BN	501160	\$ 208.32
5/8	5/8	5		1-5/8	3-1/2	SQ	Ti5-R-.6250-SQ	501170	\$ 204.74
5/8	5/8	5		1-5/8	3-1/2	0.015	Ti5-R-.6250-R.015	501180	\$ 213.91
5/8	5/8	5		1-5/8	3-1/2	0.030	Ti5-R-.6250-R.030	501190	\$ 213.91
5/8	5/8	5		1-5/8	3-1/2	0.060	Ti5-R-.6250-R.060	501200	\$ 215.50
5/8	5/8	5		1-5/8	3-1/2	BALL	Ti5-R-.6250-BN	501210	\$ 231.04
5/8	5/8	5		2-1/8	4	SQ	Ti5-M-.6250-SQ	501220	\$ 212.97
5/8	5/8	5		2-1/8	4	0.015	Ti5-M-.6250-R.015	501230	\$ 222.09
5/8	5/8	5		2-1/8	4	0.030	Ti5-M-.6250-R.030	501240	\$ 222.09
5/8	5/8	5		2-1/8	4	0.060	Ti5-M-.6250-R.060	501250	\$ 223.65
5/8	5/8	5		2-1/8	4	BALL	Ti5-M-.6250-BN	501260	\$ 239.25
5/8	5/8	5		2-1/2	5	SQ	Ti5-L-.6250-SQ	501270	\$ 239.77
5/8	5/8	5		2-1/2	5	0.015	Ti5-L-.6250-R.015	501280	\$ 248.64
5/8	5/8	5		2-1/2	5	0.030	Ti5-L-.6250-R.030	501290	\$ 248.64
5/8	5/8	5		2-1/2	5	0.060	Ti5-L-.6250-R.060	501300	\$ 250.20
5/8	5/8	5		2-1/2	5	BALL	Ti5-L-.6250-BN	501310	\$ 266.14
3/4	3/4	5		1	3	SQ	Ti5-S-.7500-SQ	501320	\$ 262.39
3/4	3/4	5		1	3	0.015	Ti5-S-.7500-R.015	501330	\$ 270.77
3/4	3/4	5		1	3	0.030	Ti5-S-.7500-R.030	501340	\$ 270.77
3/4	3/4	5		1	3	0.060	Ti5-S-.7500-R.060	501350	\$ 272.98
3/4	3/4	5		1	3	BALL	Ti5-S-.7500-BN	501360	\$ 301.81
3/4	3/4	5		1-5/8	4	SQ	Ti5-R-.7500-SQ	501370	\$ 286.91
3/4	3/4	5		1-5/8	4	0.015	Ti5-R-.7500-R.015	501380	\$ 295.59
3/4	3/4	5		1-5/8	4	0.030	Ti5-R-.7500-R.030	501390	\$ 295.59
3/4	3/4	5		1-5/8	4	0.060	Ti5-R-.7500-R.060	501400	\$ 297.36
3/4	3/4	5		1-5/8	4	BALL	Ti5-R-.7500-BN	501410	\$ 326.26
3/4	3/4	5		2-1/4	5	SQ	Ti5-M-.7500-SQ	501420	\$ 317.67
3/4	3/4	5		2-1/4	5	0.015	Ti5-M-.7500-R.015	501430	\$ 326.22
3/4	3/4	5		2-1/4	5	0.030	Ti5-M-.7500-R.030	501440	\$ 326.22
3/4	3/4	5		2-1/4	5	0.060	Ti5-M-.7500-R.060	501450	\$ 328.12
3/4	3/4	5		2-1/4	5	BALL	Ti5-M-.7500-BN	501460	\$ 357.09

## Titanium & High Temp Alloys



Carbide	5 Flute Center Cutting	Variable	AlTiSiN	+ .000 / -.002	Hrc <54			Series: Ti5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
3/4	3/4	5		2-3/4	5	SQ	Ti5-L-.7500-SQ	501470	\$ 337.13
3/4	3/4	5		2-3/4	5	0.015	Ti5-L-.7500-R.015	501480	\$ 344.88
3/4	3/4	5		2-3/4	5	0.030	Ti5-L-.7500-R.030	501490	\$ 344.88
3/4	3/4	5		2-3/4	5	0.060	Ti5-L-.7500-R.060	501500	\$ 347.81
3/4	3/4	5		3-1/4	6	SQ	Ti5-X-.750-SQ	501510	\$ 372.98
3/4	3/4	5		3-1/4	6	0.015	Ti5-X-.750-R.015	501520	\$ 381.93
3/4	3/4	5		3-1/4	6	0.030	Ti5-X-.750-R.030	501530	\$ 381.93
3/4	3/4	5		3-1/4	6	0.060	Ti5-X-.750-R.060	501540	\$ 383.90
3/4	3/4	5		3-1/4	6	0.120	Ti5-X-.750-R.120	501550	\$ 390.62

## Titanium & High Temp Alloys



Carbide	7 Flute Center Cutting	Variable	AlTiSiN	+0.00 / -.002	HRC <54			Series: Ti7	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
3/16	3/16	7		9/16	2-1/2	SQ	Ti7-R-.1875-SQ	700000	\$ 28.85
3/16	3/16	7		9/16	2-1/2	0.015	Ti7-R-.1875-R.015	700010	\$ 28.85
3/16	3/16	7		3/4	2-1/2	SQ	Ti7-M-.1875-SQ	700020	\$ 68.15
3/16	3/16	7		3/4	2-1/2	0.015	Ti7-M-.1875-R.015	700030	\$ 68.15
1/4	1/4	7		1/2	2-1/2	SQ	Ti7-T-.2500-SQ	700040	\$ 59.34
1/4	1/4	7		1/2	2-1/2	0.015	Ti7-T-.2500-R.015	700050	\$ 59.34
1/4	1/4	7		1/2	2-1/2	0.030	Ti7-T-.2500-R.030	700060	\$ 59.34
1/4	1/4	7		3/4	2-1/2	SQ	Ti7-R-.2500-SQ	700070	\$ 60.52
1/4	1/4	7		3/4	2-1/2	0.015	Ti7-R-.2500-R.015	700080	\$ 60.52
1/4	1/4	7		3/4	2-1/2	0.030	Ti7-R-.2500-R.030	700090	\$ 60.52
1/4	1/4	7		1-1/4	3	SQ	Ti7-L-.2500-SQ	700100	\$ 83.07
1/4	1/4	7		1-1/4	3	0.015	Ti7-L-.2500-R.015	700110	\$ 83.07
1/4	1/4	7		1-1/4	3	0.030	Ti7-L-.2500-R.030	700120	\$ 83.07
3/8	3/8	7		1/2	2	SQ	Ti7-S-.3750-SQ	700130	\$ 71.21
3/8	3/8	7		1/2	2	0.015	Ti7-S-.3750-R.015	700140	\$ 71.21
3/8	3/8	7		1/2	2	0.030	Ti7-S-.3750-R.030	700150	\$ 71.21
3/8	3/8	7		1/2	2	0.060	Ti7-S-.3750-R.060	700160	\$ 71.21
3/8	3/8	7		1	2-1/2	SQ	Ti7-R-.3750-SQ	700170	\$ 94.94
3/8	3/8	7		1	2-1/2	0.015	Ti7-R-.3750-R.015	700180	\$ 94.94
3/8	3/8	7		1	2-1/2	0.030	Ti7-R-.3750-R.030	700190	\$ 94.94
3/8	3/8	7		1	2-1/2	0.060	Ti7-R-.3750-R.060	700200	\$ 94.94
3/8	3/8	7		1-1/4	3	SQ	Ti7-M-.3750-SQ	700210	\$ 109.39
3/8	3/8	7		1-1/4	3	0.015	Ti7-M-.3750-R.015	700220	\$ 109.39
3/8	3/8	7		1-1/4	3	0.030	Ti7-M-.3750-R.030	700230	\$ 109.39
3/8	3/8	7		1-1/4	3	0.060	Ti7-M-.3750-R.060	700240	\$ 109.39
1/2	1/2	7		5/8	2-1/2	SQ	Ti7-S-.5000-SQ	700250	\$ 106.34
1/2	1/2	7		5/8	2-1/2	0.015	Ti7-S-.5000-R.015	700260	\$ 106.34
1/2	1/2	7		5/8	2-1/2	0.030	Ti7-S-.5000-R.030	700270	\$ 106.34
1/2	1/2	7		5/8	2-1/2	0.060	Ti7-S-.5000-R.060	700280	\$ 106.34
1/2	1/2	7		1	3	SQ	Ti7-T-.5000-SQ	700290	\$ 142.18
1/2	1/2	7		1	3	0.015	Ti7-T-.5000-R.015	700300	\$ 142.18
1/2	1/2	7		1	3	0.030	Ti7-T-.5000-R.030	700310	\$ 142.18
1/2	1/2	7		1	3	0.060	Ti7-T-.5000-R.060	700320	\$ 142.18
1/2	1/2	7		1-1/4	3	SQ	Ti7-R-.5000-SQ	700330	\$ 145.02
1/2	1/2	7		1-1/4	3	0.015	Ti7-R-.5000-R.015	700340	\$ 145.02
1/2	1/2	7		1-1/4	3	0.030	Ti7-R-.5000-R.030	700350	\$ 145.02
1/2	1/2	7		1-1/4	3	0.060	Ti7-R-.5000-R.060	700360	\$ 145.02
1/2	1/2	7		2-1/8	4	SQ	Ti7-L-.5000-SQ	700370	\$ 164.03
1/2	1/2	7		2-1/8	4	0.015	Ti7-L-.5000-R.015	700380	\$ 164.03
1/2	1/2	7		2-1/8	4	0.030	Ti7-L-.5000-R.030	700390	\$ 164.03
1/2	1/2	7		2-1/8	4	0.060	Ti7-L-.5000-R.060	700400	\$ 164.03
5/8	5/8	7		3/4	3	SQ	Ti7-S-.6250-SQ	700410	\$ 172.37
5/8	5/8	7		3/4	3	0.015	Ti7-S-.6250-R.015	700420	\$ 172.37
5/8	5/8	7		3/4	3	0.030	Ti7-S-.6250-R.030	700430	\$ 172.37
5/8	5/8	7		3/4	3	0.060	Ti7-S-.6250-R.060	700440	\$ 172.37
5/8	5/8	7		1-1/4	3-1/2	SQ	Ti7-T-.6250-SQ	700450	\$ 213.73
5/8	5/8	7		1-1/4	3-1/2	0.015	Ti7-T-.6250-R.015	700460	\$ 213.73
5/8	5/8	7		1-1/4	3-1/2	0.030	Ti7-T-.6250-R.030	700470	\$ 213.73
5/8	5/8	7		1-1/4	3-1/2	0.060	Ti7-T-.6250-R.060	700480	\$ 213.73
5/8	5/8	7		1-5/8	3-1/2	SQ	Ti7-R-.6250-SQ	700490	\$ 218.00
5/8	5/8	7		1-5/8	3-1/2	0.015	Ti7-R-.6250-R.015	700500	\$ 218.00
5/8	5/8	7		1-5/8	3-1/2	0.030	Ti7-R-.6250-R.030	700510	\$ 218.00
5/8	5/8	7		1-5/8	3-1/2	0.060	Ti7-R-.6250-R.060	700520	\$ 218.00
5/8	5/8	7		2-1/8	4	SQ	Ti7-M-.6250-SQ	700530	\$ 245.58
5/8	5/8	7		2-1/8	4	0.015	Ti7-M-.6250-R.015	700540	\$ 245.58
5/8	5/8	7		2-1/8	4	0.030	Ti7-M-.6250-R.030	700550	\$ 245.58
5/8	5/8	7		2-1/8	4	0.060	Ti7-M-.6250-R.060	700560	\$ 245.58
3/4	3/4	7		1	3	SQ	Ti7-S-.7500-SQ	700570	\$ 259.99
3/4	3/4	7		1	3	0.015	Ti7-S-.7500-R.015	700580	\$ 259.99
3/4	3/4	7		1	3	0.030	Ti7-S-.7500-R.030	700590	\$ 259.99
3/4	3/4	7		1	3	0.060	Ti7-S-.7500-R.060	700600	\$ 259.99
3/4	3/4	7		1	3	0.090	Ti7-S-.7500-R.090	700610	\$ 259.99
3/4	3/4	7		1	3	0.120	Ti7-S-.7500-R.120	700620	\$ 259.99
3/4	3/4	7		1-5/8	4	SQ	Ti7-R-.7500-SQ	700630	\$ 296.34
3/4	3/4	7		1-5/8	4	0.015	Ti7-R-.7500-R.015	700640	\$ 296.34
3/4	3/4	7		1-5/8	4	0.030	Ti7-R-.7500-R.030	700650	\$ 296.34
3/4	3/4	7		1-5/8	4	0.060	Ti7-R-.7500-R.060	700660	\$ 296.34
3/4	3/4	7		1-5/8	4	0.090	Ti7-R-.7500-R.090	700670	\$ 296.34
3/4	3/4	7		1-5/8	4	0.120	Ti7-R-.7500-R.120	700680	\$ 296.34



## Titanium & High Temp Alloys



Carbide	7 Flute Center Cutting	Variable	AlTiSiN	+0.00 / -.002	Hrc <54			Series: Ti7	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
3/4	3/4	7		2-1/4	5	SQ	Ti7-M-.7500-SQ	700690	\$ 340.99
3/4	3/4	7		2-1/4	5	0.015	Ti7-M-.7500-R.015	700700	\$ 340.99
3/4	3/4	7		2-1/4	5	0.030	Ti7-M-.7500-R.030	700710	\$ 340.99
3/4	3/4	7		2-1/4	5	0.060	Ti7-M-.7500-R.060	700720	\$ 340.99
3/4	3/4	7		2-1/4	5	0.090	Ti7-M-.7500-R.090	700730	\$ 340.99
3/4	3/4	7		2-1/4	5	0.120	Ti7-M-.7500-R.120	700740	\$ 340.99
3/4	3/4	7		3-1/4	6	SQ	Ti7-X-.750-SQ	700750	\$ 393.43
3/4	3/4	7		3-1/4	6	0.015	Ti7-X-.750-R.015	700760	\$ 393.43
3/4	3/4	7		3-1/4	6	0.030	Ti7-X-.750-R.030	700770	\$ 393.43
3/4	3/4	7		3-1/4	6	0.060	Ti7-X-.750-R.060	700780	\$ 393.43
3/4	3/4	7		3-1/4	6	0.090	Ti7-X-.750-R.090	700790	\$ 393.43
3/4	3/4	7		3-1/4	6	0.120	Ti7-X-.750-R.120	700800	\$ 393.43

## Ferrous Alloys



Carbide	4 Flute Center Cutting	Variable	TiAlN	+0.00 / -.002	HRC <54			Series: Fe4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/16	4		1/8	1-1/2	SQ	Fe4-.0625-SQ	410000	\$ 25.30
1/8	1/16	4		1/8	1-1/2	0.010	Fe4-.0625-R.010	410010	\$ 25.82
1/8	3/32	4		3/16	1-1/2	SQ	Fe4-.0938-SQ	410020	\$ 25.30
1/8	3/32	4		3/16	1-1/2	0.010	Fe4-.0938-R.010	410030	\$ 25.82
1/8	1/8	4	7/8	3/16	2	0.015	Fe4-.1250-R.015-RN	410040	\$ 27.71
1/8	1/8	4		1/4	1-1/2	SQ	Fe4-.1250-S-SQ	410050	\$ 19.79
1/8	1/8	4		1/4	1-1/2	0.015	Fe4-.1250-S-R.015	410060	\$ 20.19
1/8	1/8	4		1/2	1-1/2	SQ	Fe4-.1250-SQ	410070	\$ 21.13
1/8	1/8	4		1/2	1-1/2	0.015	Fe4-.1250-R.015	410080	\$ 21.56
3/16	3/16	4		1/4	1-1/2	SQ	Fe4-.1875-S-SQ	410090	\$ 22.86
3/16	3/16	4		1/4	1-1/2	0.015	Fe4-.1875-S-R.015	410100	\$ 23.32
3/16	3/16	4	3/4	1/4	3	0.015	Fe4-.1875-R.015-RN	410110	\$ 33.80
3/16	3/16	4		5/8	2	SQ	Fe4-.1875-SQ	410120	\$ 25.50
3/16	3/16	4		5/8	2	0.015	Fe4-.1875-R.015	410130	\$ 26.02
1/4	1/4	4		3/8	2	SQ	Fe4-.2500-S-SQ	410140	\$ 28.48
1/4	1/4	4		3/8	2	0.015	Fe4-.2500-S-R.015	410150	\$ 29.06
1/4	1/4	4	3/4	3/8	3	0.015	Fe4-.2500-R.015-RN	410160	\$ 47.50
1/4	1/4	4	1-1/8	3/8	3	0.015	Fe4-.2500-R.015-RN1	410170	\$ 47.50
1/4	1/4	4	2-1/8	3/8	4	0.015	Fe4-.2500-R.015-RN2	410180	\$ 54.64
1/4	1/4	4		3/8	2	0.030	Fe4-.2500-S-R.030	410190	\$ 29.06
1/4	1/4	4	3/4	3/8	3	0.030	Fe4-.2500-R.030-RN	410200	\$ 47.50
1/4	1/4	4	1-1/8	3/8	3	0.030	Fe4-.2500-R.030-RN1	410210	\$ 47.50
1/4	1/4	4	2-1/8	3/8	4	0.030	Fe4-.2500-R.030-RN2	410220	\$ 54.64
1/4	1/4	4		1/2	2	SQ	Fe4-.2500-T-SQ	410225	\$ 31.39
1/4	1/4	4		3/4	2-1/2	SQ	Fe4-.2500-SQ	410230	\$ 33.21
1/4	1/4	4		3/4	2-1/2	0.015	Fe4-.2500-R.015	410240	\$ 33.89
1/4	1/4	4		3/4	2-1/2	0.030	Fe4-.2500-R.030	410250	\$ 33.89
1/4	1/4	4		1-1/8	3	SQ	Fe4-.2500-L-SQ	410260	\$ 38.79
1/4	1/4	4		1-1/8	3	0.015	Fe4-.2500-L-R.015	410270	\$ 39.58
1/4	1/4	4		1-1/8	3	0.030	Fe4-.2500-L-R.030	410280	\$ 39.58
5/16	5/16	4		1/2	2	SQ	Fe4-.3125-S-SQ	410290	\$ 42.00
5/16	5/16	4		1/2	2	0.015	Fe4-.3125-S-R.015	410300	\$ 42.86
5/16	5/16	4		1/2	2	0.030	Fe4-.3125-S-R.030	410310	\$ 42.86
5/16	5/16	4		13/16	2-1/2	SQ	Fe4-.3125-SQ	410320	\$ 43.70
5/16	5/16	4		13/16	2-1/2	0.015	Fe4-.3125-R.015	410330	\$ 44.59
5/16	5/16	4		13/16	2-1/2	0.030	Fe4-.3125-R.030	410340	\$ 44.59
5/16	5/16	4		1-1/8	3	SQ	Fe4-.3125-L-SQ	410350	\$ 50.38
5/16	5/16	4		1-1/8	3	0.015	Fe4-.3125-L-R.015	410360	\$ 51.42
5/16	5/16	4		1-1/8	3	0.030	Fe4-.3125-L-R.030	410370	\$ 51.42
3/8	3/8	4		1/2	2	SQ	Fe4-.3750-S-SQ	410380	\$ 48.66
3/8	3/8	4		1/2	2	0.015	Fe4-.3750-S-R.015	410390	\$ 49.65
3/8	3/8	4	1-1/8	1/2	3	0.015	Fe4-.3750-R.015-RN1	410400	\$ 67.04
3/8	3/8	4	2-1/8	1/2	4	0.015	Fe4-.3750-R.015-RN2	410410	\$ 77.06
3/8	3/8	4	3-1/8	1/2	6	0.015	Fe4-.3750-R.015-RN3	410420	\$ 95.99
3/8	3/8	4		1/2	2	0.030	Fe4-.3750-S-R.030	410430	\$ 49.65
3/8	3/8	4	1-1/8	1/2	3	0.030	Fe4-.3750-R.030-RN1	410440	\$ 67.04
3/8	3/8	4	2-1/8	1/2	4	0.030	Fe4-.3750-R.030-RN2	410450	\$ 77.06
3/8	3/8	4	3-1/8	1/2	6	0.030	Fe4-.3750-R.030-RN3	410460	\$ 95.99
3/8	3/8	4		1	2-1/2	SQ	Fe4-.3750-SQ	410470	\$ 51.67
3/8	3/8	4		1	2-1/2	0.015	Fe4-.3750-R.015	410480	\$ 52.73
3/8	3/8	4		1	2-1/2	0.030	Fe4-.3750-R.030	410490	\$ 52.73
3/8	3/8	4		1-1/8	3	SQ	Fe4-.3750-L-SQ	410500	\$ 61.65
3/8	3/8	4		1-1/8	3	0.015	Fe4-.3750-L-R.015	410510	\$ 62.90
3/8	3/8	4		1-1/8	3	0.030	Fe4-.3750-L-R.030	410520	\$ 62.90
1/2	1/2	4		5/8	2-1/2	SQ	Fe4-.5000-S-SQ	410530	\$ 77.21
1/2	1/2	4		5/8	2-1/2	0.015	Fe4-.5000-S-R.015	410540	\$ 78.78
1/2	1/2	4	1-1/2	5/8	4	0.015	Fe4-.5000-R.015-RN1	410550	\$ 143.65
1/2	1/2	4	2-1/4	5/8	4	0.015	Fe4-.5000-R.015-RN2	410560	\$ 160.38
1/2	1/2	4	3-3/8	5/8	6	0.015	Fe4-.5000-R.015-RN3	410570	\$ 177.10
1/2	1/2	4		5/8	2-1/2	0.030	Fe4-.5000-S-R.030	410580	\$ 78.78
1/2	1/2	4	1-1/2	5/8	4	0.030	Fe4-.5000-R.030-RN1	410590	\$ 143.65
1/2	1/2	4	2-1/4	5/8	4	0.030	Fe4-.5000-R.030-RN2	410600	\$ 160.38
1/2	1/2	4	3-3/8	5/8	6	0.030	Fe4-.5000-R.030-RN3	410610	\$ 177.10
1/2	1/2	4		5/8	2-1/2	0.060	Fe4-.5000-S-R.060	410620	\$ 78.78
1/2	1/2	4	3-3/8	5/8	6	0.060	Fe4-.5000-R.060-RN3	410630	\$ 177.10
1/2	1/2	4		1	3	SQ	Fe4-.5000-SQ	410640	\$ 84.76
1/2	1/2	4		1	3	0.015	Fe4-.5000-R.015	410650	\$ 86.49
1/2	1/2	4		1	3	0.030	Fe4-.5000-R.030	410660	\$ 86.49
1/2	1/2	4		1	3	0.060	Fe4-.5000-R.060	410670	\$ 86.49
1/2	1/2	4		1-1/4	3	SQ	Fe4-.5000-M-SQ	410680	\$ 96.40
1/2	1/2	4		1-1/4	3	0.015	Fe4-.5000-M-R.015	410690	\$ 98.37
1/2	1/2	4		1-1/4	3	0.030	Fe4-.5000-M-R.030	410700	\$ 98.37
1/2	1/2	4		1-1/4	3	0.060	Fe4-.5000-M-R.060	410710	\$ 98.37

## Ferrous Alloys



Carbide	4 Flute Center Cutting	Variable	TiAlN	+0.00 / -.002	HRC <54			Series: Fe4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/2	1/2	4		1-1/2	4	SQ	Fe4-.5000-T-SQ	410720	\$ 108.03
1/2	1/2	4		1-1/2	4	0.015	Fe4-.5000-T-R.015	410730	\$ 110.24
1/2	1/2	4		1-1/2	4	0.030	Fe4-.5000-T-R.030	410740	\$ 110.24
1/2	1/2	4		1-1/2	4	0.060	Fe4-.5000-T-R.060	410750	\$ 110.24
1/2	1/2	4		2	4	SQ	Fe4-.5000-L-SQ	410760	\$ 135.05
1/2	1/2	4		2	4	0.015	Fe4-.5000-L-R.015	410770	\$ 137.80
1/2	1/2	4		2	4	0.030	Fe4-.5000-L-R.030	410780	\$ 137.80
1/2	1/2	4		2	4	0.060	Fe4-.5000-L-R.060	410790	\$ 137.80
5/8	5/8	4		3/4	3	SQ	Fe4-.6250-S-SQ	410800	\$ 139.98
5/8	5/8	4		3/4	3	0.030	Fe4-.6250-S-R.030	410810	\$ 142.84
5/8	5/8	4	1-5/8	3/4	5	0.030	Fe4-.6250-R.030-RN1	410820	\$ 246.22
5/8	5/8	4		3/4	3	0.060	Fe4-.6250-S-R.060	410830	\$ 142.84
5/8	5/8	4		1-1/4	3-1/2	SQ	Fe4-.6250-SQ	410840	\$ 147.70
5/8	5/8	4		1-1/4	3-1/2	0.030	Fe4-.6250-R.030	410850	\$ 150.72
5/8	5/8	4		1-1/4	3-1/2	0.060	Fe4-.6250-R.060	410860	\$ 150.72
5/8	5/8	4		2-1/4	5	SQ	Fe4-.6250-L-SQ	410870	\$ 186.04
5/8	5/8	4		2-1/4	5	0.030	Fe4-.6250-L-R.030	410880	\$ 189.84
5/8	5/8	4		2-1/4	5	0.060	Fe4-.6250-L-R.060	410890	\$ 189.84
3/4	3/4	4		7/8	3	SQ	Fe4-.7500-S-SQ	410900	\$ 207.05
3/4	3/4	4		7/8	3	0.030	Fe4-.7500-S-R.030	410910	\$ 211.27
3/4	3/4	4	2	7/8	5	0.030	Fe4-.7500-R.030-RN2	410920	\$ 288.29
3/4	3/4	4		7/8	3	0.060	Fe4-.7500-S-R.060	410930	\$ 211.27
3/4	3/4	4		1-1/2	4	SQ	Fe4-.7500-SQ	410940	\$ 222.28
3/4	3/4	4		1-1/2	4	0.030	Fe4-.7500-R.030	410950	\$ 226.82
3/4	3/4	4		1-1/2	4	0.060	Fe4-.7500-R.060	410960	\$ 226.82
3/4	3/4	4		1-1/2	4	0.120	Fe4-.7500-R.120	410970	\$ 226.82
3/4	3/4	4		2-1/4	5	SQ	Fe4-.7500-L-SQ	410980	\$ 263.90
3/4	3/4	4		2-1/4	5	0.030	Fe4-.7500-L-R.030	410990	\$ 269.29
3/4	3/4	4		2-1/4	5	0.060	Fe4-.7500-L-R.060	411000	\$ 269.29
3/4	3/4	4		2-1/4	5	0.120	Fe4-.7500-L-R.120	411010	\$ 269.29

## Ferrous Alloys



Carbide	5 Flute	Non-Center Cutting	Variable	TiAlN	+ .000 / -.002	HRC <54		Series: Fe5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	3/32	5		3/16	1-1/2	SQ	Fe5-.0938-SQ	510000	\$ 25.30
1/8	1/8	5		1/4	1-1/2	SQ	Fe5-.1250-S-SQ	510010	\$ 19.79
1/8	1/8	5		1/4	1-1/2	0.015	Fe5-.1250-S-R.015	510020	\$ 20.19
1/8	1/8	5	3/4	1/2	2	SQ	Fe5-.1250-SQ-RN	510030	\$ 21.13
1/8	1/8	5	3/4	1/2	2	0.015	Fe5-.1250-R.015-RN	510040	\$ 21.56
3/16	3/16	5		1/4	1-1/2	SQ	Fe5-.1875-S-SQ	510050	\$ 22.86
3/16	3/16	5		1/4	1-1/2	0.015	Fe5-.1875-S-R.015	510060	\$ 23.32
3/16	3/16	5	7/8	5/8	2	SQ	Fe5-.1875-SQ-RN	510070	\$ 25.50
3/16	3/16	5	7/8	5/8	2	0.015	Fe5-.1875-R.015-RN	510080	\$ 26.02
1/4	1/4	5		3/8	2	SQ	Fe5-.2500-S-SQ	510090	\$ 28.48
1/4	1/4	5		3/8	2	0.015	Fe5-.2500-S-R.015	510100	\$ 29.06
1/4	1/4	5		3/8	2	0.030	Fe5-.2500-S-R.030	510110	\$ 29.06
1/4	1/4	5		3/4	2-1/2	SQ	Fe5-.2500-SQ	510120	\$ 33.21
1/4	1/4	5		3/4	2-1/2	0.015	Fe5-.2500-R.015	510130	\$ 33.89
1/4	1/4	5		3/4	2-1/2	0.030	Fe5-.2500-R.030	510140	\$ 33.89
5/16	5/16	5		1/2	2	SQ	Fe5-.3125-S-SQ	510150	\$ 42.00
5/16	5/16	5		1/2	2	0.015	Fe5-.3125-S-R.015	510160	\$ 42.86
5/16	5/16	5		1/2	2	0.030	Fe5-.3125-S-R.030	510170	\$ 42.86
5/16	5/16	5		13/16	2-1/2	SQ	Fe5-.3125-SQ	510180	\$ 43.70
5/16	5/16	5		13/16	2-1/2	0.015	Fe5-.3125-R.015	510190	\$ 44.59
5/16	5/16	5		13/16	2-1/2	0.030	Fe5-.3125-R.030	510200	\$ 44.59
3/8	3/8	5		1/2	2	SQ	Fe5-.3750-S-SQ	510210	\$ 48.66
3/8	3/8	5	1-7/8	1/2	3	SQ	Fe5-.3750-SQ-RN1	510220	\$ 65.70
3/8	3/8	5		1/2	2	0.015	Fe5-.3750-S-R.015	510230	\$ 49.65
3/8	3/8	5	1-7/8	1/2	3	0.015	Fe5-.3750-R.015-RN1	510240	\$ 67.04
3/8	3/8	5		1/2	2	0.030	Fe5-.3750-S-R.030	510250	\$ 49.65
3/8	3/8	5	1-7/8	1/2	3	0.030	Fe5-.3750-R.030-RN1	510260	\$ 67.04
3/8	3/8	5		1	2-1/2	0.030	Fe5-.3750-SQ	510270	\$ 52.73
3/8	3/8	5		1	2-1/2	0.030	Fe5-.3750-R.015	510280	\$ 52.73
3/8	3/8	5		1	2-1/2	0.030	Fe5-.3750-R.030	510290	\$ 52.73
1/2	1/2	5		5/8	2-1/2	SQ	Fe5-.5000-S-SQ	510300	\$ 77.21
1/2	1/2	5		5/8	2-1/2	0.015	Fe5-.5000-S-R.015	510310	\$ 78.78
1/2	1/2	5	1-1/2	5/8	4	0.015	Fe5-.5000-R.015-RN1	510320	\$ 143.65
1/2	1/2	5	2-1/4	5/8	4	0.015	Fe5-.5000-R.015-RN2	510330	\$ 160.38
1/2	1/2	5		5/8	2-1/2	0.030	Fe5-.5000-S-R.030	510340	\$ 78.78
1/2	1/2	5	1-1/2	5/8	4	0.030	Fe5-.5000-R.030-RN1	510350	\$ 143.65
1/2	1/2	5	2-1/4	5/8	4	0.030	Fe5-.5000-R.030-RN2	510360	\$ 160.38
1/2	1/2	5		5/8	2-1/2	0.060	Fe5-.5000-S-R.060	510370	\$ 78.78
1/2	1/2	5	1-1/2	5/8	4	0.060	Fe5-.5000-R.060-RN1	510380	\$ 143.65
1/2	1/2	5	2-1/4	5/8	4	0.060	Fe5-.5000-R.060-RN2	510390	\$ 160.38
1/2	1/2	5		1	3	SQ	Fe5-.5000-SQ	510400	\$ 84.76
1/2	1/2	5		1	3	0.015	Fe5-.5000-R.015	510410	\$ 86.49
1/2	1/2	5		1	3	0.030	Fe5-.5000-R.030	510420	\$ 86.49
1/2	1/2	5		1	3	0.060	Fe5-.5000-R.060	510430	\$ 86.49
1/2	1/2	5		1-1/4	3	SQ	Fe5-.5000-M-SQ	510440	\$ 96.40
1/2	1/2	5		1-1/4	3	0.015	Fe5-.5000-M-R.015	510450	\$ 98.37
1/2	1/2	5		1-1/4	3	0.030	Fe5-.5000-M-R.030	510460	\$ 98.37
1/2	1/2	5		1-1/4	3	0.060	Fe5-.5000-M-R.060	510470	\$ 98.37
5/8	5/8	5	1-5/8	3/4	5	0.030	Fe5-.6250-R.030-RN1	510480	\$ 246.22
5/8	5/8	5	2-3/8	3/4	5	0.060	Fe5-.6250-R.060-RN2	510490	\$ 270.84
5/8	5/8	5		1-1/4	3-1/2	SQ	Fe5-.6250-SQ	510500	\$ 150.72
5/8	5/8	5		1-1/4	3-1/2	0.030	Fe5-.6250-R.030	510510	\$ 150.72
5/8	5/8	5		1-1/4	3-1/2	0.060	Fe5-.6250-R.060	510520	\$ 150.72
3/4	3/4	5		7/8	3	SQ	Fe5-.7500-S-SQ	510530	\$ 222.28
3/4	3/4	5		7/8	3	0.030	Fe5-.7500-S-R.030	510540	\$ 226.82
3/4	3/4	5		7/8	3	0.060	Fe5-.7500-S-R.060	510550	\$ 226.82
3/4	3/4	5		1-1/2	4	SQ	Fe5-.7500-SQ	510560	\$ 244.50
3/4	3/4	5		1-1/2	4	0.030	Fe5-.7500-R.030	510570	\$ 249.50
3/4	3/4	5		1-1/2	4	0.060	Fe5-.7500-R.060	510580	\$ 249.50

## Ferrous Alloys



Carbide	7 Flute	Non-Center Cutting	Variable	TiAlN	+ .000 / - .002	HRC <54		Series: Fe7	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	7		3/16	1-1/2	SQ	Fe7-.1250-S-SQ	710000	\$ 29.55
1/8	1/8	7		3/16	1-1/2	0.010	Fe7-.1250-S-R.010	710010	\$ 30.50
1/8	1/8	7		3/8	1-1/2	SQ	Fe7-.1250-SQ	710020	\$ 31.93
1/8	1/8	7		3/8	1-1/2	0.010	Fe7-.1250-R.010	710030	\$ 32.58
3/16	3/16	7		9/32	1-1/2	SQ	Fe7-.1875-S-SQ	710040	\$ 34.53
3/16	3/16	7		9/32	1-1/2	0.010	Fe7-.1875-S-R.010	710050	\$ 35.23
3/16	3/16	7		9/16	2	SQ	Fe7-.1875-SQ	710060	\$ 38.50
3/16	3/16	7		9/16	2	0.010	Fe7-.1875-R.010	710070	\$ 39.29
1/4	1/4	7		3/8	2	SQ	Fe7-.2500-S-SQ	710080	\$ 43.04
1/4	1/4	7		3/8	2	0.015	Fe7-.2500-S-R.015	710090	\$ 43.92
1/4	1/4	7	2-1/8	3/8	4	0.015	Fe7-.2500-R.015-RN2	710100	\$ 82.54
1/4	1/4	7		3/4	2-1/2	SQ	Fe7-.2500-SQ	710110	\$ 50.17
1/4	1/4	7		3/4	2-1/2	0.015	Fe7-.2500-R.015	710120	\$ 51.19
3/8	3/8	7		1/2	2	SQ	Fe7-.3750-S-SQ	710130	\$ 73.51
3/8	3/8	7		1/2	2	0.015	Fe7-.3750-S-R.015	710140	\$ 75.01
3/8	3/8	7	1-1/8	1/2	3	0.015	Fe7-.3750-R.015-RN1	710150	\$ 101.29
3/8	3/8	7	2-1/8	1/2	4	0.015	Fe7-.3750-R.015-RN2	710160	\$ 116.42
3/8	3/8	7		1	2-1/2	SQ	Fe7-.3750-SQ	710170	\$ 78.06
3/8	3/8	7		1	2-1/2	0.015	Fe7-.3750-R.015	710180	\$ 79.65
3/8	3/8	7		2-1/8	3	0.015	Fe7-.3750-L-R.015	710190	\$ 86.82
1/2	1/2	7		5/8	2-1/2	SQ	Fe7-.5000-S-SQ	710200	\$ 116.62
1/2	1/2	7		5/8	2-1/2	0.015	Fe7-.5000-S-R.015	710210	\$ 119.00
1/2	1/2	7	1-1/2	5/8	4	0.015	Fe7-.5000-R.015-RN1	710220	\$ 217.02
1/2	1/2	7	2-1/4	5/8	4	0.015	Fe7-.5000-R.015-RN2	710230	\$ 238.72
1/2	1/2	7		1	3	SQ	Fe7-.5000-SQ	710240	\$ 128.05
1/2	1/2	7		1	3	0.015	Fe7-.5000-R.015	710250	\$ 130.66
1/2	1/2	7		1	3	0.030	Fe7-.5000-R.030	710260	\$ 130.66
1/2	1/2	7		1-1/4	3	SQ	Fe7-.5000-M-SQ	710270	\$ 128.05
1/2	1/2	7		1-1/4	3	0.015	Fe7-.5000-M-R.015	710280	\$ 130.66
1/2	1/2	7		1-1/4	3	0.030	Fe7-.5000-M-R.030	710290	\$ 130.66
5/8	5/8	7		3/4	3	SQ	Fe7-.6250-S-SQ	710300	\$ 211.48
5/8	5/8	7		3/4	3	0.030	Fe7-.6250-S-R.030	710310	\$ 215.80
5/8	5/8	7	1-5/8	3/4	5	0.030	Fe7-.6250-R.030-RN1	710320	\$ 371.95
5/8	5/8	7		1-1/4	3-1/2	SQ	Fe7-.6250-SQ	710330	\$ 223.15
5/8	5/8	7		1-1/4	3-1/2	0.030	Fe7-.6250-R.030	710340	\$ 227.70
3/4	3/4	7		7/8	3	SQ	Fe7-.7500-S-SQ	710350	\$ 312.79
3/4	3/4	7		7/8	3	0.030	Fe7-.7500-S-R.030	710360	\$ 319.17
3/4	3/4	7	2	7/8	5	0.030	Fe7-.7500-R.030-RN2	710370	\$ 435.54
3/4	3/4	7		1-1/2	4	SQ	Fe7-.7500-SQ	710380	\$ 335.82
3/4	3/4	7		1-1/2	4	0.030	Fe7-.7500-R.030	710390	\$ 342.67

Ferrous Alloys



Carbide	9 Flute	Non-Center Cutting	Variable	TiAlN	+0.00 / -.002	HRC <54		Series: Fe9	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
3/16	3/16	9		9/32	1-1/2	SQ	Fe9-.1875-S-SQ	910000	\$ 37.13
3/16	3/16	9		9/32	1-1/2	0.010	Fe9-.1875-S-R.010	910010	\$ 37.89
3/16	3/16	9		9/16	2	SQ	Fe9-.1875-SQ	910020	\$ 41.54
3/16	3/16	9		9/16	2	0.010	Fe9-.1875-R.010	910030	\$ 42.30
1/4	1/4	9		3/8	2	SQ	Fe9-.2500-S-SQ	910040	\$ 46.30
1/4	1/4	9		3/8	2	0.015	Fe9-.2500-S-R.015	910050	\$ 47.24
1/4	1/4	9	2-1/8	3/8	4	0.015	Fe9-.2500-R.015-RN2	910060	\$ 88.78
1/4	1/4	9		3/4	2-1/2	SQ	Fe9-.2500-SQ	910070	\$ 53.96
1/4	1/4	9		3/4	2-1/2	0.015	Fe9-.2500-R.015	910080	\$ 55.06
3/8	3/8	9		1/2	2	SQ	Fe9-.3750-S-SQ	910090	\$ 79.08
3/8	3/8	9		1/2	2	0.015	Fe9-.3750-S-R.015	910100	\$ 80.69
3/8	3/8	9	1-1/8	1/2	3	0.015	Fe9-.3750-R.015-RN1	910110	\$ 108.95
3/8	3/8	9	2-1/8	1/2	4	0.015	Fe9-.3750-R.015-RN2	910120	\$ 125.22
3/8	3/8	9		1	2-1/2	SQ	Fe9-.3750-SQ	910130	\$ 83.96
3/8	3/8	9		1	2-1/2	0.015	Fe9-.3750-R.015	910140	\$ 85.67
1/2	1/2	9		5/8	2-1/2	SQ	Fe9-.5000-S-SQ	910150	\$ 125.47
1/2	1/2	9		5/8	2-1/2	0.015	Fe9-.5000-S-R.015	910160	\$ 128.03
1/2	1/2	9	1-1/2	5/8	4	0.015	Fe9-.5000-R.015-RN1	910170	\$ 233.41
1/2	1/2	9	2-1/2	5/8	4	0.015	Fe9-.5000-R.015-RN2	910180	\$ 256.75
1/2	1/2	9		1	3	SQ	Fe9-.5000-SQ	910190	\$ 137.73
1/2	1/2	9		1	3	0.015	Fe9-.5000-R.015	910200	\$ 140.54
1/2	1/2	9		1	3	0.030	Fe9-.5000-R.030	910210	\$ 140.54
1/2	1/2	9		1-1/4	3	SQ	Fe9-.5000-M-SQ	910220	\$ 137.73
1/2	1/2	9		1-1/4	3	0.015	Fe9-.5000-M-R.015	910230	\$ 140.54
1/2	1/2	9		1-1/4	3	0.030	Fe9-.5000-M-R.030	910240	\$ 140.54
5/8	5/8	9		3/4	3	SQ	Fe9-.6250-S-SQ	910250	\$ 227.48
5/8	5/8	9		3/4	3	0.030	Fe9-.6250-S-R.030	910260	\$ 232.12
5/8	5/8	9	1-5/8	3/4	3	0.030	Fe9-.6250-R.030-RN1	910270	\$ 400.10
5/8	5/8	9		1-1/4	3	0.030	Fe9-.6250-SQ	910280	\$ 240.01
5/8	5/8	9		1-1/4	3	0.030	Fe9-.6250-R.030	910290	\$ 244.91
3/4	3/4	9		1-1/4	3	SQ	Fe9-.7500-S-SQ	910300	\$ 336.45
3/4	3/4	9		1-1/4	3	0.030	Fe9-.7500-S-R.030	910310	\$ 343.32
3/4	3/4	9	2	1-1/4	5	0.030	Fe9-.7500-R.030-RN2	910320	\$ 468.47
3/4	3/4	9		1-1/4	3-1/2	SQ	Fe9-.7500-SQ	910330	\$ 361.20
3/4	3/4	9		1-1/4	3-1/2	0.030	Fe9-.7500-R.030	910340	\$ 368.57

**Aluminum Alloys**



Carbide	2 Flute Center Cutting	45° Helix	Bright	ZrN	+ .000 - .002	HRC <40	ZrN add a (1) after leading (2) for EDP: (e.g. - 210000)	Series: A12				
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	BRIGHT EDP	ZRN EDP	Bright	ZrN	
1/8	1/8	2		1/4	1-1/2	SQ	A12-S-.1250-SQ	200000	210000	\$ 24.33	\$ 27.37	
1/8	1/8	2		1/4	1-1/2	0.010	A12-S-.1250-R010	200010	210010	\$ 28.47	\$ 32.03	
1/8	1/8	2		1/4	1-1/2	0.020	A12-S-.1250-R020	200020	210020	\$ 28.47	\$ 32.03	
1/8	1/8	2		1/4	1-1/2	BALL	A12-S-.1250-BN	200030	210030	\$ 37.39	\$ 42.06	
1/8	1/8	2		1/2	2	SQ	A12-R-.1250-SQ	200040	210040	\$ 24.50	\$ 27.56	
1/8	1/8	2		1/2	2	0.010	A12-R-.1250-R010	200050	210050	\$ 28.66	\$ 32.24	
1/8	1/8	2		1/2	2	0.020	A12-R-.1250-R020	200060	210060	\$ 28.66	\$ 32.24	
1/8	1/8	2		1/2	2	BALL	A12-R-.1250-BN	200070	210070	\$ 31.61	\$ 35.56	
3/16	3/16	2		5/16	2	SQ	A12-S-.1875-SQ	200080	210080	\$ 25.51	\$ 28.70	
3/16	3/16	2		5/16	2	0.015	A12-S-.1875-R015	200090	210090	\$ 29.84	\$ 33.57	
3/16	3/16	2		5/16	2	0.030	A12-S-.1875-R030	200100	210100	\$ 29.84	\$ 33.57	
3/16	3/16	2		5/16	2	BALL	A12-S-.1875-BN	200110	210110	\$ 32.91	\$ 37.02	
3/16	3/16	2		9/16	2	SQ	A12-R-.1875-SQ	200120	210120	\$ 26.92	\$ 30.29	
3/16	3/16	2		9/16	2	0.015	A12-R-.1875-R015	200130	210130	\$ 31.50	\$ 35.44	
3/16	3/16	2		9/16	2	0.030	A12-R-.1875-R030	200140	210140	\$ 31.50	\$ 35.44	
3/16	3/16	2		9/16	2	BALL	A12-R-.1875-BN	200150	210150	\$ 34.73	\$ 39.07	
3/16	3/16	2		3/4	2-1/2	SQ	A12-L-.1875-SQ	200160	210160	\$ 29.20	\$ 32.85	
3/16	3/16	2		3/4	2-1/2	0.015	A12-L-.1875-R015	200170	210170	\$ 34.17	\$ 38.44	
3/16	3/16	2		3/4	2-1/2	0.030	A12-L-.1875-R030	200180	210180	\$ 34.17	\$ 38.44	
3/16	3/16	2		3/4	2-1/2	BALL	A12-L-.1875-BN	200190	210190	\$ 37.67	\$ 42.38	
1/4	1/4	2		3/8	2	SQ	A12-S-.2500-SQ	200200	210200	\$ 27.70	\$ 31.16	
1/4	1/4	2		3/8	2	0.015	A12-S-.2500-R015	200210	210210	\$ 32.40	\$ 36.45	
1/4	1/4	2		3/8	2	0.030	A12-S-.2500-R030	200220	210220	\$ 32.40	\$ 36.45	
1/4	1/4	2		3/8	2	BALL	A12-S-.2500-BN	200230	210230	\$ 35.73	\$ 40.20	
1/4	1/4	2		5/8	2-1/2	SQ	A12-R-.2500-SQ	200240	210240	\$ 29.34	\$ 33.01	
1/4	1/4	2		5/8	2-1/2	0.015	A12-R-.2500-R015	200250	210250	\$ 34.34	\$ 38.63	
1/4	1/4	2		5/8	2-1/2	0.030	A12-R-.2500-R030	200260	210260	\$ 34.34	\$ 38.63	
1/4	1/4	2		5/8	2-1/2	BALL	A12-R-.2500-BN	200270	210270	\$ 37.85	\$ 42.58	
1/4	1/4	2		3/4	2-1/2	SQ	A12-M-.2500-SQ	200280	210280	\$ 30.28	\$ 34.07	
1/4	1/4	2		3/4	2-1/2	0.015	A12-M-.2500-R015	200290	210290	\$ 35.43	\$ 39.86	
1/4	1/4	2		3/4	2-1/2	0.030	A12-M-.2500-R030	200300	210300	\$ 35.43	\$ 39.86	
1/4	1/4	2		3/4	2-1/2	BALL	A12-M-.2500-BN	200310	210310	\$ 39.06	\$ 43.94	
1/4	1/4	2		1	3	SQ	A12-L-.2500-SQ	200320	210320	\$ 41.95	\$ 47.19	
1/4	1/4	2		1	3	0.015	A12-L-.2500-R015	200330	210330	\$ 49.08	\$ 55.22	
1/4	1/4	2		1	3	0.030	A12-L-.2500-R030	200340	210340	\$ 49.08	\$ 55.22	
1/4	1/4	2		1	3	BALL	A12-L-.2500-BN	200350	210350	\$ 54.11	\$ 60.87	
5/16	5/16	2		1/2	2	SQ	A12-S-.3125-SQ	200360	210360	\$ 33.29	\$ 37.45	
5/16	5/16	2		1/2	2	0.015	A12-S-.3125-R015	200370	210370	\$ 38.94	\$ 43.81	
5/16	5/16	2		1/2	2	0.030	A12-S-.3125-R030	200380	210380	\$ 38.94	\$ 43.81	
5/16	5/16	2		1/2	2	BALL	A12-S-.3125-BN	200390	210390	\$ 42.94	\$ 48.31	
5/16	5/16	2		13/16	2-1/2	SQ	A12-R-.3125-SQ	200400	210400	\$ 35.57	\$ 40.02	
5/16	5/16	2		13/16	2-1/2	0.015	A12-R-.3125-R015	200410	210410	\$ 41.61	\$ 46.81	
5/16	5/16	2		13/16	2-1/2	0.030	A12-R-.3125-R030	200420	210420	\$ 41.61	\$ 46.81	
5/16	5/16	2		13/16	2-1/2	BALL	A12-R-.3125-BN	200430	210430	\$ 45.89	\$ 51.63	
3/8	3/8	2		1/2	2	SQ	A12-S-.3750-SQ	200440	210440	\$ 37.84	\$ 42.57	
3/8	3/8	2		1/2	2	0.015	A12-S-.3750-R015	200450	210450	\$ 44.27	\$ 49.80	
3/8	3/8	2		1/2	2	0.030	A12-S-.3750-R030	200460	210460	\$ 44.27	\$ 49.80	
3/8	3/8	2		1/2	2	BALL	A12-S-.3750-BN	200470	210470	\$ 48.81	\$ 54.91	
3/8	3/8	2		1	2-1/2	SQ	A12-R-.3750-SQ	200480	210480	\$ 47.15	\$ 53.04	
3/8	3/8	2		1	2-1/2	0.015	A12-R-.3750-R015	200490	210490	\$ 55.17	\$ 62.07	
3/8	3/8	2		1	2-1/2	0.030	A12-R-.3750-R030	200500	210500	\$ 55.17	\$ 62.07	
3/8	3/8	2		1	2-1/2	BALL	A12-R-.3750-BN	200510	210510	\$ 60.82	\$ 68.42	
3/8	3/8	2		1-1/4	3	SQ	A12-M-.3750-SQ	200520	210520	\$ 49.98	\$ 56.23	
3/8	3/8	2		1-1/4	3	0.015	A12-M-.3750-R015	200530	210530	\$ 58.47	\$ 65.78	
3/8	3/8	2		1-1/4	3	0.030	A12-M-.3750-R030	200540	210540	\$ 58.47	\$ 65.78	
3/8	3/8	2		1-1/4	3	BALL	A12-M-.3750-BN	200550	210550	\$ 64.47	\$ 72.53	
1/2	1/2	2		5/8	2-1/2	SQ	A12-S-.5000-SQ	200560	210560	\$ 55.94	\$ 62.93	
1/2	1/2	2		5/8	2-1/2	0.015	A12-S-.5000-R015	200570	210570	\$ 65.45	\$ 73.63	
1/2	1/2	2		5/8	2-1/2	0.030	A12-S-.5000-R030	200580	210580	\$ 65.45	\$ 73.63	
1/2	1/2	2		5/8	2-1/2	0.060	A12-S-.5000-R060	200590	210590	\$ 65.45	\$ 73.63	
1/2	1/2	2		5/8	2-1/2	BALL	A12-S-.5000-BN	200600	210600	\$ 72.16	\$ 81.18	
1/2	1/2	2		1	3	SQ	A12-R-.5000-SQ	200610	210610	\$ 63.43	\$ 71.36	
1/2	1/2	2		1	3	0.015	A12-R-.5000-R015	200620	210620	\$ 74.21	\$ 83.49	
1/2	1/2	2		1	3	0.030	A12-R-.5000-R030	200630	210630	\$ 74.21	\$ 83.49	
1/2	1/2	2		1	3	0.060	A12-R-.5000-R060	200640	210640	\$ 74.21	\$ 83.49	
1/2	1/2	2		1	3	BALL	A12-R-.5000-BN	200650	210650	\$ 81.82	\$ 92.05	
1/2	1/2	2		1-1/4	3	SQ	A12-M-.5000-SQ	200660	210660	\$ 67.80	\$ 76.28	
1/2	1/2	2		1-1/4	3	0.015	A12-M-.5000-R015	200670	210670	\$ 79.32	\$ 89.24	
1/2	1/2	2		1-1/4	3	0.030	A12-M-.5000-R030	200680	210680	\$ 79.32	\$ 89.24	
1/2	1/2	2		1-1/4	3	0.060	A12-M-.5000-R060	200690	210690	\$ 79.32	\$ 89.24	
1/2	1/2	2		1-1/4	3	BALL	A12-M-.5000-BN	200700	210700	\$ 87.46	\$ 98.39	
1/2	1/2	2		2	4	SQ	A12-L-.5000-SQ	200710	210710	\$ 97.02	\$ 109.15	
1/2	1/2	2		2	4	0.015	A12-L-.5000-R015	200720	210720	\$ 108.73	\$ 122.32	
1/2	1/2	2		2	4	0.030	A12-L-.5000-R030	200730	210730	\$ 108.73	\$ 122.32	
1/2	1/2	2		2	4	0.060	A12-L-.5000-R060	200740	210740	\$ 108.73	\$ 122.32	
1/2	1/2	2		2	4	BALL	A12-L-.5000-BN	200750	210750	\$ 125.16	\$ 140.81	

## Aluminum Alloys



Carbide	3 Flute Center Cutting	41° Helix	Bright	ZrN	+000 / -.002	HRC <40	ZrN add a (1) after leading (3) for EDP: (e.g. - 310000)	Series: A13				
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	BRIGHT EDP	ZrN EDP	List	ZrN	
1/8	1/8	3		1/4	1-1/2	SQ	A13-S-.1250-SQ	300000	310000	\$ 26.17	\$ 29.44	
1/8	1/8	3		1/4	1-1/2	0.010	A13-S-.1250-R010	300010	310010	\$ 30.74	\$ 34.58	
1/8	1/8	3		1/4	1-1/2	0.015	A13-S-.1250-R015	300020	310020	\$ 30.74	\$ 34.58	
1/8	1/8	3		1/4	1-1/2	0.020	A13-S-.1250-R020	300030	310030	\$ 30.74	\$ 34.58	
1/8	1/8	3		3/8	2	SQ	A13-T-.1250-SQ	300040	310040	\$ 26.44	\$ 29.74	
1/8	1/8	3		3/8	2	0.010	A13-T-.1250-R010	300050	310050	\$ 31.01	\$ 34.88	
1/8	1/8	3		3/8	2	0.015	A13-T-.1250-R015	300060	310060	\$ 31.01	\$ 34.88	
1/8	1/8	3		3/8	2	0.020	A13-T-.1250-R020	300070	310070	\$ 31.01	\$ 34.88	
1/8	1/8	3		1/2	2	SQ	A13-R-.1250-SQ	300080	310080	\$ 26.44	\$ 29.74	
1/8	1/8	3		1/2	2	0.010	A13-R-.1250-R010	300090	310090	\$ 31.01	\$ 34.88	
1/8	1/8	3		1/2	2	0.015	A13-R-.1250-R015	300100	310100	\$ 31.01	\$ 34.88	
1/8	1/8	3		1/2	2	0.020	A13-R-.1250-R020	300110	310110	\$ 31.01	\$ 34.88	
3/16	3/16	3		5/16	2	SQ	A13-S-.1875-SQ	300120	310120	\$ 26.57	\$ 29.89	
3/16	3/16	3		5/16	2	0.015	A13-S-.1875-R015	300130	310130	\$ 31.47	\$ 35.40	
3/16	3/16	3		5/16	2	0.030	A13-S-.1875-R030	300140	310140	\$ 31.47	\$ 35.40	
3/16	3/16	3		5/16	2	0.060	A13-S-.1875-R060	300150	310150	\$ 31.47	\$ 35.40	
3/16	3/16	3		9/16	2	SQ	A13-R-.1875-SQ	300160	310160	\$ 28.04	\$ 31.54	
3/16	3/16	3		9/16	2	0.015	A13-R-.1875-R015	300170	310170	\$ 32.94	\$ 37.05	
3/16	3/16	3		9/16	2	0.030	A13-R-.1875-R030	300180	310180	\$ 32.94	\$ 37.05	
3/16	3/16	3		9/16	2	0.060	A13-R-.1875-R060	300190	310190	\$ 32.94	\$ 37.05	
3/16	3/16	3		3/4	2-1/2	SQ	A13-M-.1875-SQ	300200	310200	\$ 30.42	\$ 34.22	
3/16	3/16	3		3/4	2-1/2	0.015	A13-M-.1875-R015	300210	310210	\$ 35.74	\$ 40.21	
3/16	3/16	3		3/4	2-1/2	0.030	A13-M-.1875-R030	300220	310220	\$ 35.74	\$ 40.21	
3/16	3/16	3		3/4	2-1/2	0.060	A13-M-.1875-R060	300230	310230	\$ 35.74	\$ 40.21	
1/4	1/4	3		3/8	2	SQ	A13-S-.2500-SQ	300240	310240	\$ 28.85	\$ 32.45	
1/4	1/4	3		3/8	2	0.015	A13-S-.2500-R015	300250	310250	\$ 34.71	\$ 39.05	
1/4	1/4	3		3/8	2	0.030	A13-S-.2500-R030	300260	310260	\$ 34.71	\$ 39.05	
1/4	1/4	3		3/8	2	0.060	A13-S-.2500-R060	300270	310270	\$ 34.71	\$ 39.05	
1/4	1/4	3		1/2	2-1/2	SQ	A13-T-.2500-SQ	300280	310280	\$ 30.57	\$ 34.40	
1/4	1/4	3		1/2	2-1/2	0.015	A13-T-.2500-R015	300290	310290	\$ 36.43	\$ 40.98	
1/4	1/4	3		1/2	2-1/2	0.030	A13-T-.2500-R030	300300	310300	\$ 36.43	\$ 40.98	
1/4	1/4	3		1/2	2-1/2	0.060	A13-T-.2500-R060	300310	310310	\$ 36.43	\$ 40.98	
1/4	1/4	3		5/8	2-1/2	SQ	A13-R-.2500-SQ	300320	310320	\$ 30.57	\$ 34.40	
1/4	1/4	3		5/8	2-1/2	0.015	A13-R-.2500-R015	300330	310330	\$ 36.43	\$ 40.98	
1/4	1/4	3		5/8	2-1/2	0.030	A13-R-.2500-R030	300340	310340	\$ 36.43	\$ 40.98	
1/4	1/4	3		5/8	2-1/2	0.060	A13-R-.2500-R060	300350	310350	\$ 36.43	\$ 40.98	
1/4	1/4	3		3/4	2-1/2	SQ	A13-M-.2500-SQ	300360	310360	\$ 31.54	\$ 35.48	
1/4	1/4	3		3/4	2-1/2	0.015	A13-M-.2500-R015	300370	310370	\$ 37.40	\$ 42.08	
1/4	1/4	3		3/4	2-1/2	0.030	A13-M-.2500-R030	300380	310380	\$ 37.40	\$ 42.08	
1/4	1/4	3		3/4	2-1/2	0.060	A13-M-.2500-R060	300390	310390	\$ 37.40	\$ 42.08	
1/4	1/4	3		1	3	SQ	A13-L-.2500-SQ	300400	310400	\$ 43.70	\$ 49.16	
1/4	1/4	3		1	3	0.015	A13-L-.2500-R015	300410	310410	\$ 49.56	\$ 55.76	
1/4	1/4	3		1	3	0.030	A13-L-.2500-R030	300420	310420	\$ 49.56	\$ 55.76	
1/4	1/4	3		1	3	0.060	A13-L-.2500-R060	300430	310430	\$ 49.56	\$ 55.76	
5/16	5/16	3		13/16	2-1/2	SQ	A13-R-.3125-SQ	300440	310440	\$ 37.05	\$ 41.68	
5/16	5/16	3		13/16	2-1/2	0.015	A13-R-.3125-R015	300450	310450	\$ 43.71	\$ 49.17	
5/16	5/16	3		13/16	2-1/2	0.030	A13-R-.3125-R030	300460	310460	\$ 43.71	\$ 49.17	
5/16	5/16	3		13/16	2-1/2	0.060	A13-R-.3125-R060	300470	310470	\$ 43.71	\$ 49.17	
5/16	5/16	3		1	3	SQ	A13-M-.3125-SQ	300480	310480	\$ 47.94	\$ 53.93	
5/16	5/16	3		1	3	0.015	A13-M-.3125-R015	300490	310490	\$ 54.61	\$ 61.44	
5/16	5/16	3		1	3	0.030	A13-M-.3125-R030	300500	310500	\$ 54.61	\$ 61.44	
5/16	5/16	3		1	3	0.060	A13-M-.3125-R060	300510	310510	\$ 54.61	\$ 61.44	
3/8	3/8	3		1/2	2	SQ	A13-S-.3750-SQ	300520	310520	\$ 39.42	\$ 44.35	
3/8	3/8	3		1/2	2	0.015	A13-S-.3750-R015	300530	310530	\$ 47.21	\$ 53.11	
3/8	3/8	3		1/2	2	0.030	A13-S-.3750-R030	300540	310540	\$ 47.21	\$ 53.11	
3/8	3/8	3		1/2	2	0.060	A13-S-.3750-R060	300550	310550	\$ 47.21	\$ 53.11	
3/8	3/8	3		1	3	SQ	A13-R-.3750-SQ	300560	310560	\$ 49.12	\$ 55.25	
3/8	3/8	3		1	3	0.015	A13-R-.3750-R015	300570	310570	\$ 56.91	\$ 64.02	
3/8	3/8	3		1	3	0.030	A13-R-.3750-R030	300580	310580	\$ 56.91	\$ 64.02	
3/8	3/8	3		1	3	0.060	A13-R-.3750-R060	300590	310590	\$ 56.91	\$ 64.02	
3/8	3/8	3		1-1/4	3	SQ	A13-M-.3750-SQ	300600	310600	\$ 52.06	\$ 58.57	
3/8	3/8	3		1-1/4	3	0.015	A13-M-.3750-R015	300610	310610	\$ 59.85	\$ 67.34	
3/8	3/8	3		1-1/4	3	0.030	A13-M-.3750-R030	300620	310620	\$ 59.85	\$ 67.34	
3/8	3/8	3		1-1/4	3	0.060	A13-M-.3750-R060	300630	310630	\$ 59.85	\$ 67.34	
3/8	3/8	3		1-1/2	3-1/2	SQ	A13-L-.3750-SQ	300640	310640	\$ 74.68	\$ 84.02	
3/8	3/8	3		1-1/2	3-1/2	0.015	A13-L-.3750-R015	300650	310650	\$ 82.47	\$ 92.78	
3/8	3/8	3		1-1/2	3-1/2	0.030	A13-L-.3750-R030	300660	310660	\$ 82.47	\$ 92.78	
3/8	3/8	3		1-1/2	3-1/2	0.060	A13-L-.3750-R060	300670	310670	\$ 82.47	\$ 92.78	
3/8	3/8	3		2	4	SQ	A13-XL-.3750-SQ	300680	310680	\$ 79.00	\$ 88.87	
3/8	3/8	3		2	4	0.015	A13-XL-.3750-R015	300690	310690	\$ 86.79	\$ 97.63	
3/8	3/8	3		2	4	0.030	A13-XL-.3750-R030	300700	310700	\$ 86.79	\$ 97.63	
3/8	3/8	3		2	4	0.060	A13-XL-.3750-R060	300710	310710	\$ 86.79	\$ 97.63	



**Aluminum Alloys**



Carbide	3 Flute Center Cutting	41° Helix	Bright	ZrN	+000 / -.002	HRc <40	ZrN add a (1) after leading (3) for EDP: (e.g. - 310000)	Series: A13				
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	BRIGHT EDP	ZrN EDP	BRIGHT	ZrN	
1/2	1/2	3		5/8	2-1/2	SQ	A13-S-.5000-SQ	300720	310720	\$ 58.52	\$ 65.83	
1/2	1/2	3		5/8	2-1/2	0.015	A13-S-.5000-R015	300730	310730	\$ 67.27	\$ 75.68	
1/2	1/2	3		5/8	2-1/2	0.030	A13-S-.5000-R030	300740	310740	\$ 67.27	\$ 75.68	
1/2	1/2	3		5/8	2-1/2	0.060	A13-S-.5000-R060	300750	310750	\$ 67.27	\$ 75.68	
1/2	1/2	3		1	3	SQ	A13-T-.5000-SQ	300760	310760	\$ 66.07	\$ 74.33	
1/2	1/2	3		1	3	0.015	A13-T-.5000-R015	300770	310770	\$ 74.84	\$ 84.19	
1/2	1/2	3		1	3	0.030	A13-T-.5000-R030	300780	310780	\$ 74.84	\$ 84.19	
1/2	1/2	3		1	3	0.060	A13-T-.5000-R060	300790	310790	\$ 74.84	\$ 84.19	
1/2	1/2	3		1-1/4	3	SQ	A13-R-.5000-SQ	300800	310800	\$ 70.62	\$ 79.44	
1/2	1/2	3		1-1/4	3	0.015	A13-R-.5000-R015	300810	310810	\$ 79.38	\$ 89.31	
1/2	1/2	3		1-1/4	3	0.030	A13-R-.5000-R030	300820	310820	\$ 79.38	\$ 89.31	
1/2	1/2	3		1-1/4	3	0.060	A13-R-.5000-R060	300830	310830	\$ 79.38	\$ 89.31	
1/2	1/2	3		1-5/8	4	SQ	A13-M-.5000-SQ	300840	310840	\$ 86.90	\$ 97.77	
1/2	1/2	3		1-5/8	4	0.015	A13-M-.5000-R015	300850	310850	\$ 95.66	\$ 107.61	
1/2	1/2	3		1-5/8	4	0.030	A13-M-.5000-R030	300860	310860	\$ 95.66	\$ 107.61	
1/2	1/2	3		1-5/8	4	0.060	A13-M-.5000-R060	300870	310870	\$ 95.66	\$ 107.61	
1/2	1/2	3		2	4	SQ	A13-L-.5000-SQ	300880	310880	\$ 101.07	\$ 113.71	
1/2	1/2	3		2	4	0.015	A13-L-.5000-R015	300890	310890	\$ 109.83	\$ 123.56	
1/2	1/2	3		2	4	0.030	A13-L-.5000-R030	300900	310900	\$ 109.83	\$ 123.56	
1/2	1/2	3		2	4	0.060	A13-L-.5000-R060	300910	310910	\$ 109.83	\$ 123.56	
1/2	1/2	3		2-1/2	5	SQ	A13-XL-.5000-SQ	300920	310920	\$ 113.56	\$ 127.76	
1/2	1/2	3		2-1/2	5	0.015	A13-XL-.5000-R015	300930	310930	\$ 122.32	\$ 137.61	
1/2	1/2	3		2-1/2	5	0.030	A13-XL-.5000-R030	300940	310940	\$ 122.32	\$ 137.61	
1/2	1/2	3		2-1/2	5	0.060	A13-XL-.5000-R060	300950	310950	\$ 122.32	\$ 137.61	
5/8	5/8	3		3/4	3	SQ	A13-S-.6250-SQ	300960	310960	\$ 120.21	\$ 135.24	
5/8	5/8	3		3/4	3	0.015	A13-S-.6250-R015	300970	310970	\$ 130.65	\$ 146.98	
5/8	5/8	3		3/4	3	0.030	A13-S-.6250-R030	300980	310980	\$ 130.65	\$ 146.98	
5/8	5/8	3		3/4	3	0.060	A13-S-.6250-R060	300990	310990	\$ 130.65	\$ 146.98	
5/8	5/8	3		1-1/4	3-1/2	SQ	A13-T-.6250-SQ	301000	311000	\$ 123.53	\$ 138.97	
5/8	5/8	3		1-1/4	3-1/2	0.015	A13-T-.6250-R015	301010	311010	\$ 133.96	\$ 150.71	
5/8	5/8	3		1-1/4	3-1/2	0.030	A13-T-.6250-R030	301020	311020	\$ 133.96	\$ 150.71	
5/8	5/8	3		1-1/4	3-1/2	0.060	A13-T-.6250-R060	301030	311030	\$ 133.96	\$ 150.71	
5/8	5/8	3		1-5/8	3-1/2	SQ	A13-R-.6250-SQ	301040	311040	\$ 126.77	\$ 142.62	
5/8	5/8	3		1-5/8	3-1/2	0.015	A13-R-.6250-R015	301050	311050	\$ 137.20	\$ 154.36	
5/8	5/8	3		1-5/8	3-1/2	0.030	A13-R-.6250-R030	301060	311060	\$ 137.20	\$ 154.36	
5/8	5/8	3		1-5/8	3-1/2	0.060	A13-R-.6250-R060	301070	311070	\$ 137.20	\$ 154.36	
3/4	3/4	3		1	4	SQ	A13-S-.7500-SQ	301080	311080	\$ 195.00	\$ 219.38	
3/4	3/4	3		1	4	0.015	A13-S-.7500-R015	301090	311090	\$ 207.12	\$ 233.01	
3/4	3/4	3		1	4	0.030	A13-S-.7500-R030	301100	311100	\$ 207.12	\$ 233.01	
3/4	3/4	3		1	4	0.060	A13-S-.7500-R060	301110	311110	\$ 207.12	\$ 233.01	
3/4	3/4	3		1-5/8	4	SQ	A13-R-.7500-SQ	301120	311120	\$ 212.66	\$ 239.25	
3/4	3/4	3		1-5/8	4	0.015	A13-R-.7500-R015	301130	311130	\$ 224.80	\$ 252.90	
3/4	3/4	3		1-5/8	4	0.030	A13-R-.7500-R030	301140	311140	\$ 224.80	\$ 252.90	
3/4	3/4	3		1-5/8	4	0.060	A13-R-.7500-R060	301150	311150	\$ 224.80	\$ 252.90	
3/4	3/4	3		2-1/4	5	SQ	A13-M-.7500-SQ	301160	311160	\$ 245.54	\$ 276.23	
3/4	3/4	3		2-1/4	5	0.015	A13-M-.7500-R015	301170	311170	\$ 257.67	\$ 289.87	
3/4	3/4	3		2-1/4	5	0.030	A13-M-.7500-R030	301180	311180	\$ 257.67	\$ 289.87	
3/4	3/4	3		2-1/4	5	0.060	A13-M-.7500-R060	301190	311190	\$ 257.67	\$ 289.87	

## Ferrous Alloys



Carbide	4 Flute Center Cutting	37° Helix	TiAlN	+0.000 / -.002	HRC <54			Series: AP4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	4		1/4	1-1/2	SQ	AP4-S-.1250-SQ	420000	\$ 15.44
1/8	1/8	4		1/4	1-1/2	0.010	AP4-S-.1250-R.010	420010	\$ 19.07
1/8	1/8	4		1/4	1-1/2	BALL	AP4-S-.1250-BN	420020	\$ 18.94
1/8	1/8	4		1/2	1-1/2	SQ	AP4-.1250-SQ	420030	\$ 16.13
1/8	1/8	4		1/2	1-1/2	0.010	AP4-.1250-R.010	420040	\$ 19.79
1/8	1/8	4		1/2	1-1/2	0.015	AP4-.1250-R.015	420050	\$ 19.79
1/8	1/8	4		1/2	1-1/2	0.020	AP4-.1250-R.020	420060	\$ 19.79
1/8	1/8	4		1/2	1-1/2	0.030	AP4-.1250-R.030	420070	\$ 19.79
1/8	1/8	4		1/2	1-1/2	BALL	AP4-.1250-BN	420080	\$ 19.79
1/8	1/8	4		3/4	2-1/4	SQ	AP4-L-.1250-SQ	420090	\$ 23.86
1/8	1/8	4		3/4	2-1/4	0.015	AP4-L-.1250-R.015	420100	\$ 28.00
1/8	1/8	4		3/4	2-1/4	BALL	AP4-L-.1250-BN	420110	\$ 29.25
1/8	1/8	4		1	3	SQ	AP4-XL-.1250-SQ	420120	\$ 28.82
1/8	1/8	4		1	3	0.015	AP4-XL-.1250-R.015	420130	\$ 32.04
3/16	3/16	4		3/8	2	SQ	AP4-S-.1875-SQ	420140	\$ 21.21
3/16	3/16	4		3/8	2	0.010	AP4-S-.1875-R.010	420150	\$ 25.59
3/16	3/16	4		3/8	2	BALL	AP4-S-.1875-BN	420160	\$ 26.01
3/16	3/16	4		5/8	2	SQ	AP4-.1875-SQ	420170	\$ 22.07
3/16	3/16	4		5/8	2	0.010	AP4-.1875-R.010	420180	\$ 26.50
3/16	3/16	4		5/8	2	0.015	AP4-.1875-R.015	420190	\$ 26.50
3/16	3/16	4		5/8	2	0.020	AP4-.1875-R.020	420200	\$ 26.50
3/16	3/16	4		5/8	2	0.030	AP4-.1875-R.030	420210	\$ 26.50
3/16	3/16	4		5/8	2	BALL	AP4-.1875-BN	420220	\$ 27.06
3/16	3/16	4		3/4	2-1/2	SQ	AP4-L-.1875-SQ	420230	\$ 28.96
3/16	3/16	4		3/4	2-1/2	0.015	AP4-L-.1875-R.015	420240	\$ 33.83
3/16	3/16	4		3/4	2-1/2	BALL	AP4-L-.1875-BN	420250	\$ 35.51
3/16	3/16	4		1-1/8	3	SQ	AP4-XL-.1875-SQ	420260	\$ 33.51
3/16	3/16	4		1-1/8	3	0.015	AP4-XL-.1875-R.015	420270	\$ 37.41
1/4	1/4	4		7/16	2	SQ	AP4-S-.2500-SQ	420280	\$ 22.61
1/4	1/4	4		7/16	2	0.015	AP4-S-.2500-R.015	420290	\$ 27.22
1/4	1/4	4		7/16	2	BALL	AP4-S-.2500-BN	420300	\$ 27.22
1/4	1/4	4		3/4	2-1/2	SQ	AP4-.2500-SQ	420310	\$ 28.70
1/4	1/4	4		3/4	2-1/2	0.015	AP4-.2500-R.015	420320	\$ 33.68
1/4	1/4	4		3/4	2-1/2	0.030	AP4-.2500-R.030	420330	\$ 33.68
1/4	1/4	4		3/4	2-1/2	0.060	AP4-.2500-R.060	420340	\$ 33.68
1/4	1/4	4		3/4	2-1/2	BALL	AP4-.2500-BN	420350	\$ 34.55
1/4	1/4	4		1-1/8	3	SQ	AP4-L-.2500-SQ	420360	\$ 37.66
1/4	1/4	4		1-1/8	3	0.015	AP4-L-.2500-R.015	420370	\$ 42.71
1/4	1/4	4		1-1/8	3	0.030	AP4-L-.2500-R.030	420380	\$ 42.71
1/4	1/4	4		1-1/8	3	BALL	AP4-L-.2500-BN	420390	\$ 45.35
1/4	1/4	4		1-1/2	4	SQ	AP4-XL-.2500-SQ	420400	\$ 45.52
1/4	1/4	4		1-1/2	4	0.015	AP4-XL-.2500-R.015	420410	\$ 50.56
1/4	1/4	4		1-1/2	4	0.030	AP4-XL-.2500-R.030	420420	\$ 50.56
1/4	1/4	4		1-1/2	4	BALL	AP4-XL-.2500-BN	420430	\$ 54.55
5/16	5/16	4		1/2	2	SQ	AP4-S-.3125-SQ	420440	\$ 35.59
5/16	5/16	4		1/2	2	0.015	AP4-S-.3125-R.015	420450	\$ 40.40
5/16	5/16	4		13/16	2-1/2	SQ	AP4-.3125-SQ	420460	\$ 37.52
5/16	5/16	4		13/16	2-1/2	0.015	AP4-.3125-R.015	420470	\$ 42.43
5/16	5/16	4		13/16	2-1/2	0.030	AP4-.3125-R.030	420480	\$ 42.43
5/16	5/16	4		13/16	2-1/2	0.060	AP4-.3125-R.060	420490	\$ 42.43
5/16	5/16	4		13/16	2-1/2	BALL	AP4-.3125-BN	420500	\$ 45.16
5/16	5/16	4		1-1/8	3	SQ	AP4-L-.3125-SQ	420510	\$ 41.92
5/16	5/16	4		1-1/8	3	0.015	AP4-L-.3125-R.015	420520	\$ 47.15
5/16	5/16	4		1-1/8	3	0.030	AP4-L-.3125-R.030	420530	\$ 47.15
5/16	5/16	4		1-5/8	4	SQ	AP4-XL-.3125-SQ	420540	\$ 56.28
5/16	5/16	4		1-5/8	4	0.015	AP4-XL-.3125-R.015	420550	\$ 62.39
5/16	5/16	4		1-5/8	4	0.030	AP4-XL-.3125-R.030	420560	\$ 62.39
3/8	3/8	4		5/8	2	SQ	AP4-S-.3750-SQ	420570	\$ 43.59
3/8	3/8	4		5/8	2	0.015	AP4-S-.3750-R.015	420580	\$ 49.30
3/8	3/8	4		5/8	2	BALL	AP4-S-.3750-BN	420590	\$ 52.49
3/8	3/8	4		1	2-1/2	SQ	AP4-.3750-SQ	420600	\$ 42.34
3/8	3/8	4		1	2-1/2	0.015	AP4-.3750-R.015	420610	\$ 47.98
3/8	3/8	4		1	2-1/2	0.030	AP4-.3750-R.030	420620	\$ 47.98
3/8	3/8	4		1	2-1/2	0.060	AP4-.3750-R.060	420630	\$ 47.98
3/8	3/8	4		1	2-1/2	BALL	AP4-.3750-BN	420640	\$ 50.98
3/8	3/8	4		1-1/8	3	SQ	AP4-L-.3750-SQ	420650	\$ 58.91
3/8	3/8	4		1-1/8	3	0.015	AP4-L-.3750-R.015	420660	\$ 65.57
3/8	3/8	4		1-1/8	3	0.030	AP4-L-.3750-R.030	420670	\$ 65.57
3/8	3/8	4		1-1/8	3	0.060	AP4-L-.3750-R.060	420680	\$ 65.57
3/8	3/8	4		1-1/8	3	BALL	AP4-L-.3750-BN	420690	\$ 70.93
3/8	3/8	4		1-3/4	4	SQ	AP4-XL-.3750-SQ	420700	\$ 68.58
3/8	3/8	4		1-3/4	4	0.015	AP4-XL-.3750-R.015	420710	\$ 75.83
3/8	3/8	4		1-3/4	4	0.030	AP4-XL-.3750-R.030	420720	\$ 75.83

**Ferrous Alloys**



Carbide	4 Flute Center Cutting	Variable	TiAlN	+0.000 / -.002	HRc <54			Series: AP4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
7/16	7/16	4		1	2-3/4	SQ	AP4-.4375-SQ	420730	\$ 58.08
7/16	7/16	4		1	2-3/4	.030	AP4-.4375-R.030	420740	\$ 65.15
7/16	7/16	4		1	2-3/4	.060	AP4-.4375-R.060	420750	\$ 65.15
7/16	7/16	4		2	4	SQ	AP4-L-.4375-SQ	420760	\$ 93.95
7/16	7/16	4		3	6	SQ	AP4-XL-.4375-SQ	420770	\$ 128.85
1/2	1/2	4		5/8	2-1/2	SQ	AP4-S-.5000-SQ	420780	\$ 70.60
1/2	1/2	4		5/8	2-1/2	0.030	AP4-S-.5000-R.030	420790	\$ 78.85
1/2	1/2	4		1	3	SQ	AP4-.5000-SQ	420800	\$ 72.02
1/2	1/2	4		1	3	0.015	AP4-.5000-R.015	420810	\$ 80.35
1/2	1/2	4		1	3	0.030	AP4-.5000-R.030	420820	\$ 80.35
1/2	1/2	4		1	3	0.060	AP4-.5000-R.060	420830	\$ 80.35
1/2	1/2	4		1	3	BALL	AP4-.5000-BN	420840	\$ 84.34
1/2	1/2	4		1-1/4	3	SQ	AP4-M-.5000-SQ	420850	\$ 76.22
1/2	1/2	4		1-1/4	3	0.015	AP4-M-.5000-R.015	420860	\$ 85.06
1/2	1/2	4		1-1/4	3	0.030	AP4-M-.5000-R.030	420870	\$ 85.06
1/2	1/2	4		1-1/4	3	0.060	AP4-M-.5000-R.060	420880	\$ 85.06
1/2	1/2	4		1-1/4	3	BALL	AP4-M-.5000-BN	420890	\$ 89.27
1/2	1/2	4		2	4	SQ	AP4-L-.5000-SQ	420900	\$ 90.58
1/2	1/2	4		2	4	0.030	AP4-L-.5000-R.030	420910	\$ 100.08
1/2	1/2	4		2	4	0.060	AP4-L-.5000-R.060	420920	\$ 100.08
1/2	1/2	4		2	4	BALL	AP4-L-.5000-BN	420930	\$ 106.06
1/2	1/2	4		3	6	SQ	AP4-XL-.5000-SQ	420940	\$ 140.11
1/2	1/2	4		3	6	0.030	AP4-XL-.5000-R.030	420950	\$ 152.70
1/2	1/2	4		3	6	0.060	AP4-XL-.5000-R.060	420960	\$ 152.70
5/8	5/8	4		3/4	3	SQ	AP4-S-.6250-SQ	420970	\$ 120.84
5/8	5/8	4		3/4	3	0.030	AP4-S-.6250-R.030	420980	\$ 133.02
5/8	5/8	4		1-1/4	3-1/2	SQ	AP4-.6250-SQ	420990	\$ 134.76
5/8	5/8	4		1-1/4	3-1/2	0.030	AP4-.6250-R.030	421000	\$ 147.81
5/8	5/8	4		1-1/4	3-1/2	0.060	AP4-.6250-R.060	421010	\$ 147.81
5/8	5/8	4		1-1/4	3-1/2	BALL	AP4-.6250-BN	421020	\$ 157.80
5/8	5/8	4		2-1/4	5	SQ	AP4-L-.6250-SQ	421030	\$ 179.09
5/8	5/8	4		2-1/4	5	BALL	AP4-L-.6250-BN	421040	\$ 209.71
5/8	5/8	4		2-1/4	5	0.030	AP4-L-.6250-R.030	421050	\$ 194.91
5/8	5/8	4		2-1/4	5	0.060	AP4-L-.6250-R.060	421060	\$ 194.91
5/8	5/8	4		3	6	SQ	AP4-XL-.6250-SQ	421070	\$ 205.81
5/8	5/8	4		3	6	0.030	AP4-XL-.6250-R.030	421080	\$ 223.30
5/8	5/8	4		3	6	0.060	AP4-XL-.6250-R.060	421090	\$ 223.30
3/4	3/4	4		1	3	SQ	AP4-S-.7500-SQ	421100	\$ 174.67
3/4	3/4	4		1	3	0.030	AP4-S-.7500-R.030	421110	\$ 191.00
3/4	3/4	4		1-1/2	4	SQ	AP4-.7500-SQ	421120	\$ 197.30
3/4	3/4	4		1-1/2	4	0.030	AP4-.7500-R.030	421130	\$ 215.06
3/4	3/4	4		1-1/2	4	0.060	AP4-.7500-R.060	421140	\$ 215.06
3/4	3/4	4		1-1/2	4	BALL	AP4-.7500-BN	421150	\$ 228.85
3/4	3/4	4		2-1/4	5	SQ	AP4-L-.7500-SQ	421160	\$ 247.54
3/4	3/4	4		2-1/4	5	0.030	AP4-L-.7500-R.030	421170	\$ 268.44
3/4	3/4	4		2-1/4	5	0.060	AP4-L-.7500-R.060	421180	\$ 268.44
3/4	3/4	4		2-1/4	5	BALL	AP4-L-.7500-BN	421190	\$ 287.13
3/4	3/4	4		3	6	SQ	AP4-XL-.7500-SQ	421200	\$ 313.56
3/4	3/4	4		3	6	0.030	AP4-XL-.7500-R.030	421210	\$ 338.60
3/4	3/4	4		3	6	0.060	AP4-XL-.7500-R.060	421220	\$ 338.60

## Ferrous Alloys



Carbide	5 Flute Center Cutting	Variable	TiAlN	+ .000 / -.002	HRC <54			Series: AP5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	5		1/4	1-1/2	SQ	AP5-S-.1250-SQ	520000	\$ 16.90
1/8	1/8	5		1/4	1-1/2	0.010	AP5-S-.1250-R.010	520010	\$ 20.89
1/8	1/8	5		1/4	1-1/2	BALL	AP5-S-.1250-BN	520020	\$ 20.89
1/8	1/8	5		1/2	1-1/2	SQ	AP5-.1250-SQ	520030	\$ 17.67
1/8	1/8	5		1/2	1-1/2	0.010	AP5-.1250-R.010	520040	\$ 21.67
1/8	1/8	5		1/2	1-1/2	0.015	AP5-.1250-R.015	520050	\$ 21.67
1/8	1/8	5		1/2	1-1/2	0.020	AP5-.1250-R.020	520060	\$ 21.67
1/8	1/8	5		1/2	1-1/2	0.030	AP5-.1250-R.030	520070	\$ 21.67
1/8	1/8	5		1/2	1-1/2	BALL	AP5-.1250-BN	520080	\$ 21.85
1/8	1/8	5		3/4	2-1/4	SQ	AP5-L-.1250-SQ	520090	\$ 26.12
1/8	1/8	5		3/4	2-1/4	0.015	AP5-L-.1250-R.015	520100	\$ 30.67
1/8	1/8	5		3/4	2-1/4	BALL	AP5-L-.1250-BN	520110	\$ 32.26
1/8	1/8	5		1	3	SQ	AP5-XL-.1250-SQ	520120	\$ 31.56
1/8	1/8	5		1	3	0.015	AP5-XL-.1250-R.015	520130	\$ 35.09
3/16	3/16	5		3/8	2	SQ	AP5-S-.1875-SQ	520140	\$ 23.24
3/16	3/16	5		3/8	2	0.010	AP5-S-.1875-R.010	520150	\$ 28.02
3/16	3/16	5		3/8	2	BALL	AP5-S-.1875-BN	520160	\$ 28.48
3/16	3/16	5		5/8	2	SQ	AP5-.1875-SQ	520170	\$ 24.17
3/16	3/16	5		5/8	2	0.010	AP5-.1875-R.010	520180	\$ 29.01
3/16	3/16	5		5/8	2	0.015	AP5-.1875-R.015	520190	\$ 29.01
3/16	3/16	5		5/8	2	0.020	AP5-.1875-R.020	520200	\$ 29.01
3/16	3/16	5		5/8	2	0.030	AP5-.1875-R.030	520210	\$ 29.01
3/16	3/16	5		5/8	2	BALL	AP5-.1875-BN	520220	\$ 29.61
3/16	3/16	5		3/4	2-1/2	SQ	AP5-L-.1875-SQ	520230	\$ 31.71
3/16	3/16	5		3/4	2-1/2	0.015	AP5-L-.1875-R.015	520240	\$ 37.04
3/16	3/16	5		3/4	2-1/2	BALL	AP5-L-.1875-BN	520250	\$ 38.96
3/16	3/16	5		1-1/8	3	SQ	AP5-XL-.1875	520260	\$ 36.69
3/16	3/16	5		1-1/8	3	0.015	AP5-XL-.1875-R.015	520270	\$ 40.97
1/4	1/4	5		7/16	2	SQ	AP5-S-.2500-SQ	520280	\$ 24.31
1/4	1/4	5		7/16	2	0.015	AP5-S-.2500-R.015	520290	\$ 29.27
1/4	1/4	5		7/16	2	BALL	AP5-S-.2500-BN	520300	\$ 29.39
1/4	1/4	5		3/4	2-1/2	SQ	AP5-.2500-SQ	520310	\$ 30.84
1/4	1/4	5		3/4	2-1/2	0.015	AP5-.2500-R.015	520320	\$ 36.21
1/4	1/4	5		3/4	2-1/2	0.030	AP5-.2500-R.030	520330	\$ 36.21
1/4	1/4	5		3/4	2-1/2	0.060	AP5-.2500-R.060	520340	\$ 36.21
1/4	1/4	5		3/4	2-1/2	BALL	AP5-.2500-BN	520350	\$ 37.52
1/4	1/4	5		1-1/8	3	SQ	AP5-L-.2500-SQ	520360	\$ 40.48
1/4	1/4	5		1-1/8	3	0.015	AP5-L-.2500-R.015	520370	\$ 45.91
1/4	1/4	5		1-1/8	3	0.030	AP5-L-.2500-R.030	520380	\$ 45.91
1/4	1/4	5		1-1/8	3	BALL	AP5-L-.2500-BN	520390	\$ 49.41
1/4	1/4	5		1-1/2	4	SQ	AP5-XL-.2500-SQ	520400	\$ 48.95
1/4	1/4	5		1-1/2	4	0.015	AP5-XL-.2500-R.015	520410	\$ 54.35
1/4	1/4	5		1-1/2	4	0.030	AP5-XL-.2500-R.030	520420	\$ 54.35
1/4	1/4	5		1-1/2	4	BALL	AP5-XL-.2500-BN	520430	\$ 58.34
5/16	5/16	5		1/2	2	SQ	AP5-S-.3125-SQ	520440	\$ 38.25
5/16	5/16	5		1/2	2	0.015	AP5-S-.3125-R.015	520450	\$ 43.42
5/16	5/16	5		13/16	2-1/2	SQ	AP5-.3125-SQ	520460	\$ 40.33
5/16	5/16	5		13/16	2-1/2	0.015	AP5-.3125-R.015	520470	\$ 45.63
5/16	5/16	5		13/16	2-1/2	0.030	AP5-.3125-R.030	520480	\$ 45.63
5/16	5/16	5		13/16	2-1/2	0.060	AP5-.3125-R.060	520490	\$ 45.63
5/16	5/16	5		13/16	2-1/2	BALL	AP5-.3125-BN	520500	\$ 48.87
5/16	5/16	5		1-1/8	3	SQ	AP5-L-.3125-SQ	520510	\$ 45.07
5/16	5/16	5		1-1/8	3	0.015	AP5-L-.3125-R.015	520520	\$ 50.68
5/16	5/16	5		1-1/8	3	0.030	AP5-L-.3125-R.030	520530	\$ 50.68
5/16	5/16	5		1-5/8	4	SQ	AP5-XL-.3125-SQ	520540	\$ 60.52
5/16	5/16	5		1-5/8	4	0.015	AP5-XL-.3125-R.015	520550	\$ 67.07
5/16	5/16	5		1-5/8	4	0.030	AP5-XL-.3125-R.030	520560	\$ 67.07
3/8	3/8	5		5/8	2	SQ	AP5-S-.3750-SQ	520570	\$ 46.85
3/8	3/8	5		5/8	2	0.015	AP5-S-.3750-R.015	520580	\$ 53.01
3/8	3/8	5		5/8	2	BALL	AP5-S-.3750-BN	520590	\$ 56.82
3/8	3/8	5		1	2-1/2	SQ	AP5-.3750-SQ	520600	\$ 45.51
3/8	3/8	5		1	2-1/2	0.015	AP5-.3750-R.015	520610	\$ 51.59
3/8	3/8	5		1	2-1/2	0.030	AP5-.3750-R.030	520620	\$ 51.59
3/8	3/8	5		1	2-1/2	0.060	AP5-.3750-R.060	520630	\$ 51.59
3/8	3/8	5		1	2-1/2	BALL	AP5-.3750-BN	520640	\$ 54.82
3/8	3/8	5		1-1/8	3	SQ	AP5-L-.3750-SQ	520650	\$ 63.33
3/8	3/8	5		1-1/8	3	0.015	AP5-L-.3750-R.015	520660	\$ 70.49
3/8	3/8	5		1-1/8	3	0.030	AP5-L-.3750-R.030	520670	\$ 70.49
3/8	3/8	5		1-1/8	3	0.060	AP5-L-.3750-R.060	520680	\$ 70.49
3/8	3/8	5		1-1/8	3	BALL	AP5-L-.3750-BN	520690	\$ 76.69
3/8	3/8	5		1-3/4	4	SQ	AP5-XL-.3750-SQ	520700	\$ 73.71
3/8	3/8	5		1-3/4	4	0.015	AP5-XL-.3750-R.015	520710	\$ 81.52
3/8	3/8	5		1-3/4	4	0.030	AP5-XL-.3750-R.030	520720	\$ 81.52

## Ferrous Alloys



Carbide	5 Flute Center Cutting	37° Helix	TiAlN	+ .000 / -.002	HRC <54			Series: AP5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
7/16	7/16	5		1	2-3/4	SQ	AP5-.4375-SQ	520730	\$ 61.27
7/16	7/16	5		1	2-3/4	.030	AP5-.4375-R.030	520740	\$ 68.74
7/16	7/16	5		1	2-3/4	.060	AP5-.4375-R.060	520750	\$ 68.74
7/16	7/16	5		2	4	SQ	AP5-L-.4375-SQ	520760	\$ 99.13
7/16	7/16	5		3	6	SQ	AP5-XL-.4375-SQ	520770	\$ 135.95
1/2	1/2	5		5/8	2-1/2	SQ	AP5-S-.5000-SQ	520780	\$ 74.48
1/2	1/2	5		5/8	2-1/2	0.030	AP5-S-.5000-R.030	520790	\$ 83.19
1/2	1/2	5		1	3	SQ	AP5-.5000-SQ	520800	\$ 75.97
1/2	1/2	5		1	3	0.015	AP5-.5000-R.015	520810	\$ 84.77
1/2	1/2	5		1	3	0.030	AP5-.5000-R.030	520820	\$ 84.77
1/2	1/2	5		1	3	0.060	AP5-.5000-R.060	520830	\$ 84.77
1/2	1/2	5		1	3	BALL	AP5-.5000-BN	520840	\$ 90.17
1/2	1/2	5		1-1/4	3	SQ	AP5-M-.5000-SQ	520850	\$ 80.42
1/2	1/2	5		1-1/4	3	0.015	AP5-M-.5000-R.015	520860	\$ 89.74
1/2	1/2	5		1-1/4	3	0.030	AP5-M-.5000-R.030	520870	\$ 89.74
1/2	1/2	5		1-1/4	3	0.060	AP5-M-.5000-R.060	520880	\$ 89.74
1/2	1/2	5		1-1/4	3	BALL	AP5-M-.5000-BN	520890	\$ 95.70
1/2	1/2	5		2	4	SQ	AP5-L-.5000-SQ	520900	\$ 95.55
1/2	1/2	5		2	4	0.030	AP5-L-.5000-R.030	520910	\$ 105.59
1/2	1/2	5		2	4	0.060	AP5-L-.5000-R.060	520920	\$ 105.59
1/2	1/2	5		2	4	BALL	AP5-L-.5000-BN	520930	\$ 112.97
1/2	1/2	5		3	6	SQ	AP5-XL.5000-SQ	520940	\$ 147.81
1/2	1/2	5		3	6	0.030	AP5-XL-.5000-R.030	520950	\$ 161.09
1/2	1/2	5		3	6	0.060	AP5-XL.5000-R.060	520960	\$ 161.09
5/8	5/8	5		3/4	3	SQ	AP5-S-.6250-SQ	520970	\$ 127.49
5/8	5/8	5		3/4	3	0.030	AP5-S-.6250-R.030	520980	\$ 140.35
5/8	5/8	5		1-1/4	3-1/2	SQ	AP5-.6250-SQ	520990	\$ 142.17
5/8	5/8	5		1-1/4	3-1/2	0.030	AP5-.6250-R.030	521000	\$ 155.95
5/8	5/8	5		1-1/4	3-1/2	0.060	AP5-.6250-R.060	521010	\$ 155.95
5/8	5/8	5		1-1/4	3-1/2	BALL	AP5-.6250-BN	521020	\$ 169.43
5/8	5/8	5		2-1/4	5	SQ	AP5-L-.6250-SQ	521030	\$ 188.92
5/8	5/8	5		2-1/4	5	0.030	AP5-L-.6250-R.030	521040	\$ 205.63
5/8	5/8	5		2-1/4	5	0.060	AP5-L-.6250-R.060	521050	\$ 205.63
5/8	5/8	5		2-1/4	5	BALL	AP5-L-.6250-BN	521060	\$ 223.40
5/8	5/8	5		3	6	SQ	AP5-XL.6250-SQ	521070	\$ 217.12
5/8	5/8	5		3	6	0.030	AP5-XL-.6250-R.030	521080	\$ 235.59
5/8	5/8	5		3	6	0.060	AP5-XL-.6250-R.060	521090	\$ 235.59
3/4	3/4	5		1	3	SQ	AP5-S-.7500-SQ	521100	\$ 182.52
3/4	3/4	5		1	3	0.030	AP5-S-.7500-R.030	521110	\$ 199.61
3/4	3/4	5		1-1/2	4	SQ	AP5-.7500-SQ	521120	\$ 206.18
3/4	3/4	5		1-1/2	4	0.030	AP5-.7500-R.030	521130	\$ 224.74
3/4	3/4	5		1-1/2	4	0.060	AP5-.7500-R.060	521140	\$ 224.74
3/4	3/4	5		1-1/2	4	BALL	AP5-.7500-BN	521150	\$ 244.84
3/4	3/4	5		2-1/4	5	SQ	AP5-L-.7500-SQ	521160	\$ 258.68
3/4	3/4	5		2-1/4	5	0.030	AP5-L-.7500-R.030	521170	\$ 280.51
3/4	3/4	5		2-1/4	5	0.060	AP5-L-.7500-R.060	521180	\$ 280.51
3/4	3/4	5		2-1/4	5	BALL	AP5-L-.7500-BN	521190	\$ 304.84
3/4	3/4	5		3	6	SQ	AP5-XL-.7500-SQ	521200	\$ 327.67
3/4	3/4	5		3	6	0.030	AP5-XL-.7500-R.030	521210	\$ 353.84
3/4	3/4	5		3	6	0.060	AP5-XL-.7500-R.060	521220	\$ 353.84

## Stainless and Nickel Based Alloys



Carbide	5 Flute Center Cutting	45° Helix	TiCN	+0.00 / -.002	HRc <54			Series: Cr5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	5		1/4	1-1/2	SQ	Cr5-S-.1250	530000	\$ 19.40
1/8	1/8	5		1/4	1-1/2	0.010	Cr5-S-.1250-R.010	530010	\$ 21.16
1/8	1/8	5		1/2	1-1/2	SQ	Cr5-.1250	530020	\$ 19.66
1/8	1/8	5		1/2	1-1/2	0.010	Cr5-.1250-R.010	530030	\$ 21.38
3/16	3/16	5		5/16	2	SQ	Cr5-S-.1875	530040	\$ 27.24
3/16	3/16	5		9/16	2	SQ	Cr5-.1875	530050	\$ 27.62
3/16	3/16	5		9/16	2	0.010	Cr5-.1875-R.010	530060	\$ 29.61
1/4	1/4	5		3/8	2	SQ	Cr5-S-.2500	530070	\$ 30.84
1/4	1/4	5		3/8	2	0.015	Cr5-S-.2500-R.015	530080	\$ 34.60
1/4	1/4	5		3/4	2-1/2	SQ	Cr5-.2500	530090	\$ 34.55
1/4	1/4	5		3/4	2-1/2	0.015	Cr5-.2500-R.015	530100	\$ 36.82
5/16	5/16	5		7/16	2	SQ	Cr5-S-.3125	530110	\$ 38.79
5/16	5/16	5		13/16	2-1/2	SQ	Cr5-.3125	530120	\$ 42.92
5/16	5/16	5		13/16	2-1/2	0.015	Cr5-.3125-R.015	530130	\$ 46.52
3/8	3/8	5		1/2	2	SQ	Cr5-S-.3750	530140	\$ 46.36
3/8	3/8	5		1/2	2	0.015	Cr5-S-.3750-R.015	530150	\$ 50.27
3/8	3/8	5		1/2	2	0.030	Cr5-S-.3750-R.030	530160	\$ 50.27
3/8	3/8	5		1	2-1/2	SQ	Cr5-.3750	530170	\$ 53.94
3/8	3/8	5		1	2-1/2	0.015	Cr5-.3750-R.015	530180	\$ 57.48
3/8	3/8	5		1	2-1/2	0.030	Cr5-.3750-R.030	530190	\$ 57.48
7/16	7/16	5		9/16	2-1/2	SQ	Cr5-S-.4375	530200	\$ 62.30
7/16	7/16	5		1	2-3/4	SQ	Cr5-.4375	530210	\$ 74.49
1/2	1/2	5		5/8	2-1/2	SQ	Cr5-S-.5000	530220	\$ 74.22
1/2	1/2	5		5/8	2-1/2	0.030	Cr5-S-.5000-R.030	530230	\$ 80.80
1/2	1/2	5		5/8	2-1/2	0.060	Cr5-S-.5000-R.060	530240	\$ 80.80
1/2	1/2	5		1-1/4	3	SQ	Cr5-.5000	530250	\$ 89.66
1/2	1/2	5		1-1/4	3	0.030	Cr5-.5000-R.030	530260	\$ 99.07
1/2	1/2	5		1-1/4	3	0.060	Cr5-.5000-R.060	530270	\$ 95.39
5/8	5/8	5		3/4	3	SQ	Cr5-S-.6250	530280	\$ 151.82
5/8	5/8	5		3/4	3	0.030	Cr5-S-.6250-R.030	530290	\$ 159.04
5/8	5/8	5		3/4	3	0.060	Cr5-S-.6250-R.060	530300	\$ 159.04
5/8	5/8	5		1-5/8	3-1/2	SQ	Cr5-.6250	530310	\$ 159.94
5/8	5/8	5		1-5/8	3-1/2	0.030	Cr5-.6250-R.030	530320	\$ 166.66
5/8	5/8	5		1-5/8	3-1/2	0.060	Cr5-.6250-R.060	530330	\$ 166.66
3/4	3/4	5		1	3	SQ	Cr5-S-.7500	530340	\$ 206.38
3/4	3/4	5		1	3	0.030	Cr5-S-.7500-R.030	530350	\$ 217.03
3/4	3/4	5		1	3	0.060	Cr5-S-.7500-R.060	530360	\$ 217.03
3/4	3/4	5		1-5/8	4	SQ	Cr5-.7500	530370	\$ 235.38
3/4	3/4	5		1-5/8	4	0.030	Cr5-.7500-R.030	530380	\$ 244.41
3/4	3/4	5		1-5/8	4	0.060	Cr5-.7500-R.060	530390	\$ 244.41
3.0mm	3.0mm	5		12mm	38mm	SQ	Cr5-3mm	530400	\$ 18.04
4.0mm	4.0mm	5		14mm	51mm	SQ	Cr5-4mm	530410	\$ 24.59
5mm	5mm	5		20mm	51mm	SQ	Cr5-5mm	530420	\$ 27.62
6mm	6mm	5		20mm	63mm	SQ	Cr5-6mm	530430	\$ 33.22
6mm	6mm	5		20mm	63mm	0.50mm	Cr5-6mm-R0.5	530440	\$ 36.57
8mm	8mm	5		20mm	63mm	SQ	Cr5-8mm	530450	\$ 40.25
8mm	8mm	5		20mm	63mm	0.50mm	Cr5-8mm-R0.5	530460	\$ 42.97
10mm	10mm	5		25mm	70mm	SQ	Cr5-10mm	530470	\$ 64.03
10mm	10mm	5		25mm	70mm	SQ	Cr5-10mm-R0.5	530480	\$ 69.61
12mm	12mm	5		25mm	76mm	SQ	Cr5-12mm	530490	\$ 79.63
12mm	12mm	5		25mm	76mm	1.0mm	Cr5-12mm-R1.0	530500	\$ 88.12
16mm	16mm	5		32mm	89mm	SQ	Cr5-16mm	530510	\$ 130.90
16mm	16mm	5		32mm	89mm	1.0mm	Cr5-16mm-R1.0	530520	\$ 169.12
20mm	20mm	5		38mm	100mm	SQ	Cr5-20mm	530530	\$ 283.19
20mm	20mm	5		38mm	100mm	1.0mm	Cr5-20mm-R1.0	530540	\$ 283.19

## Die & Mold Steels



Carbide	6 Flute Center Cutting	45° Helix	AlTiSiN	+ .000 / -.002	HRC >55-65			Series: Cr6	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	6	1/2	1/4	1-1/2	0.010	Cr6-S-.1250	600000	\$ 23.17
1/8	1/8	6		1/2	1-1/2	0.010	Cr6-.1250	600010	\$ 24.15
3/16	3/16	6		5/8	2	0.010	Cr6-.1875	600020	\$ 32.65
1/4	1/4	6	3/4	3/8	2-1/2	0.015	Cr6-S-.2500	600030	\$ 45.38
1/4	1/4	6		3/4	2-1/2	0.015	Cr6-.2500	600040	\$ 47.26
5/16	5/16	6		13/16	2-1/2	0.020	Cr6-.3125	600050	\$ 59.12
3/8	3/8	6	1	1/2	2-1/2	0.020	Cr6-S.3750	600060	\$ 64.73
3/8	3/8	6		1	2-1/2	0.020	Cr6-.3750	600070	\$ 67.45
1/2	1/2	6	1	5/8	3	0.025	Cr6-S-.5000	600080	\$ 106.18
1/2	1/2	6		1	3	0.025	Cr6-.5000	600090	\$ 110.58
5/8	5/8	6		1-1/4	3-1/2	0.030	Cr6-.6250	600100	\$ 203.80
3/4	3/4	6	1-1/2	1	4	0.035	Cr6-S.7500	600110	\$ 299.07
3/4	3/4	6		1-1/2	4	0.035	Cr6-.7500	600120	\$ 311.53
3mm	3mm	6		12mm	38mm	0.25mm	Cr6-3mm	600130	\$ 26.52
4mm	4mm	6		14mm	51mm	0.25mm	Cr6-4mm	600140	\$ 31.23
6mm	6mm	6		20mm	63mm	0.40mm	Cr6-6mm	600150	\$ 45.06
8mm	8mm	6		20mm	63mm	0.50 mm	Cr6-8mm	600160	\$ 54.66
10mm	10mm	6		25mm	70mm	0.50mm	Cr6-10mm	600170	\$ 81.60
12mm	12mm	6		25mm	76mm	0.60mm	Cr6-12mm	600180	\$ 100.89
16mm	16mm	6		32mm	89mm	0.75mm	Cr6-16mm	600190	\$ 187.64
20mm	20mm	6		38mm	100mm	0.90mm	Cr6-20mm	600200	\$ 349.04

## Inconel and Nickel Based Alloys



Carbide	4 Flute Center Cutting	Variable Helix	TiCN	+0.00 / -.002	HRC <54			Series: Ni4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/8	1/8	4		1/4	1-1/2	0.015	Ni4-S-.1250-R.015	430000	\$ 21.08
1/8	1/8	4		1/4	1-1/2	0.030	Ni4-S-.1250-R.030	430010	\$ 26.14
1/8	1/8	4		1/4	1-1/2	Ball	Ni4-S-.1250-BN	430020	\$ 27.89
1/8	1/8	4		1/2	2	0.015	Ni4-R-.1250-R.015	430030	\$ 21.69
1/8	1/8	4		1/2	2	0.030	Ni4-R-.1250-R.030	430040	\$ 28.59
1/8	1/8	4		1/2	2	Ball	Ni4-R-.1250-BN	430050	\$ 28.65
3/16	3/16	4		5/16	2	0.015	Ni4-S-.1875-R.015	430060	\$ 25.22
3/16	3/16	4		5/16	2	0.030	Ni4-S-.1875-R.030	430070	\$ 29.36
3/16	3/16	4		5/16	2	Ball	Ni4-S-.1875-BN	430080	\$ 33.06
3/16	3/16	4		9/16	2-1/2	0.015	Ni4-R-.1875-R.015	430090	\$ 27.20
3/16	3/16	4		9/16	2-1/2	0.030	Ni4-R-.1875-R.030	430100	\$ 31.96
3/16	3/16	4		9/16	2-1/2	Ball	Ni4-R-.1875-BN	430110	\$ 35.57
1/4	1/4	4		3/8	2	0.015	Ni4-S-.2500-R.015	430120	\$ 35.03
1/4	1/4	4		3/8	2	0.030	Ni4-S-.2500-R.030	430130	\$ 35.03
1/4	1/4	4		3/8	2	0.060	Ni4-S-.2500-R.060	430140	\$ 37.01
1/4	1/4	4		3/8	2	Ball	Ni4-S-.2500-BN	430150	\$ 40.16
1/4	1/4	4		1/2	2-1/2	0.015	Ni4-T-.2500-R.015	430160	\$ 38.40
1/4	1/4	4		1/2	2-1/2	0.030	Ni4-T-.2500-R.030	430170	\$ 38.40
1/4	1/4	4		1/2	2-1/2	0.060	Ni4-T-.2500-R.060	430180	\$ 46.30
1/4	1/4	4		1/2	2-1/2	Ball	Ni4-T-.2500-BN	430190	\$ 46.22
1/4	1/4	4		3/4	2-1/2	0.015	Ni4-R-.2500-R.015	430200	\$ 50.07
1/4	1/4	4		3/4	2-1/2	0.030	Ni4-R-.2500-R.030	430210	\$ 41.56
1/4	1/4	4		3/4	2-1/2	0.060	Ni4-R-.2500-R.060	430220	\$ 49.21
1/4	1/4	4		3/4	2-1/2	Ball	Ni4-R-.2500-BN	430230	\$ 48.90
1/4	1/4	4		1	3	0.015	Ni4-M-.2500-R.015	430240	\$ 56.33
1/4	1/4	4		1	3	0.030	Ni4-M-.2500-R.030	430250	\$ 56.33
1/4	1/4	4		1	3	0.060	Ni4-M-.2500-R.060	430260	\$ 57.90
1/4	1/4	4		1	3	Ball	Ni4-M-.2500-BN	430270	\$ 60.23
5/16	5/16	4		7/16	2	0.015	Ni4-S-.3125-R.015	430280	\$ 49.07
5/16	5/16	4		7/16	2	0.030	Ni4-S-.3125-R.030	430290	\$ 49.07
5/16	5/16	4		7/16	2	0.060	Ni4-S-.3125-R.060	430300	\$ 50.75
5/16	5/16	4		7/16	2	Ball	Ni4-S-.3125-BN	430310	\$ 51.98
5/16	5/16	4		13/16	2-1/2	0.015	Ni4-R-.3125-R.015	430320	\$ 52.43
5/16	5/16	4		13/16	2-1/2	0.030	Ni4-R-.3125-R.030	430330	\$ 52.43
5/16	5/16	4		13/16	2-1/2	0.060	Ni4-R-.3125-R.060	430340	\$ 58.55
5/16	5/16	4		13/16	2-1/2	Ball	Ni4-R-.3125-BN	430350	\$ 61.95
3/8	3/8	4		1/2	2	0.015	Ni4-S-.3750-R.015	430360	\$ 57.79
3/8	3/8	4		1/2	2	0.030	Ni4-S-.3750-R.030	430370	\$ 57.79
3/8	3/8	4		1/2	2	0.060	Ni4-S-.3750-R.060	430380	\$ 59.69
3/8	3/8	4		1/2	2	Ball	Ni4-S-.3750-BN	430390	\$ 66.38
3/8	3/8	4		1	2-1/2	0.015	Ni4-R-.3750-R.015	430400	\$ 61.02
3/8	3/8	4		1	2-1/2	0.030	Ni4-R-.3750-R.030	430410	\$ 61.02
3/8	3/8	4		1	2-1/2	0.060	Ni4-R-.3750-R.060	430420	\$ 62.93
3/8	3/8	4		1	2-1/2	Ball	Ni4-R-.3750-BN	430430	\$ 72.05
3/8	3/8	4		1-1/4	3	0.015	Ni4-M-.3750-R.015	430440	\$ 72.49
3/8	3/8	4		1-1/4	3	0.030	Ni4-M-.3750-R.030	430450	\$ 72.49
3/8	3/8	4		1-1/4	3	0.060	Ni4-M-.3750-R.060	430460	\$ 74.11
3/8	3/8	4		1-1/4	3	Ball	Ni4-M-.3750-BN	430470	\$ 80.36
1/2	1/2	4		5/8	2-1/2	0.015	Ni4-S-.5000-R.015	430480	\$ 91.38
1/2	1/2	4		5/8	2-1/2	0.030	Ni4-S-.5000-R.030	430490	\$ 91.38
1/2	1/2	4		5/8	2-1/2	0.060	Ni4-S-.5000-R.060	430500	\$ 93.64
1/2	1/2	4		5/8	2-1/2	Ball	Ni4-S-.5000-BN	430510	\$ 100.77
1/2	1/2	4		1	3	0.015	Ni4-T-.5000-R.015	430520	\$ 95.75
1/2	1/2	4		1	3	0.030	Ni4-T-.5000-R.030	430530	\$ 95.75
1/2	1/2	4		1	3	0.060	Ni4-T-.5000-R.060	430540	\$ 97.84
1/2	1/2	4		1	3	Ball	Ni4-T-.5000-BN	430550	\$ 104.99
1/2	1/2	4		1-1/4	3	0.015	Ni4-R-.5000-R.015	430560	\$ 99.65
1/2	1/2	4		1-1/4	3	0.030	Ni4-R-.5000-R.030	430570	\$ 99.65
1/2	1/2	4		1-1/4	3	0.060	Ni4-R-.5000-R.060	430580	\$ 97.84
1/2	1/2	4		1-1/4	3	Ball	Ni4-R-.5000-BN	430590	\$ 108.29
1/2	1/2	4		1-5/8	4	0.015	Ni4-M-.5000-R.015	430600	\$ 120.05
1/2	1/2	4		1-5/8	4	0.030	Ni4-M-.5000-R.030	430610	\$ 120.05
1/2	1/2	4		1-5/8	4	0.060	Ni4-M-.5000-R.060	430620	\$ 121.98
1/2	1/2	4		1-5/8	4	Ball	Ni4-M-.5000-BN	430630	\$ 132.00



## Inconel and Nickel Based Alloys



Carbide	5 Flute Center Cutting	Variable Helix	TiCN	+0.00 / -.002	HRC <54			Series: Ni5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/4	1/4	5		3/8	2	0.015	Ni5-S-.2500-R.015	540000	\$ 36.87
1/4	1/4	5		3/8	2	0.030	Ni5-S-.2500-R.030	540010	\$ 36.87
1/4	1/4	5		3/8	2	0.060	Ni5-S-.2500-R.060	540020	\$ 38.97
1/4	1/4	5		3/8	2	Ball	Ni5-S-.2500-BN	540030	\$ 42.29
1/4	1/4	5		1/2	2-1/2	0.015	Ni5-T-.2500-R.015	540040	\$ 40.42
1/4	1/4	5		1/2	2-1/2	0.030	Ni5-T-.2500-R.030	540050	\$ 40.42
1/4	1/4	5		1/2	2-1/2	0.060	Ni5-T-.2500-R.060	540060	\$ 48.75
1/4	1/4	5		1/2	2-1/2	Ball	Ni5-T-.2500-BN	540070	\$ 48.67
1/4	1/4	5		3/4	2-1/2	0.015	Ni5-R-.2500-R.015	540080	\$ 52.69
1/4	1/4	5		3/4	2-1/2	0.030	Ni5-R-.2500-R.030	540090	\$ 43.73
1/4	1/4	5		3/4	2-1/2	0.060	Ni5-R-.2500-R.060	540100	\$ 51.81
1/4	1/4	5		3/4	2-1/2	Ball	Ni5-R-.2500-BN	540110	\$ 51.48
1/4	1/4	5		1	3	0.015	Ni5-M-.2500-R.015	540120	\$ 57.77
1/4	1/4	5		1	3	0.030	Ni5-M-.2500-R.030	540130	\$ 57.77
1/4	1/4	5		1	3	0.060	Ni5-M-.2500-R.060	540140	\$ 59.40
1/4	1/4	5		1	3	Ball	Ni5-M-.2500-BN	540150	\$ 61.78
5/16	5/16	5		7/16	2	0.015	Ni5-S-.3125-R.015	540160	\$ 51.64
5/16	5/16	5		7/16	2	0.030	Ni5-S-.3125-R.030	540170	\$ 51.64
5/16	5/16	5		7/16	2	0.060	Ni5-S-.3125-R.060	540180	\$ 53.40
5/16	5/16	5		7/16	2	Ball	Ni5-S-.3125-BN	540190	\$ 54.71
5/16	5/16	5		13/16	2-1/2	0.015	Ni5-R-.3125-R.015	540200	\$ 55.21
5/16	5/16	5		13/16	2-1/2	0.030	Ni5-R-.3125-R.030	540210	\$ 55.21
5/16	5/16	5		13/16	2-1/2	0.060	Ni5-R-.3125-R.060	540220	\$ 61.64
5/16	5/16	5		13/16	2-1/2	Ball	Ni5-R-.3125-BN	540230	\$ 65.20
3/8	3/8	5		1/2	2	0.015	Ni5-S-.3750-R.015	540240	\$ 63.27
3/8	3/8	5		1/2	2	0.030	Ni5-S-.3750-R.030	540250	\$ 63.27
3/8	3/8	5		1/2	2	0.060	Ni5-S-.3750-R.060	540260	\$ 65.35
3/8	3/8	5		1/2	2	Ball	Ni5-S-.3750-BN	540270	\$ 69.88
3/8	3/8	5		1	2-1/2	0.015	Ni5-R-.3750-R.015	540280	\$ 66.82
3/8	3/8	5		1	2-1/2	0.030	Ni5-R-.3750-R.030	540290	\$ 66.82
3/8	3/8	5		1	2-1/2	0.060	Ni5-R-.3750-R.060	540300	\$ 68.90
3/8	3/8	5		1	2-1/2	Ball	Ni5-R-.3750-BN	540310	\$ 75.85
3/8	3/8	5		1-1/4	3	0.015	Ni5-M-.3750-R.015	540320	\$ 79.37
3/8	3/8	5		1-1/4	3	0.030	Ni5-M-.3750-R.030	540330	\$ 79.37
3/8	3/8	5		1-1/4	3	0.060	Ni5-M-.3750-R.060	540340	\$ 81.13
3/8	3/8	5		1-1/4	3	Ball	Ni5-M-.3750-BN	540350	\$ 84.56
1/2	1/2	5		5/8	2-1/2	0.015	Ni5-S-.5000-R.015	540360	\$ 100.80
1/2	1/2	5		5/8	2-1/2	0.030	Ni5-S-.5000-R.030	540370	\$ 100.80
1/2	1/2	5		5/8	2-1/2	0.060	Ni5-S-.5000-R.060	540380	\$ 103.28
1/2	1/2	5		5/8	2-1/2	Ball	Ni5-S-.5000-BN	540390	\$ 106.82
1/2	1/2	5		1	3	0.015	Ni5-T-.5000-R.015	540400	\$ 105.59
1/2	1/2	5		1	3	0.030	Ni5-T-.5000-R.030	540410	\$ 105.59
1/2	1/2	5		1	3	0.060	Ni5-T-.5000-R.060	540420	\$ 107.88
1/2	1/2	5		1	3	Ball	Ni5-T-.5000-BN	540430	\$ 111.25
1/2	1/2	5		1-1/4	3	0.015	Ni5-R-.5000-R.015	540440	\$ 109.86
1/2	1/2	5		1-1/4	3	0.030	Ni5-R-.5000-R.030	540450	\$ 109.86
1/2	1/2	5		1-1/4	3	0.060	Ni5-R-.5000-R.060	540460	\$ 107.88
1/2	1/2	5		1-1/4	3	Ball	Ni5-R-.5000-BN	540470	\$ 114.73
1/2	1/2	5		1-5/8	4	0.015	Ni5-M-.5000-R.015	540480	\$ 132.18
1/2	1/2	5		1-5/8	4	0.030	Ni5-M-.5000-R.030	540490	\$ 132.18
1/2	1/2	5		1-5/8	4	0.060	Ni5-M-.5000-R.060	540500	\$ 134.33
1/2	1/2	5		1-5/8	4	Ball	Ni5-M-.5000-BN	540510	\$ 139.66
5/8	5/8	5		3/4	3	0.015	Ni5-S-.6250-R.015	540520	\$ 184.98
5/8	5/8	5		3/4	3	0.030	Ni5-S-.6250-R.030	540530	\$ 184.98
5/8	5/8	5		3/4	3	0.060	Ni5-S-.6250-R.060	540540	\$ 186.54
5/8	5/8	5		3/4	3	Ball	Ni5-S-.6250-BN	540550	\$ 201.84
5/8	5/8	5		1-1/4	3-1/2	0.015	Ni5-T-.6250-R.015	540560	\$ 191.30
5/8	5/8	5		1-1/4	3-1/2	0.030	Ni5-T-.6250-R.030	540570	\$ 191.30
5/8	5/8	5		1-1/4	3-1/2	0.060	Ni5-T-.6250-R.060	540580	\$ 193.03
5/8	5/8	5		1-1/4	3-1/2	Ball	Ni5-T-.6250-BN	540590	\$ 208.32
5/8	5/8	5		1-5/8	3-1/2	0.015	Ni5-R-.6250-R.015	540600	\$ 213.91
5/8	5/8	5		1-5/8	3-1/2	0.030	Ni5-R-.6250-R.030	540610	\$ 213.91
5/8	5/8	5		1-5/8	3-1/2	0.060	Ni5-R-.6250-R.060	540620	\$ 215.50
5/8	5/8	5		1-5/8	3-1/2	Ball	Ni5-R-.6250-BN	540630	\$ 231.04

**Inconel and Nickel Based Alloys**



Carbide	5 Flute Center Cutting	Variable Helix	TiCN	+ .000 / -.002	Hrc <54			Series: Ni5	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
3/4	3/4	5		1	3	0.015	Ni5-S-.7500-R.015	540640	\$ 270.77
3/4	3/4	5		1	3	0.030	Ni5-S-.7500-R.030	540650	\$ 270.77
3/4	3/4	5		1	3	0.060	Ni5-S-.7500-R.060	540660	\$ 272.98
3/4	3/4	5		1	3	Ball	Ni5-S-.7500-BN	540670	\$ 301.81
3/4	3/4	5		1-5/8	4	0.015	Ni5-R-.7500-R.015	540680	\$ 295.59
3/4	3/4	5		1-5/8	4	0.030	Ni5-R-.7500-R.030	540690	\$ 295.59
3/4	3/4	5		1-5/8	4	0.060	Ni5-R-.7500-R.060	540700	\$ 297.36
3/4	3/4	5		1-5/8	4	Ball	Ni5-R-.7500-BN	540710	\$ 326.26
3/4	3/4	5		2-1/4	5	0.015	Ni5-M-.7500-R.015	540720	\$ 326.22
3/4	3/4	5		2-1/4	5	0.030	Ni5-M-.7500-R.030	540730	\$ 326.22
3/4	3/4	5		2-1/4	5	0.060	Ni5-M-.7500-R.060	540740	\$ 328.12
3/4	3/4	5		2-1/4	5	Ball	Ni5-M-.7500-BN	540750	\$ 357.09

**General Purpose**



Carbide	4 Flute Center Cutting	30° Helix	Coat on Demand	+0.00 / -0.021/8 and Greater	±0.005 Below 1/8				Series: BCT4					
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List	Coated List (DIA / DLC) Call for Price	AIN	TiCN	TiN	
1/8	1/32	4		1/16	1-1/2	SQ	BCT4F-.0313-S-SQ	BCT4-7000	\$ 13.72	\$ 15.44	BCT4-7000I	BCT4-70002	BCT4-70003	
1/8	1/32	4		1/16	1-1/2	BALL	BCT4F-.0313-S-BN	BCT4-7001	\$ 17.88	\$ 20.12	BCT4-7001I	BCT4-70012	BCT4-70013	
1/8	1/32	4		3/32	1-1/2	SQ	BCT4F-.0313-SQ	BCT4-7002	\$ 13.14	\$ 14.78	BCT4-7002I	BCT4-70022	BCT4-70023	
1/8	1/32	4		3/32	1-1/2	BALL	BCT4F-.0313-BN	BCT4-7003	\$ 16.21	\$ 18.24	BCT4-7003I	BCT4-70032	BCT4-70033	
1/8	1/32	4		9/64	1-1/2	SQ	BCT4F-.0313-L-SQ	BCT4-7004	\$ 16.04	\$ 18.05	BCT4-7004I	BCT4-70042	BCT4-70043	
1/8	3/64	4		3/32	1-1/2	SQ	BCT4F-.0469-S-SQ	BCT4-7005	\$ 13.51	\$ 15.20	BCT4-7005I	BCT4-70052	BCT4-70053	
1/8	3/64	4		3/32	1-1/2	BALL	BCT4F-.0469-S-BN	BCT4-7006	\$ 16.20	\$ 18.23	BCT4-7006I	BCT4-70062	BCT4-70063	
1/8	3/64	4		1/8	1-1/2	SQ	BCT4F-.0469-SQ	BCT4-7007	\$ 13.52	\$ 15.21	BCT4-7007I	BCT4-70072	BCT4-70073	
1/8	3/64	4		1/8	1-1/2	BALL	BCT4F-.0469-BN	BCT4-7008	\$ 16.21	\$ 18.24	BCT4-7008I	BCT4-70082	BCT4-70083	
1/8	3/64	4		3/16	1-1/2	SQ	BCT4F-.0469-L-SQ	BCT4-7009	\$ 15.23	\$ 17.13	BCT4-7009I	BCT4-70092	BCT4-70093	
1/8	1/16	4		1/8	1-1/2	SQ	BCT4F-.0625-S-SQ	BCT4-7010	\$ 11.07	\$ 12.45	BCT4-7010I	BCT4-70102	BCT4-70103	
1/8	1/16	4		1/8	1-1/2	BALL	BCT4F-.0625-S-BN	BCT4-7011	\$ 12.63	\$ 14.21	BCT4-7011I	BCT4-70112	BCT4-70113	
1/8	1/16	4		3/16	1-1/2	SQ	BCT4F-.0625-SQ	BCT4-7012	\$ 11.16	\$ 12.56	BCT4-7012I	BCT4-70122	BCT4-70123	
1/8	1/16	4		3/16	1-1/2	BALL	BCT4F-.0625-BN	BCT4-7013	\$ 13.37	\$ 15.04	BCT4-7013I	BCT4-70132	BCT4-70133	
1/8	1/16	4		1/4	1-1/2	SQ	BCT4F-.0625-M-SQ	BCT4-7014	\$ 15.59	\$ 17.54	BCT4-7014I	BCT4-70142	BCT4-70143	
1/8	1/16	4		1/4	1-1/2	BALL	BCT4F-.0625-M-BN	BCT4-7015	\$ 14.02	\$ 15.77	BCT4-7015I	BCT4-70152	BCT4-70153	
1/8	1/16	4		3/8	1-1/2	SQ	BCT4F-.0625-L-SQ	BCT4-7016	\$ 15.59	\$ 17.54	BCT4-7016I	BCT4-70162	BCT4-70163	
1/8	1/16	4		3/8	1-1/2	BALL	BCT4F-.0625-L-BN	BCT4-7017	\$ 14.43	\$ 16.23	BCT4-7017I	BCT4-70172	BCT4-70173	
1/8	5/64	4		1/8	1-1/2	SQ	BCT4F-.0781-S-SQ	BCT4-7018	\$ 11.16	\$ 12.56	BCT4-7018I	BCT4-70182	BCT4-70183	
1/8	5/64	4		1/8	1-1/2	BALL	BCT4F-.0781-S-BN	BCT4-7019	\$ 12.21	\$ 13.74	BCT4-7019I	BCT4-70192	BCT4-70193	
1/8	5/64	4		3/16	1-1/2	SQ	BCT4F-.0781-SQ	BCT4-7020	\$ 11.16	\$ 12.56	BCT4-7020I	BCT4-70202	BCT4-70203	
1/8	5/64	4		3/16	1-1/2	BALL	BCT4F-.0781-BN	BCT4-7021	\$ 13.37	\$ 15.04	BCT4-7021I	BCT4-70212	BCT4-70213	
1/8	5/64	4		1/4	1-1/2	SQ	BCT4F-.0781-M-SQ	BCT4-7022	\$ 15.59	\$ 17.54	BCT4-7022I	BCT4-70222	BCT4-70223	
1/8	5/64	4		3/8	1-1/2	SQ	BCT4F-.0781-T-SQ	BCT4-7023	\$ 15.59	\$ 17.54	BCT4-7023I	BCT4-70232	BCT4-70233	
1/8	5/64	4		1/2	1-1/2	SQ	BCT4F-.0781-L-SQ	BCT4-7024	\$ 15.59	\$ 17.54	BCT4-7024I	BCT4-70242	BCT4-70243	
1/8	3/32	4		3/16	1-1/2	SQ	BCT4F-.0938-S-SQ	BCT4-7025	\$ 10.77	\$ 12.12	BCT4-7025I	BCT4-70252	BCT4-70253	
1/8	3/32	4		3/16	1-1/2	BALL	BCT4F-.0938-S-BN	BCT4-7026	\$ 12.13	\$ 13.65	BCT4-7026I	BCT4-70262	BCT4-70263	
1/8	3/32	4		3/8	1-1/2	SQ	BCT4F-.0938-SQ	BCT4-7027	\$ 11.16	\$ 12.56	BCT4-7027I	BCT4-70272	BCT4-70273	
1/8	3/32	4		3/8	1-1/2	0.010	BCT4F-.0938-R.010	BCT4-7028	\$ 13.91	\$ 15.65	BCT4-7028I	BCT4-70282	BCT4-70283	
1/8	3/32	4		3/8	1-1/2	0.015	BCT4F-.0938-R.015	BCT4-7029	\$ 13.91	\$ 15.65	BCT4-7029I	BCT4-70292	BCT4-70293	
1/8	3/32	4		3/8	1-1/2	0.020	BCT4F-.0938-R.020	BCT4-7030	\$ 13.91	\$ 15.65	BCT4-7030I	BCT4-70302	BCT4-70303	
1/8	3/32	4		3/8	1-1/2	BALL	BCT4F-.0938-BN	BCT4-7031	\$ 13.37	\$ 15.04	BCT4-7031I	BCT4-70312	BCT4-70313	
1/8	3/32	4		1/2	1-1/2	SQ	BCT4F-.0938-M-SQ	BCT4-7032	\$ 12.84	\$ 14.45	BCT4-7032I	BCT4-70322	BCT4-70323	
1/8	3/32	4		1/2	1-1/2	BALL	BCT4F-.0938-M-BN	BCT4-7033	\$ 14.43	\$ 16.23	BCT4-7033I	BCT4-70332	BCT4-70333	
1/8	3/32	4		9/16	2	SQ	BCT4F-.0938-L-SQ	BCT4-7034	\$ 23.41	\$ 26.34	BCT4-7034I	BCT4-70342	BCT4-70343	
1/8	7/64	4		7/32	1-1/2	SQ	BCT4F-.1094-S-SQ	BCT4-7035	\$ 11.00	\$ 12.38	BCT4-7035I	BCT4-70352	BCT4-70353	
1/8	7/64	4		7/32	1-1/2	BALL	BCT4F-.1094-S-BN	BCT4-7036	\$ 13.23	\$ 14.88	BCT4-7036I	BCT4-70362	BCT4-70363	
1/8	7/64	4		3/8	1-1/2	SQ	BCT4F-.1094-SQ	BCT4-7037	\$ 11.16	\$ 12.56	BCT4-7037I	BCT4-70372	BCT4-70373	
1/8	7/64	4		3/8	1-1/2	BALL	BCT4F-.1094-BN	BCT4-7038	\$ 13.37	\$ 15.04	BCT4-7038I	BCT4-70382	BCT4-70383	
1/8	7/64	4		3/4	2	SQ	BCT4F-.1094-L-SQ	BCT4-7039	\$ 16.39	\$ 18.44	BCT4-7039I	BCT4-70392	BCT4-70393	
1/8	1/8	4		1/4	1-1/2	SQ	BCT4F-.1250-S-SQ	BCT4-7040	\$ 10.32	\$ 11.61	BCT4-7040I	BCT4-70402	BCT4-70403	
1/8	1/8	4		1/4	1-1/2	0.010	BCT4F-.1250-S-R.010	BCT4-7041	\$ 12.75	\$ 14.34	BCT4-7041I	BCT4-70412	BCT4-70413	
1/8	1/8	4		1/4	1-1/2	BALL	BCT4F-.1250-S-BN	BCT4-7042	\$ 11.62	\$ 13.07	BCT4-7042I	BCT4-70422	BCT4-70423	
1/8	1/8	4		1/2	1-1/2	SQ	BCT4F-.1250-SQ	BCT4-7043	\$ 10.81	\$ 12.16	BCT4-7043I	BCT4-70432	BCT4-70433	
1/8	1/8	4		1/2	1-1/2	0.005	BCT4F-.1250-R.005	BCT4-7044	\$ 12.98	\$ 14.60	BCT4-7044I	BCT4-70442	BCT4-70443	
1/8	1/8	4		1/2	1-1/2	0.010	BCT4F-.1250-R.010	BCT4-7045	\$ 12.98	\$ 14.60	BCT4-7045I	BCT4-70452	BCT4-70453	
1/8	1/8	4		1/2	1-1/2	0.015	BCT4F-.1250-R.015	BCT4-7046	\$ 12.98	\$ 14.60	BCT4-7046I	BCT4-70462	BCT4-70463	
1/8	1/8	4		1/2	1-1/2	0.020	BCT4F-.1250-R.020	BCT4-7047	\$ 12.98	\$ 14.60	BCT4-7047I	BCT4-70472	BCT4-70473	
1/8	1/8	4		1/2	1-1/2	0.030	BCT4F-.1250-R.030	BCT4-7048	\$ 12.98	\$ 14.60	BCT4-7048I	BCT4-70482	BCT4-70483	
1/8	1/8	4		1/2	1-1/2	BALL	BCT4F-.1250-BN	BCT4-7049	\$ 13.37	\$ 15.04	BCT4-7049I	BCT4-70492	BCT4-70493	
1/8	1/8	4		5/8	2	SQ	BCT4F-.1250-M-SQ	BCT4-7050	\$ 15.78	\$ 17.75	BCT4-7050I	BCT4-70502	BCT4-70503	
1/8	1/8	4		5/8	2	BALL	BCT4F-.1250-M-BN	BCT4-7051	\$ 17.83	\$ 20.06	BCT4-7051I	BCT4-70512	BCT4-70513	
1/8	1/8	4		3/4	2-1/4	SQ	BCT4F-.1250-T-SQ	BCT4-7052	\$ 16.32	\$ 18.36	BCT4-7052I	BCT4-70522	BCT4-70523	
1/8	1/8	4		3/4	2-1/4	BALL	BCT4F-.1250-T-BN	BCT4-7053	\$ 20.62	\$ 23.20	BCT4-7053I	BCT4-70532	BCT4-70533	
1/8	1/8	4		3/4	3	SQ	BCT4F-.1250-L-SQ	BCT4-7054	\$ 16.32	\$ 18.36	BCT4-7054I	BCT4-70542	BCT4-70543	
1/8	1/8	4		3/4	3	BALL	BCT4F-.1250-L-BN	BCT4-7055	\$ 21.97	\$ 24.72	BCT4-7055I	BCT4-70552	BCT4-70553	
1/8	1/8	4		1	3	SQ	BCT4F-.1250-XL-SQ	BCT4-7056	\$ 20.72	\$ 23.31	BCT4-7056I	BCT4-70562	BCT4-70563	
1/8	1/8	4		1	3	BALL	BCT4F-.1250-XL-BN	BCT4-7057	\$ 30.38	\$ 34.18	BCT4-7057I	BCT4-70572	BCT4-70573	
3/16	5/32	4		5/16	2	SQ	BCT4F-.1563-S-SQ	BCT4-7058	\$ 14.19	\$ 15.96	BCT4-7058I	BCT4-70582	BCT4-70583	
3/16	5/32	4		5/16	2	0.010	BCT4F-.1563-S-R.010	BCT4-7059	\$ 19.69	\$ 22.15	BCT4-7059I	BCT4-70592	BCT4-70593	
3/16	5/32	4		5/16	2	BALL	BCT4F-.1563-S-BN	BCT4-7060	\$ 17.77	\$ 19.99	BCT4-7060I	BCT4-70602	BCT4-70603	
3/16	5/32	4		9/16	2	SQ	BCT4F-.1563-SQ	BCT4-7061	\$ 18.23	\$ 20.51	BCT4-7061I	BCT4-70612	BCT4-70613	
3/16	5/32	4		9/16	2	0.010	BCT4F-.1563-R.010	BCT4-7062	\$ 19.00	\$ 21.38	BCT4-7062I	BCT4-70622	BCT4-70623	
3/16	5/32	4		9/16	2	0.015	BCT4F-.1563-R.015	BCT4-7063	\$ 19.00	\$ 21.38	BCT4-7063I	BCT4-70632	BCT4-70633	
3/16	5/32	4		9/16	2	0.030	BCT4F-.1563-R.030	BCT4-7064	\$ 19.00	\$ 21.38	BCT4-7064I	BCT4-70642	BCT4-70643	
3/16	3/16	4		3/8	2	SQ	BCT4F-.1875-S-SQ	BCT4-7065	\$ 13.65	\$ 15.36	BCT4-7065I	BCT4-70652	BCT4-70653	
3/16	3/16	4		3/8	2	0.010	BCT4F-.1875-S-R.010	BCT4-7066	\$ 17.05	\$ 19.18	BCT4-7066I	BCT4-70662	BCT4-70663	
3/16	3/16	4		3/8	2	BALL	BCT4F-.1875-S-BN	BCT4-7067	\$ 16.73	\$ 18.82	BCT4-7067I	BCT4-70672	BCT4-70673	
3/16	3/16	4		5/8	2	SQ	BCT4F-.1875-SQ	BCT4-7068	\$ 15.32	\$ 17.24	BCT4-7068I	BCT4-70682	BCT4-70683	
3/16	3/16	4		5/8	2	0.010	BCT4F-.1875-R.010	BCT4-7069	\$ 18.38	\$ 20.68	BCT4-7069I	BCT4-70692	BCT4-70693	
3/16	3/16	4		5/8	2	0.015	BCT4F-.1875-R.015	BCT4-7070	\$ 18.38	\$ 20.68	BCT4-7070I	BCT4-70702	BCT4-70703	
3/16	3/16	4		5/8	2	0.020	BCT4F-.1875-R.020	BCT4-7071	\$ 18.38	\$ 20.68	BCT4-7071I	BCT4-70712	BCT4-70713	
3/16	3/16	4		5/8	2	0.030	BCT4F-.1875-R.030	BCT4-7072	\$ 18.38	\$ 20.68	BCT4-7072I	BCT4-70722	BCT4-70723	
3/16	3/16	4		5/8	2	0.045	BCT4F-.1875-R.045	BCT4-7073	\$ 18.38	\$ 20.68	BCT4-7073I	BCT4-70732	BCT4-70733	
3/16	3/16	4		5/8	2	BALL	BCT4F-.1875-BN	BCT4-7074	\$ 19.27	\$ 21.68	BCT4-7074I	BCT4-70742	BCT4-70743	
3/16	3/16	4		3/4	2-1/2	SQ	BCT4F-.1875-T-SQ	BCT4-7075	\$ 20.75	\$ 23.34	BCT4-7075I	BCT4-70752	BCT4-70753	
3/16	3/16	4		3/4	2-1/2	BALL	BCT4F-.1875-T-BN	BCT4-7076	\$ 33.73	\$ 37.95	BCT4-7076I	BCT4-70762	BCT4-70763	
3/16	3/16	4		3/4	3	SQ	BCT4F-.1875-L-SQ	BCT4-7077	\$ 20.75	\$ 23.34	BCT4-7077I	BCT4-70772	BCT4-70773	
3/16	3/16	4		3/4	3	BALL	BCT4F-.1875-L-BN	BCT4-7078	\$ 33.97	\$ 38.22	BCT4-7078I	BCT4-70782	BCT4-70783	
3/16	3/16	4		1-1/8	3	SQ	BCT4F-.1875-XL-SQ	BCT4-7079	\$ 24.18	\$ 27.20	BCT4-7079I	BCT4-70792	BCT4-70793	
3/16	3/16	4		1-1/8	3	BALL	BCT4F-.1875-XL-BN	BCT4-7080	\$ 33.97	\$ 38.22	BCT4-7080I	BCT4-70802	BCT4-70803	
1/4	7/32	4		1/2	2	SQ	BCT4F-.2188-S-SQ	BCT4-7081	\$ 17.59	\$ 19.79	BCT4-7081I	BCT4-70812	BCT4-70813	
1/4	7/32	4		1/2	2	0.020	BCT4F-.2188-S-R.0							

**General Purpose**



Carbide	4 Flute Center Cutting	30° Helix	Coat on Demand	+0.00 / -.0021/8 and Greater	±.0005 Below 1/8				Series: BCT4						
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP		List	Coated List (DIA / DLC) Call for Price	AlTiN	TiCN	TiN	
1/4	1/4	4		1/2	2	BALL	BCT4F-2500-S-BN	BCT4-7090	\$ 19.75	\$ 22.22	BCT4-70901	BCT4-70902	BCT4-70903		
1/4	1/4	4		3/4	2-1/2	SQ	BCT4F-2500-SQ	BCT4-7091	\$ 19.77	\$ 22.24	BCT4-70911	BCT4-70912	BCT4-70913		
1/4	1/4	4		3/4	2-1/2	0.010	BCT4F-2500-R.010	BCT4-7092	\$ 22.68	\$ 25.52	BCT4-70921	BCT4-70922	BCT4-70923		
1/4	1/4	4		3/4	2-1/2	0.015	BCT4F-2500-R.015	BCT4-7093	\$ 22.68	\$ 25.52	BCT4-70931	BCT4-70932	BCT4-70933		
1/4	1/4	4		3/4	2-1/2	0.020	BCT4F-2500-R.020	BCT4-7094	\$ 22.68	\$ 25.52	BCT4-70941	BCT4-70942	BCT4-70943		
1/4	1/4	4		3/4	2-1/2	0.030	BCT4F-2500-R.030	BCT4-7095	\$ 22.68	\$ 25.52	BCT4-70951	BCT4-70952	BCT4-70953		
1/4	1/4	4		3/4	2-1/2	0.045	BCT4F-2500-R.045	BCT4-7096	\$ 22.68	\$ 25.52	BCT4-70961	BCT4-70962	BCT4-70963		
1/4	1/4	4		3/4	2-1/2	0.060	BCT4F-2500-R.060	BCT4-7097	\$ 22.68	\$ 25.52	BCT4-70971	BCT4-70972	BCT4-70973		
1/4	1/4	4		3/4	2-1/2	BALL	BCT4F-2500-BN	BCT4-7098	\$ 24.33	\$ 27.37	BCT4-70981	BCT4-70982	BCT4-70983		
1/4	1/4	4		1-1/8	3	SQ	BCT4F-2500-L-SQ	BCT4-7099	\$ 26.20	\$ 29.48	BCT4-70991	BCT4-70992	BCT4-70993		
1/4	1/4	4		1-1/8	3	BALL	BCT4F-2500-L-BN	BCT4-7100	\$ 39.34	\$ 44.26	BCT4-71001	BCT4-71002	BCT4-71003		
1/4	1/4	4		1-1/2	4	SQ	BCT4F-2500-XL-SQ	BCT4-7101	\$ 31.79	\$ 35.76	BCT4-71011	BCT4-71012	BCT4-71013		
1/4	1/4	4		1-1/2	4	BALL	BCT4F-2500-XL-BN	BCT4-7102	\$ 41.39	\$ 46.56	BCT4-71021	BCT4-71022	BCT4-71023		
5/16	5/16	4		1/2	2	SQ	BCT4F-3125-S-SQ	BCT4-7103	\$ 24.75	\$ 27.84	BCT4-71031	BCT4-71032	BCT4-71033		
5/16	5/16	4		1/2	2	0.020	BCT4F-3125-S-R.020	BCT4-7104	\$ 30.05	\$ 33.81	BCT4-71041	BCT4-71042	BCT4-71043		
5/16	5/16	4		1/2	2	0.030	BCT4F-3125-S-R.030	BCT4-7105	\$ 31.26	\$ 35.17	BCT4-71051	BCT4-71052	BCT4-71053		
5/16	5/16	4		1/2	2	BALL	BCT4F-3125-S-BN	BCT4-7106	\$ 29.70	\$ 33.41	BCT4-71061	BCT4-71062	BCT4-71063		
5/16	5/16	4		13/16	2-1/2	SQ	BCT4F-3125-SQ	BCT4-7107	\$ 26.05	\$ 29.31	BCT4-71071	BCT4-71072	BCT4-71073		
5/16	5/16	4		13/16	2-1/2	0.015	BCT4F-3125-R.015	BCT4-7108	\$ 31.26	\$ 35.17	BCT4-71081	BCT4-71082	BCT4-71083		
5/16	5/16	4		13/16	2-1/2	0.020	BCT4F-3125-R.020	BCT4-7109	\$ 31.26	\$ 35.17	BCT4-71091	BCT4-71092	BCT4-71093		
5/16	5/16	4		13/16	2-1/2	0.030	BCT4F-3125-R.030	BCT4-7110	\$ 31.26	\$ 35.17	BCT4-71101	BCT4-71102	BCT4-71103		
5/16	5/16	4		13/16	2-1/2	0.045	BCT4F-3125-R.045	BCT4-7111	\$ 31.26	\$ 35.17	BCT4-71111	BCT4-71112	BCT4-71113		
5/16	5/16	4		13/16	2-1/2	0.060	BCT4F-3125-R.060	BCT4-7112	\$ 31.26	\$ 35.17	BCT4-71121	BCT4-71122	BCT4-71123		
5/16	5/16	4		13/16	2-1/2	BALL	BCT4F-3125-BN	BCT4-7113	\$ 30.80	\$ 34.65	BCT4-71131	BCT4-71132	BCT4-71133		
5/16	5/16	4		1-1/8	3	SQ	BCT4F-3125-L-SQ	BCT4-7114	\$ 30.47	\$ 34.28	BCT4-71141	BCT4-71142	BCT4-71143		
5/16	5/16	4		1-1/8	3	BALL	BCT4F-3125-L-BN	BCT4-7115	\$ 49.29	\$ 55.45	BCT4-71151	BCT4-71152	BCT4-71153		
5/16	5/16	4		1-5/8	4	SQ	BCT4F-3125-XL-SQ	BCT4-7116	\$ 41.15	\$ 46.29	BCT4-71161	BCT4-71162	BCT4-71163		
5/16	5/16	4		1-5/8	4	BALL	BCT4F-3125-XL-BN	BCT4-7117	\$ 55.02	\$ 61.90	BCT4-71171	BCT4-71172	BCT4-71173		
3/8	3/8	4		5/8	2	SQ	BCT4F-3750-S-SQ	BCT4-7118	\$ 30.42	\$ 34.22	BCT4-71181	BCT4-71182	BCT4-71183		
3/8	3/8	4		5/8	2	0.020	BCT4F-3750-S-R.020	BCT4-7119	\$ 36.24	\$ 40.77	BCT4-71191	BCT4-71192	BCT4-71193		
3/8	3/8	4		5/8	2	BALL	BCT4F-3750-S-BN	BCT4-7120	\$ 36.50	\$ 41.06	BCT4-71201	BCT4-71202	BCT4-71203		
3/8	3/8	4		1	2-1/2	SQ	BCT4F-3750-SQ	BCT4-7121	\$ 30.80	\$ 34.65	BCT4-71211	BCT4-71212	BCT4-71213		
3/8	3/8	4		1	2-1/2	0.015	BCT4F-3750-R.015	BCT4-7122	\$ 35.98	\$ 40.48	BCT4-71221	BCT4-71222	BCT4-71223		
3/8	3/8	4		1	2-1/2	0.020	BCT4F-3750-R.020	BCT4-7123	\$ 35.98	\$ 40.48	BCT4-71231	BCT4-71232	BCT4-71233		
3/8	3/8	4		1	2-1/2	0.030	BCT4F-3750-R.030	BCT4-7124	\$ 35.98	\$ 40.48	BCT4-71241	BCT4-71242	BCT4-71243		
3/8	3/8	4		1	2-1/2	0.045	BCT4F-3750-R.045	BCT4-7125	\$ 35.98	\$ 40.48	BCT4-71251	BCT4-71252	BCT4-71253		
3/8	3/8	4		1	2-1/2	0.060	BCT4F-3750-R.060	BCT4-7126	\$ 35.98	\$ 40.48	BCT4-71261	BCT4-71262	BCT4-71263		
3/8	3/8	4		1	2-1/2	BALL	BCT4F-3750-BN	BCT4-7127	\$ 36.98	\$ 41.60	BCT4-71271	BCT4-71272	BCT4-71273		
3/8	3/8	4		1-1/8	3	SQ	BCT4F-3750-L-SQ	BCT4-7128	\$ 42.08	\$ 47.34	BCT4-71281	BCT4-71282	BCT4-71283		
3/8	3/8	4		1-1/8	3	BALL	BCT4F-3750-L-BN	BCT4-7129	\$ 55.46	\$ 62.39	BCT4-71291	BCT4-71292	BCT4-71293		
3/8	3/8	4		1-3/4	4	SQ	BCT4F-3750-XL-SQ	BCT4-7130	\$ 48.54	\$ 54.61	BCT4-71301	BCT4-71302	BCT4-71303		
3/8	3/8	4		1-3/4	4	BALL	BCT4F-3750-XL-BN	BCT4-7131	\$ 60.90	\$ 68.51	BCT4-71311	BCT4-71312	BCT4-71313		
7/16	7/16	4		5/8	2-1/2	SQ	BCT4F-4375-S-SQ	BCT4-7132	\$ 38.21	\$ 42.99	BCT4-71321	BCT4-71322	BCT4-71323		
7/16	7/16	4		5/8	2-1/2	0.020	BCT4F-4375-S-R.020	BCT4-7133	\$ 52.75	\$ 59.34	BCT4-71331	BCT4-71332	BCT4-71333		
7/16	7/16	4		5/8	2-1/2	BALL	BCT4F-4375-S-BN	BCT4-7134	\$ 48.96	\$ 55.08	BCT4-71341	BCT4-71342	BCT4-71343		
7/16	7/16	4		1	2-3/4	SQ	BCT4F-4375-SQ	BCT4-7135	\$ 42.42	\$ 47.72	BCT4-71351	BCT4-71352	BCT4-71353		
7/16	7/16	4		1	2-3/4	BALL	BCT4F-4375-BN	BCT4-7136	\$ 54.00	\$ 60.75	BCT4-71361	BCT4-71362	BCT4-71363		
7/16	7/16	4		2	4	SQ	BCT4F-4375-L-SQ	BCT4-7137	\$ 68.12	\$ 76.64	BCT4-71371	BCT4-71372	BCT4-71373		
7/16	7/16	4		2	4	BALL	BCT4F-4375-L-BN	BCT4-7138	\$ 86.63	\$ 97.46	BCT4-71381	BCT4-71382	BCT4-71383		
7/16	7/16	4		3	6	SQ	BCT4F-4375-XL-SQ	BCT4-7139	\$ 91.19	\$ 102.59	BCT4-71391	BCT4-71392	BCT4-71393		
7/16	7/16	4		3	6	BALL	BCT4F-4375-XL-BN	BCT4-7140	\$ 112.58	\$ 126.65	BCT4-71401	BCT4-71402	BCT4-71403		
1/2	1/2	4		5/8	2-1/2	SQ	BCT4F-5000-S-SQ	BCT4-7141	\$ 50.84	\$ 57.20	BCT4-71411	BCT4-71412	BCT4-71413		
1/2	1/2	4		5/8	2-1/2	0.030	BCT4F-5000-S-R.030	BCT4-7142	\$ 61.17	\$ 68.82	BCT4-71421	BCT4-71422	BCT4-71423		
1/2	1/2	4		5/8	2-1/2	BALL	BCT4F-5000-S-BN	BCT4-7143	\$ 59.21	\$ 66.61	BCT4-71431	BCT4-71432	BCT4-71433		
1/2	1/2	4		1	3	SQ	BCT4F-5000-SQ	BCT4-7144	\$ 52.15	\$ 58.67	BCT4-71441	BCT4-71442	BCT4-71443		
1/2	1/2	4		1	3	0.015	BCT4F-5000-R.015	BCT4-7145	\$ 62.58	\$ 70.40	BCT4-71451	BCT4-71452	BCT4-71453		
1/2	1/2	4		1	3	0.020	BCT4F-5000-R.020	BCT4-7146	\$ 62.58	\$ 70.40	BCT4-71461	BCT4-71462	BCT4-71463		
1/2	1/2	4		1	3	0.030	BCT4F-5000-R.030	BCT4-7147	\$ 62.58	\$ 70.40	BCT4-71471	BCT4-71472	BCT4-71473		
1/2	1/2	4		1	3	0.045	BCT4F-5000-R.045	BCT4-7148	\$ 62.58	\$ 70.40	BCT4-71481	BCT4-71482	BCT4-71483		
1/2	1/2	4		1	3	0.060	BCT4F-5000-R.060	BCT4-7149	\$ 62.58	\$ 70.40	BCT4-71491	BCT4-71492	BCT4-71493		
1/2	1/2	4		1	3	0.090	BCT4F-5000-R.090	BCT4-7150	\$ 62.58	\$ 70.40	BCT4-71501	BCT4-71502	BCT4-71503		
1/2	1/2	4		1	3	0.125	BCT4F-5000-R.125	BCT4-7151	\$ 62.58	\$ 70.40	BCT4-71511	BCT4-71512	BCT4-71513		
1/2	1/2	4		1	3	BALL	BCT4F-5000-BN	BCT4-7152	\$ 64.47	\$ 72.53	BCT4-71521	BCT4-71522	BCT4-71523		
1/2	1/2	4		1-1/4	3	SQ	BCT4F-5000-M-SQ	BCT4-7153	\$ 56.70	\$ 63.79	BCT4-71531	BCT4-71532	BCT4-71533		
1/2	1/2	4		1-1/4	3	BALL	BCT4F-5000-M-BN	BCT4-7154	\$ 72.70	\$ 81.79	BCT4-71541	BCT4-71542	BCT4-71543		
1/2	1/2	4		1-1/2	4	SQ	BCT4F-5000-T-SQ	BCT4-7155	\$ 66.61	\$ 74.94	BCT4-71551	BCT4-71552	BCT4-71553		
1/2	1/2	4		1-1/2	4	BALL	BCT4F-5000-T-BN	BCT4-7156	\$ 88.50	\$ 99.56	BCT4-71561	BCT4-71562	BCT4-71563		
1/2	1/2	4		2	4	SQ	BCT4F-5000-L-SQ	BCT4-7157	\$ 66.61	\$ 74.94	BCT4-71571	BCT4-71572	BCT4-71573		
1/2	1/2	4		2	4	BALL	BCT4F-5000-L-BN	BCT4-7158	\$ 88.48	\$ 99.54	BCT4-71581	BCT4-71582	BCT4-71583		
1/2	1/2	4		3	6	SQ	BCT4F-5000-XL-SQ	BCT4-7159	\$ 103.47	\$ 116.40	BCT4-71591	BCT4-71592	BCT4-71593		
1/2	1/2	4		3	6	BALL	BCT4F-5000-XL-BN	BCT4-7160	\$ 125.33	\$ 141.00	BCT4-71601	BCT4-71602	BCT4-71603		
9/16	9/16	4		1/2	3-1/2	SQ	BCT4F-5625-S-SQ	BCT4-7161	\$ 84.30	\$ 94.84	BCT4-71611	BCT4-71612	BCT4-71613		
9/16	9/16	4		1-1/4	3-1/2	SQ	BCT4F-5625-SQ	BCT4-7162	\$ 90.62	\$ 101.95	BCT4-71621	BCT4-71622	BCT4-71623		
9/16	9/16	4		1-1/4	3-1/2	BALL	BCT4F-5625-BN	BCT4-7163	\$ 110.81	\$ 124.66	BCT4-71631	BCT4-71632	BCT4-71633		
5/8	5/8	4		3/4	3	SQ	BCT4F-6250-S-SQ	BCT4-7164	\$ 89.09	\$ 100.23	BCT4-71641	BCT4-71642	BCT4-71643		
5/8	5/8	4		3/4	3	0.030	BCT4F-6250-S-R.030	BCT4-7165	\$ 116.82	\$ 131.42	BCT4-71651	BCT4-71652	BCT4-71653		
5/8	5/8	4		3/4	3	BALL	BCT4F-6250-S-BN	BCT4-7166	\$ 114.93	\$ 129.30	BCT4-71661	BCT4-71662	BCT4-71663		
5/8	5/8	4		1-1/4	3-1/2	SQ	BCT4F-6250-SQ	BCT4-7167	\$ 99.41	\$ 111.84	BCT4-71671	BCT4-71672	BCT4-71673		
5/8	5/8	4		1-1/4	3-1/2	0.015	BCT4F-6250-R.015	BCT4-7168	\$ 119.20	\$ 134.10	BCT4-71681	BCT4-71682	BCT4-71683		
5/8	5/8	4		1-1/4	3-1/2	0.020	BCT4F-6250-R.020	BCT4-7169	\$ 119.20	\$ 134.10	BCT4-71691	BCT4-71692	BCT4-71693		
5/8	5/8	4		1-1/4	3-1/2	0.030	BCT4F-6250-R.030	BCT4-7170	\$ 119.20	\$ 134.10	BCT4-71701	BCT4-71702	BCT4-71703		
5/8	5/8	4		1-1/4	3-1/2	0.045	BCT4F-6250-R.045	BCT4-7171	\$ 119.20	\$ 134.10	BCT4-71711	BCT4-71712	BCT4-71713		
5/8	5/8	4		1-1/4											

General Purpose



Carbide	4 Flute Center Cutting	30° Helix	Coat on Demand	+0.00 / -0.0021/8 and Greater	±.0005 Below 1/8			Series: BCT4						
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List	Coated List (DIA / DLC) Call for Price	AlTiN	TiCN	TiN	
3/4	3/4	4		1-1/2	4	SQ	BCT4F-.7500-SQ	BCT4-7182	\$ 149.84	\$ 168.57	BCT4-71821	BCT4-71822	BCT4-71823	
3/4	3/4	4		1-1/2	4	0.015	BCT4F-.7500-R.015	BCT4-7183	\$ 180.49	\$ 203.05	BCT4-71831	BCT4-71832	BCT4-71833	
3/4	3/4	4		1-1/2	4	0.020	BCT4F-.7500-R.020	BCT4-7184	\$ 180.49	\$ 203.05	BCT4-71841	BCT4-71842	BCT4-71843	
3/4	3/4	4		1-1/2	4	0.030	BCT4F-.7500-R.030	BCT4-7185	\$ 180.49	\$ 203.05	BCT4-71851	BCT4-71852	BCT4-71853	
3/4	3/4	4		1-1/2	4	0.045	BCT4F-.7500-R.045	BCT4-7186	\$ 180.49	\$ 203.05	BCT4-71861	BCT4-71862	BCT4-71863	
3/4	3/4	4		1-1/2	4	0.060	BCT4F-.7500-R.060	BCT4-7187	\$ 180.49	\$ 203.05	BCT4-71871	BCT4-71872	BCT4-71873	
3/4	3/4	4		1-1/2	4	0.090	BCT4F-.7500-R.090	BCT4-7188	\$ 180.49	\$ 203.05	BCT4-71881	BCT4-71882	BCT4-71883	
3/4	3/4	4		1-1/2	4	0.125	BCT4F-.7500-R.125	BCT4-7189	\$ 180.49	\$ 203.05	BCT4-71891	BCT4-71892	BCT4-71893	
3/4	3/4	4		1-1/2	4	BALL	BCT4F-.7500-BN	BCT4-7190	\$ 182.76	\$ 205.61	BCT4-71901	BCT4-71902	BCT4-71903	
3/4	3/4	4		2-1/4	5	SQ	BCT4F-.7500-L-SQ	BCT4-7191	\$ 195.07	\$ 219.45	BCT4-71911	BCT4-71912	BCT4-71913	
3/4	3/4	4		2-1/4	5	BALL	BCT4F-.7500-L-BN	BCT4-7192	\$ 294.28	\$ 331.07	BCT4-71921	BCT4-71922	BCT4-71923	
3/4	3/4	4		3	6	SQ	BCT4F-.7500-XL-SQ	BCT4-7193	\$ 246.42	\$ 277.22	BCT4-71931	BCT4-71932	BCT4-71933	
3/4	3/4	4		3	6	BALL	BCT4F-.7500-XL-BN	BCT4-7194	\$ 319.07	\$ 358.95	BCT4-71941	BCT4-71942	BCT4-71943	

# General Purpose



Carbide	3 Flute Center Cutting	30° Helix	Coat on Demand	+0.00 / -0.02 1/8 and Greater	±0.005 Below 1/8				Series: BCT3						
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP		List	Coated List (DIA / DLC) Call for Price	AlTiN	TiCN	TiN	
1/8	1/32	3		1/16	1-1/2	SQ	BCT3F-.0313-S-SQ		BCT3-8000	\$ 13.72	\$ 15.44	BCT3-80001	BCT3-80002	BCT3-80003	
1/8	1/32	3		1/16	1-1/2	BALL	BCT3F-.0313-S-BN		BCT3-8001	\$ 17.88	\$ 20.12	BCT3-80011	BCT3-80012	BCT3-80013	
1/8	1/32	3		3/32	1-1/2	SQ	BCT3F-.0313-SQ		BCT3-8002	\$ 11.16	\$ 12.56	BCT3-80021	BCT3-80022	BCT3-80023	
1/8	1/32	3		3/32	1-1/2	BALL	BCT3F-.0313-BN		BCT3-8003	\$ 16.21	\$ 18.24	BCT3-80031	BCT3-80032	BCT3-80033	
1/8	3/64	3		3/32	1-1/2	SQ	BCT3F-.0469-S-SQ		BCT3-8004	\$ 13.52	\$ 15.21	BCT3-80041	BCT3-80042	BCT3-80043	
1/8	3/64	3		3/32	1-1/2	BALL	BCT3F-.0469-S-BN		BCT3-8005	\$ 16.20	\$ 18.23	BCT3-80051	BCT3-80052	BCT3-80053	
1/8	3/64	3		1/8	1-1/2	SQ	BCT3F-.0469-SQ		BCT3-8006	\$ 11.16	\$ 12.56	BCT3-80061	BCT3-80062	BCT3-80063	
1/8	3/64	3		1/8	1-1/2	BALL	BCT3F-.0469-BN		BCT3-8007	\$ 16.21	\$ 18.24	BCT3-80071	BCT3-80072	BCT3-80073	
1/8	1/16	3		1/8	1-1/2	SQ	BCT3F-.0625-S-SQ		BCT3-8008	\$ 11.07	\$ 12.45	BCT3-80081	BCT3-80082	BCT3-80083	
1/8	1/16	3		1/8	1-1/2	BALL	BCT3F-.0625-S-BN		BCT3-8009	\$ 12.63	\$ 14.21	BCT3-80091	BCT3-80092	BCT3-80093	
1/8	1/16	3		3/16	1-1/2	SQ	BCT3F-.0625-SQ		BCT3-8010	\$ 11.16	\$ 12.56	BCT3-80101	BCT3-80102	BCT3-80103	
1/8	1/16	3		3/16	1-1/2	BALL	BCT3F-.0625-BN		BCT3-8011	\$ 13.37	\$ 15.04	BCT3-80111	BCT3-80112	BCT3-80113	
1/8	1/16	3		1/4	1-1/2	SQ	BCT3F-.0625-M-SQ		BCT3-8012	\$ 11.66	\$ 13.12	BCT3-80121	BCT3-80122	BCT3-80123	
1/8	5/64	3		3/16	1-1/2	SQ	BCT3F-.0781-SQ		BCT3-8013	\$ 11.16	\$ 12.56	BCT3-80131	BCT3-80132	BCT3-80133	
1/8	5/64	3		3/16	1-1/2	BALL	BCT3F-.0781-BN		BCT3-8014	\$ 11.16	\$ 12.56	BCT3-80141	BCT3-80142	BCT3-80143	
1/8	5/64	3		1/4	1-1/2	SQ	BCT3F-.0781-M-SQ		BCT3-8015	\$ 11.16	\$ 12.56	BCT3-80151	BCT3-80152	BCT3-80153	
1/8	3/32	3		3/16	1-1/2	SQ	BCT3F-.0938-S-SQ		BCT3-8016	\$ 10.77	\$ 12.12	BCT3-80161	BCT3-80162	BCT3-80163	
1/8	3/32	3		3/16	1-1/2	BALL	BCT3F-.0938-S-BN		BCT3-8017	\$ 12.13	\$ 13.65	BCT3-80171	BCT3-80172	BCT3-80173	
1/8	3/32	3		3/8	1-1/2	SQ	BCT3F-.0938-SQ		BCT3-8018	\$ 11.16	\$ 12.56	BCT3-80181	BCT3-80182	BCT3-80183	
1/8	3/32	3		3/8	1-1/2	BALL	BCT3F-.0938-BN		BCT3-8019	\$ 13.37	\$ 15.04	BCT3-80191	BCT3-80192	BCT3-80193	
1/8	7/64	3		3/8	1-1/2	SQ	BCT3F-.1094-S-SQ		BCT3-8020	\$ 11.33	\$ 12.75	BCT3-80201	BCT3-80202	BCT3-80203	
1/8	7/64	3		3/8	1-1/2	BALL	BCT3F-.1094-BN		BCT3-8021	\$ 13.37	\$ 15.04	BCT3-80211	BCT3-80212	BCT3-80213	
1/8	1/8	3		1/4	1-1/2	SQ	BCT3F-.1250-S-SQ		BCT3-8022	\$ 10.32	\$ 11.61	BCT3-80221	BCT3-80222	BCT3-80223	
1/8	1/8	3		1/4	1-1/2	BALL	BCT3F-.1250-S-BN		BCT3-8023	\$ 11.62	\$ 13.07	BCT3-80231	BCT3-80232	BCT3-80233	
1/8	1/8	3		1/2	1-1/2	SQ	BCT3F-.1250-SQ		BCT3-8024	\$ 10.81	\$ 12.16	BCT3-80241	BCT3-80242	BCT3-80243	
1/8	1/8	3		1/2	1-1/2	BALL	BCT3F-.1250-BN		BCT3-8025	\$ 13.37	\$ 15.04	BCT3-80251	BCT3-80252	BCT3-80253	
1/8	1/8	3		3/4	2-1/4	SQ	BCT3F-.1250-M-SQ		BCT3-8026	\$ 16.32	\$ 18.36	BCT3-80261	BCT3-80262	BCT3-80263	
1/8	1/8	3		3/4	2-1/4	BALL	BCT3F-.1250-M-BN		BCT3-8027	\$ 20.80	\$ 23.40	BCT3-80271	BCT3-80272	BCT3-80273	
1/8	1/8	3		3/4	3	SQ	BCT3F-.1250-L-SQ		BCT3-8028	\$ 16.32	\$ 18.36	BCT3-80281	BCT3-80282	BCT3-80283	
1/8	1/8	3		3/4	3	BALL	BCT3F-.1250-L-BN		BCT3-8029	\$ 21.97	\$ 24.72	BCT3-80291	BCT3-80292	BCT3-80293	
1/8	1/8	3		1	3	SQ	BCT3F-.1250-XL-SQ		BCT3-8030	\$ 20.72	\$ 23.31	BCT3-80301	BCT3-80302	BCT3-80303	
1/8	1/8	3		1	3	BALL	BCT3F-.1250-XL-BN		BCT3-8031	\$ 30.38	\$ 34.18	BCT3-80311	BCT3-80312	BCT3-80313	
3/16	5/32	3		9/16	2	SQ	BCT3F-.1563-SQ		BCT3-8032	\$ 16.08	\$ 18.09	BCT3-80321	BCT3-80322	BCT3-80323	
3/16	5/32	3		9/16	2	BALL	BCT3F-.1563-BN		BCT3-8033	\$ 19.27	\$ 21.68	BCT3-80331	BCT3-80332	BCT3-80333	
3/16	3/16	3		3/8	2	SQ	BCT3F-.1875-S-SQ		BCT3-8034	\$ 13.65	\$ 15.36	BCT3-80341	BCT3-80342	BCT3-80343	
3/16	3/16	3		5/16	2	BALL	BCT3F-.1875-S-BN		BCT3-8035	\$ 16.73	\$ 18.82	BCT3-80351	BCT3-80352	BCT3-80353	
3/16	3/16	3		5/8	2	SQ	BCT3F-.1875-SQ		BCT3-8036	\$ 15.32	\$ 17.24	BCT3-80361	BCT3-80362	BCT3-80363	
3/16	3/16	3		5/8	2	BALL	BCT3F-.1875-BN		BCT3-8037	\$ 19.27	\$ 21.68	BCT3-80371	BCT3-80372	BCT3-80373	
3/16	3/16	3		3/4	2-1/2	SQ	BCT3F-.1875-M-SQ		BCT3-8038	\$ 20.75	\$ 23.34	BCT3-80381	BCT3-80382	BCT3-80383	
3/16	3/16	3		3/4	2-1/2	BALL	BCT3F-.1875-M-BN		BCT3-8039	\$ 33.73	\$ 37.95	BCT3-80391	BCT3-80392	BCT3-80393	
3/16	3/16	3		3/4	3	SQ	BCT3F-.1875-L-SQ		BCT3-8040	\$ 20.75	\$ 23.34	BCT3-80401	BCT3-80402	BCT3-80403	
3/16	3/16	3		3/4	3	BALL	BCT3F-.1875-L-BN		BCT3-8041	\$ 33.97	\$ 38.22	BCT3-80411	BCT3-80412	BCT3-80413	
3/16	3/16	3		1-1/8	3	SQ	BCT3F-.1875-XL-SQ		BCT3-8042	\$ 23.19	\$ 26.09	BCT3-80421	BCT3-80422	BCT3-80423	
3/16	3/16	3		1-1/8	3	BALL	BCT3F-.1875-XL-BN		BCT3-8043	\$ 33.99	\$ 38.24	BCT3-80431	BCT3-80432	BCT3-80433	
1/4	7/32	3		5/8	2-1/2	SQ	BCT3F-.2344-S-SQ		BCT3-8044	\$ 20.99	\$ 23.61	BCT3-80441	BCT3-80442	BCT3-80443	
1/4	7/32	3		5/8	2-1/2	BALL	BCT3F-.2344-BN		BCT3-8045	\$ 25.45	\$ 28.63	BCT3-80451	BCT3-80452	BCT3-80453	
1/4	1/4	3		1/2	2	SQ	BCT3F-.2500-S-SQ		BCT3-8046	\$ 16.06	\$ 18.07	BCT3-80461	BCT3-80462	BCT3-80463	
1/4	1/4	3		1/2	2	BALL	BCT3F-.2500-S-BN		BCT3-8047	\$ 19.69	\$ 22.15	BCT3-80471	BCT3-80472	BCT3-80473	
1/4	1/4	3		3/4	2-1/2	SQ	BCT3F-.2500-SQ		BCT3-8048	\$ 19.77	\$ 22.24	BCT3-80481	BCT3-80482	BCT3-80483	
1/4	1/4	3		3/4	2-1/2	BALL	BCT3F-.2500-BN		BCT3-8049	\$ 24.33	\$ 27.37	BCT3-80491	BCT3-80492	BCT3-80493	
1/4	1/4	3		1-1/8	3	SQ	BCT3F-.2500-L-SQ		BCT3-8050	\$ 26.20	\$ 29.48	BCT3-80501	BCT3-80502	BCT3-80503	
1/4	1/4	3		1-1/8	3	BALL	BCT3F-.2500-L-BN		BCT3-8051	\$ 39.34	\$ 44.26	BCT3-80511	BCT3-80512	BCT3-80513	
1/4	1/4	3		1-1/2	4	SQ	BCT3F-.2500-XL-SQ		BCT3-8052	\$ 31.79	\$ 35.76	BCT3-80521	BCT3-80522	BCT3-80523	
1/4	1/4	3		1-1/2	4	BALL	BCT3F-.2500-XL-BN		BCT3-8053	\$ 41.40	\$ 46.58	BCT3-80531	BCT3-80532	BCT3-80533	
5/16	5/16	3		1/2	2	SQ	BCT3F-.3125-S-SQ		BCT3-8054	\$ 24.75	\$ 27.84	BCT3-80541	BCT3-80542	BCT3-80543	
5/16	5/16	3		1/2	2	BALL	BCT3F-.3125-S-BN		BCT3-8055	\$ 29.70	\$ 33.41	BCT3-80551	BCT3-80552	BCT3-80553	
5/16	5/16	3		13/16	2-1/2	SQ	BCT3F-.3125-SQ		BCT3-8056	\$ 26.05	\$ 29.31	BCT3-80561	BCT3-80562	BCT3-80563	
5/16	5/16	3		13/16	2-1/2	BALL	BCT3F-.3125-BN		BCT3-8057	\$ 30.80	\$ 34.65	BCT3-80571	BCT3-80572	BCT3-80573	
5/16	5/16	3		1-1/8	3	SQ	BCT3F-.3125-L-SQ		BCT3-8058	\$ 30.47	\$ 34.28	BCT3-80581	BCT3-80582	BCT3-80583	
5/16	5/16	3		1-1/8	3	BALL	BCT3F-.3125-L-BN		BCT3-8059	\$ 49.31	\$ 55.47	BCT3-80591	BCT3-80592	BCT3-80593	
5/16	5/16	3		1-5/8	4	SQ	BCT3F-.3125-XL-SQ		BCT3-8060	\$ 40.20	\$ 45.23	BCT3-80601	BCT3-80602	BCT3-80603	
5/16	5/16	3		1-5/8	4	BALL	BCT3F-.3125-XL-BN		BCT3-8061	\$ 55.02	\$ 61.90	BCT3-80611	BCT3-80612	BCT3-80613	
3/8	3/8	3		5/8	2	SQ	BCT3F-.3750-S-SQ		BCT3-8062	\$ 30.42	\$ 34.22	BCT3-80621	BCT3-80622	BCT3-80623	
3/8	3/8	3		5/8	2	BALL	BCT3F-.3750-S-BN		BCT3-8063	\$ 36.50	\$ 41.06	BCT3-80631	BCT3-80632	BCT3-80633	
3/8	3/8	3		1	2-1/2	SQ	BCT3F-.3750-SQ		BCT3-8064	\$ 30.80	\$ 34.65	BCT3-80641	BCT3-80642	BCT3-80643	
3/8	3/8	3		1	2-1/2	BALL	BCT3F-.3750-BN		BCT3-8065	\$ 36.98	\$ 41.60	BCT3-80651	BCT3-80652	BCT3-80653	
3/8	3/8	3		1-1/8	3	SQ	BCT3F-.3750-L-SQ		BCT3-8066	\$ 42.08	\$ 47.34	BCT3-80661	BCT3-80662	BCT3-80663	
3/8	3/8	3		1-1/8	3	BALL	BCT3F-.3750-L-BN		BCT3-8067	\$ 55.46	\$ 62.39	BCT3-80671	BCT3-80672	BCT3-80673	
3/8	3/8	3		1-3/4	4	SQ	BCT3F-.3750-XL-SQ		BCT3-8068	\$ 48.54	\$ 54.61	BCT3-80681	BCT3-80682	BCT3-80683	
3/8	3/8	3		1-3/4	4	BALL	BCT3F-.3750-XL-BN		BCT3-8069	\$ 60.90	\$ 68.51	BCT3-80691	BCT3-80692	BCT3-80693	
7/16	7/16	3		1	2-3/4	SQ	BCT3F-.4375-S-SQ		BCT3-8070	\$ 42.42	\$ 47.72	BCT3-80701	BCT3-80702	BCT3-80703	
7/16	7/16	3		1	2-3/4	BALL	BCT3F-.4375-BN		BCT3-8071	\$ 54.00	\$ 60.75	BCT3-80711	BCT3-80712	BCT3-80713	
7/16	7/16	3		2	4	SQ	BCT3F-.4375-L-SQ		BCT3-8072	\$ 68.12	\$ 76.64	BCT3-80721	BCT3-80722	BCT3-80723	
7/16	7/16	3		2	4	BALL	BCT3F-.4375-L-BN		BCT3-8073	\$ 86.63	\$ 97.46	BCT3-80731	BCT3-80732	BCT3-80733	
1/2	1/2	3		5/8	2-1/2	SQ	BCT3F-.5000-S-SQ		BCT3-8074	\$ 50.84	\$ 57.20	BCT3-80741	BCT3-80742	BCT3-80743	
1/2	1/2	3		5/8	2-1/2	BALL	BCT3F-.5000-S-BN		BCT3-8075	\$ 59.21	\$ 66.61	BCT3-80751	BCT3-80752	BCT3-80753	
1/2	1/2	3		1	3	SQ	BCT3F-.5000-SQ		BCT3-8076	\$ 52.15	\$ 58.67	BCT3-80761	BCT3-80762	BCT3-80763	
1/2	1/2	3		1	3	BALL	BCT3F-.5000-BN		BCT3-8077	\$ 64.47	\$ 72.53	BCT3-80771	BCT3-80772	BCT3-80773	
1/2	1/2	3		2	4	SQ	BCT3F-.5000-L-SQ		BCT3-8078	\$ 66.61	\$ 74.94	BCT3-80781	BCT3-80782	BCT3-80783	

**General Purpose**



									Series: BCT3				
Carbide	3 Flute Center Cutting	30° Helix	Coat on Demand	+ .000 / - .002 1/8 and Greater	± .0005 Below 1/8				List	Coated List (DIA / DLC) Call for Price	AlTiN	TiCN	TiN
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP					
3/4	3/4	3		1-1/2	4	SQ	BCT3F-.7500-SQ	BCT3-8092	\$ 149.84	\$ 168.57	BCT3-80921	BCT3-80922	BCT3-80923
3/4	3/4	3		1-1/2	4	BALL	BCT3F-.7500-BN	BCT3-8093	\$ 182.76	\$ 205.61	BCT3-80931	BCT3-80932	BCT3-80933
3/4	3/4	3		2-1/4	5	SQ	BCT3F-.7500-L-SQ	BCT3-8094	\$ 195.07	\$ 219.45	BCT3-80941	BCT3-80942	BCT3-80943
3/4	3/4	3		2-1/4	5	BALL	BCT3F-.7500-L-BN	BCT3-8095	\$ 294.28	\$ 331.07	BCT3-80951	BCT3-80952	BCT3-80953
3/4	3/4	3		3	6	SQ	BCT3F-.7500-XL-SQ	BCT3-8096	\$ 246.42	\$ 277.22	BCT3-80961	BCT3-80962	BCT3-80963
3/4	3/4	3		3	6	BALL	BCT3F-.7500-XL-BN	BCT3-8097	\$ 319.08	\$ 358.97	BCT3-80971	BCT3-80972	BCT3-80973





# General Purpose



Carbide	2 Flute Center Cutting	30° Helix	Coat on Demand	+0.00 / -.0021/8 and Greater	±.0005 Below 1/8				Series: BCT2				
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List	Coated List (DIA / DLC) Call for Price	AlTiN	TiCN	TiN
5/16	5/16	2		13/16	2-1/2	SQ	BCT2F-3125-SQ	BCT2-9089	\$ 26.05	\$ 29.31	BCT2-90891	BCT2-90892	BCT2-90893
5/16	5/16	2		13/16	2-1/2	0.020	BCT2F-3125-R.020	BCT2-9090	\$ 31.26	\$ 35.17	BCT2-90901	BCT2-90902	BCT2-90903
5/16	5/16	2		13/16	2-1/2	0.030	BCT2F-3125-R.030	BCT2-9091	\$ 31.26	\$ 35.17	BCT2-90911	BCT2-90912	BCT2-90913
5/16	5/16	2		13/16	2-1/2	0.045	BCT2F-3125-R.045	BCT2-9092	\$ 31.26	\$ 35.17	BCT2-90921	BCT2-90922	BCT2-90923
5/16	5/16	2		13/16	2-1/2	BALL	BCT2F-3125-BN	BCT2-9093	\$ 30.80	\$ 34.65	BCT2-90931	BCT2-90932	BCT2-90933
5/16	5/16	2		1-1/8	3	SQ	BCT2F-3125-L-SQ	BCT2-9094	\$ 30.47	\$ 34.28	BCT2-90941	BCT2-90942	BCT2-90943
5/16	5/16	2		1-1/8	3	BALL	BCT2F-3125-L-BN	BCT2-9095	\$ 49.29	\$ 55.45	BCT2-90951	BCT2-90952	BCT2-90953
5/16	5/16	2		1-5/8	4	SQ	BCT2F-3125-XL-SQ	BCT2-9096	\$ 41.15	\$ 46.29	BCT2-90961	BCT2-90962	BCT2-90963
5/16	5/16	2		1-5/8	4	BALL	BCT2F-3125-XL-BN	BCT2-9097	\$ 55.02	\$ 61.90	BCT2-90971	BCT2-90972	BCT2-90973
3/8	3/8	2		5/8	2	SQ	BCT2F-3750-S-SQ	BCT2-9098	\$ 30.42	\$ 34.22	BCT2-90981	BCT2-90982	BCT2-90983
3/8	3/8	2		5/8	2	BALL	BCT2F-3750-S-BN	BCT2-9099	\$ 36.50	\$ 41.06	BCT2-90991	BCT2-90992	BCT2-90993
3/8	3/8	2		1	2-1/2	SQ	BCT2F-3750-SQ	BCT2-9100	\$ 30.80	\$ 34.65	BCT2-91001	BCT2-91002	BCT2-91003
3/8	3/8	2		1	2-1/2	0.020	BCT2F-3750-R.020	BCT2-9101	\$ 35.98	\$ 40.48	BCT2-91011	BCT2-91012	BCT2-91013
3/8	3/8	2		1	2-1/2	0.030	BCT2F-3750-R.030	BCT2-9102	\$ 35.98	\$ 40.48	BCT2-91021	BCT2-91022	BCT2-91023
3/8	3/8	2		1	2-1/2	0.045	BCT2F-3750-R.045	BCT2-9103	\$ 35.98	\$ 40.48	BCT2-91031	BCT2-91032	BCT2-91033
3/8	3/8	2		1	2-1/2	0.060	BCT2F-3750-R.060	BCT2-9104	\$ 35.98	\$ 40.48	BCT2-91041	BCT2-91042	BCT2-91043
3/8	3/8	2		1	2-1/2	BALL	BCT2F-3750-BN	BCT2-9105	\$ 36.98	\$ 41.60	BCT2-91051	BCT2-91052	BCT2-91053
3/8	3/8	2		1-1/8	3	SQ	BCT2F-3750-L-SQ	BCT2-9106	\$ 42.08	\$ 47.34	BCT2-91061	BCT2-91062	BCT2-91063
3/8	3/8	2		1-1/8	3	BALL	BCT2F-3750-L-BN	BCT2-9107	\$ 55.46	\$ 62.39	BCT2-91071	BCT2-91072	BCT2-91073
3/8	3/8	2		1-3/4	4	SQ	BCT2F-3750-XL-SQ	BCT2-9108	\$ 48.54	\$ 54.61	BCT2-91081	BCT2-91082	BCT2-91083
3/8	3/8	2		1-3/4	4	BALL	BCT2F-3750-XL-BN	BCT2-9109	\$ 60.90	\$ 68.51	BCT2-91091	BCT2-91092	BCT2-91093
7/16	7/16	2		5/8	2-1/2	SQ	BCT2F-4375-S-SQ	BCT2-9110	\$ 38.21	\$ 42.99	BCT2-91101	BCT2-91102	BCT2-91103
7/16	7/16	2		5/8	2-1/2	BALL	BCT2F-4375-S-BN	BCT2-9111	\$ 48.96	\$ 55.08	BCT2-91111	BCT2-91112	BCT2-91113
7/16	7/16	2		1	2-3/4	SQ	BCT2F-4375-SQ	BCT2-9112	\$ 42.42	\$ 47.72	BCT2-91121	BCT2-91122	BCT2-91123
7/16	7/16	2		1	2-3/4	BALL	BCT2F-4375-BN	BCT2-9113	\$ 54.00	\$ 60.75	BCT2-91131	BCT2-91132	BCT2-91133
7/16	7/16	2		2	4	SQ	BCT2F-4375-L-SQ	BCT2-9114	\$ 68.12	\$ 76.64	BCT2-91141	BCT2-91142	BCT2-91143
7/16	7/16	2		2	4	BALL	BCT2F-4375-L-BN	BCT2-9115	\$ 86.63	\$ 97.46	BCT2-91151	BCT2-91152	BCT2-91153
7/16	7/16	2		3	6	SQ	BCT2F-4375-XL-SQ	BCT2-9116	\$ 91.19	\$ 102.59	BCT2-91161	BCT2-91162	BCT2-91163
7/16	7/16	2		3	6	BALL	BCT2F-4375-XL-BN	BCT2-9117	\$ 112.58	\$ 126.65	BCT2-91171	BCT2-91172	BCT2-91173
1/2	1/2	2		5/8	2-1/2	SQ	BCT2F-5000-S-SQ	BCT2-9118	\$ 50.84	\$ 57.20	BCT2-91181	BCT2-91182	BCT2-91183
1/2	1/2	2		5/8	2-1/2	BALL	BCT2F-5000-S-BN	BCT2-9119	\$ 59.21	\$ 66.61	BCT2-91191	BCT2-91192	BCT2-91193
1/2	1/2	2		1	3	SQ	BCT2F-5000-SQ	BCT2-9120	\$ 52.15	\$ 58.67	BCT2-91201	BCT2-91202	BCT2-91203
1/2	1/2	2		1	3	0.020	BCT2F-5000-R.020	BCT2-9121	\$ 62.58	\$ 70.40	BCT2-91211	BCT2-91212	BCT2-91213
1/2	1/2	2		1	3	0.030	BCT2F-5000-R.030	BCT2-9122	\$ 62.58	\$ 70.40	BCT2-91221	BCT2-91222	BCT2-91223
1/2	1/2	2		1	3	0.045	BCT2F-5000-R.045	BCT2-9123	\$ 62.58	\$ 70.40	BCT2-91231	BCT2-91232	BCT2-91233
1/2	1/2	2		1	3	0.060	BCT2F-5000-R.060	BCT2-9124	\$ 62.58	\$ 70.40	BCT2-91241	BCT2-91242	BCT2-91243
1/2	1/2	2		1	3	0.090	BCT2F-5000-R.090	BCT2-9125	\$ 62.58	\$ 70.40	BCT2-91251	BCT2-91252	BCT2-91253
1/2	1/2	2		1	3	0.125	BCT2F-5000-R.125	BCT2-9126	\$ 62.58	\$ 70.40	BCT2-91261	BCT2-91262	BCT2-91263
1/2	1/2	2		1	3	BALL	BCT2F-5000-BN	BCT2-9127	\$ 64.47	\$ 72.53	BCT2-91271	BCT2-91272	BCT2-91273
1/2	1/2	2		1-1/4	3	SQ	BCT2F-5000-T-SQ	BCT2-9128	\$ 65.18	\$ 73.33	BCT2-91281	BCT2-91282	BCT2-91283
1/2	1/2	2		1-1/2	4	SQ	BCT2F-5000-M-SQ	BCT2-9129	\$ 53.70	\$ 60.41	BCT2-91291	BCT2-91292	BCT2-91293
1/2	1/2	2		2	4	SQ	BCT2F-5000-L-SQ	BCT2-9130	\$ 66.61	\$ 74.94	BCT2-91301	BCT2-91302	BCT2-91303
1/2	1/2	2		2	4	BALL	BCT2F-5000-L-BN	BCT2-9131	\$ 88.48	\$ 99.54	BCT2-91311	BCT2-91312	BCT2-91313
1/2	1/2	2		3	6	SQ	BCT2F-5000-XL-SQ	BCT2-9132	\$ 103.47	\$ 116.40	BCT2-91321	BCT2-91322	BCT2-91323
1/2	1/2	2		3	6	BALL	BCT2F-5000-XL-BN	BCT2-9133	\$ 125.33	\$ 141.00	BCT2-91331	BCT2-91332	BCT2-91333
9/16	9/16	2		1-1/4	3-1/2	SQ	BCT2F-5625-SQ	BCT2-9134	\$ 90.62	\$ 101.95	BCT2-91341	BCT2-91342	BCT2-91343
9/16	9/16	2		1-1/4	3-1/2	BALL	BCT2F-5625-BN	BCT2-9135	\$ 110.81	\$ 124.66	BCT2-91351	BCT2-91352	BCT2-91353
9/16	9/16	2		3	6	SQ	BCT2F-5625-XL-SQ	BCT2-9136	\$ 169.57	\$ 190.77	BCT2-91361	BCT2-91362	BCT2-91363
5/8	5/8	2		3/4	3	SQ	BCT2F-6250-S-SQ	BCT2-9137	\$ 89.09	\$ 100.23	BCT2-91371	BCT2-91372	BCT2-91373
5/8	5/8	2		3/4	3	BALL	BCT2F-6250-S-BN	BCT2-9138	\$ 114.93	\$ 129.30	BCT2-91381	BCT2-91382	BCT2-91383
5/8	5/8	2		1-1/4	3-1/2	SQ	BCT2F-6250-SQ	BCT2-9139	\$ 99.41	\$ 111.84	BCT2-91391	BCT2-91392	BCT2-91393
5/8	5/8	2		1-1/4	3-1/2	0.020	BCT2F-6250-R.020	BCT2-9140	\$ 119.20	\$ 134.10	BCT2-91401	BCT2-91402	BCT2-91403
5/8	5/8	2		1-1/4	3-1/2	0.030	BCT2F-6250-R.030	BCT2-9141	\$ 119.20	\$ 134.10	BCT2-91411	BCT2-91412	BCT2-91413
5/8	5/8	2		1-1/4	3-1/2	0.045	BCT2F-6250-R.045	BCT2-9142	\$ 119.20	\$ 134.10	BCT2-91421	BCT2-91422	BCT2-91423
5/8	5/8	2		1-1/4	3-1/2	0.060	BCT2F-6250-R.060	BCT2-9143	\$ 119.20	\$ 134.10	BCT2-91431	BCT2-91432	BCT2-91433
5/8	5/8	2		1-1/4	3-1/2	0.090	BCT2F-6250-R.090	BCT2-9144	\$ 119.20	\$ 134.10	BCT2-91441	BCT2-91442	BCT2-91443
5/8	5/8	2		1-1/4	3-1/2	BALL	BCT2F-6250-BN	BCT2-9145	\$ 123.02	\$ 138.40	BCT2-91451	BCT2-91452	BCT2-91453
5/8	5/8	2		2-1/4	5	SQ	BCT2F-6250-L-SQ	BCT2-9146	\$ 132.36	\$ 148.91	BCT2-91461	BCT2-91462	BCT2-91463
5/8	5/8	2		2-1/4	5	BALL	BCT2F-6250-L-BN	BCT2-9147	\$ 177.42	\$ 199.60	BCT2-91471	BCT2-91472	BCT2-91473
5/8	5/8	2		3	6	SQ	BCT2F-6250-XL-SQ	BCT2-9148	\$ 155.11	\$ 174.50	BCT2-91481	BCT2-91482	BCT2-91483
5/8	5/8	2		3	6	BALL	BCT2F-6250-XL-BN	BCT2-9149	\$ 193.20	\$ 217.35	BCT2-91491	BCT2-91492	BCT2-91493
3/4	3/4	2		1	3	SQ	BCT2F-7500-S-SQ	BCT2-9150	\$ 130.38	\$ 146.68	BCT2-91501	BCT2-91502	BCT2-91503
3/4	3/4	2		1	3	BALL	BCT2F-7500-S-BN	BCT2-9151	\$ 169.76	\$ 190.98	BCT2-91511	BCT2-91512	BCT2-91513
3/4	3/4	2		1-1/2	4	SQ	BCT2F-7500-SQ	BCT2-9152	\$ 149.84	\$ 168.57	BCT2-91521	BCT2-91522	BCT2-91523
3/4	3/4	2		1-1/2	4	0.020	BCT2F-7500-R.020	BCT2-9153	\$ 180.49	\$ 203.05	BCT2-91531	BCT2-91532	BCT2-91533
3/4	3/4	2		1-1/2	4	0.030	BCT2F-7500-R.030	BCT2-9154	\$ 180.49	\$ 203.05	BCT2-91541	BCT2-91542	BCT2-91543
3/4	3/4	2		1-1/2	4	0.045	BCT2F-7500-R.045	BCT2-9155	\$ 180.49	\$ 203.05	BCT2-91551	BCT2-91552	BCT2-91553
3/4	3/4	2		1-1/2	4	0.060	BCT2F-7500-R.060	BCT2-9156	\$ 180.49	\$ 203.05	BCT2-91561	BCT2-91562	BCT2-91563
3/4	3/4	2		1-1/2	4	0.090	BCT2F-7500-R.090	BCT2-9157	\$ 180.49	\$ 203.05	BCT2-91571	BCT2-91572	BCT2-91573
3/4	3/4	2		1-1/2	4	0.125	BCT2F-7500-R.125	BCT2-9158	\$ 180.49	\$ 203.05	BCT2-91581	BCT2-91582	BCT2-91583
3/4	3/4	2		1-1/2	4	BALL	BCT2F-7500-BN	BCT2-9159	\$ 182.76	\$ 205.61	BCT2-91591	BCT2-91592	BCT2-91593
3/4	3/4	2		2-1/4	5	SQ	BCT2F-7500-L-SQ	BCT2-9160	\$ 195.07	\$ 219.45	BCT2-91601	BCT2-91602	BCT2-91603
3/4	3/4	2		2-1/4	5	BALL	BCT2F-7500-L-BN	BCT2-9161	\$ 294.28	\$ 331.07	BCT2-91611	BCT2-91612	BCT2-91613
3/4	3/4	2		3	6	SQ	BCT2F-7500-XL-SQ	BCT2-9162	\$ 246.42	\$ 277.22	BCT2-91621	BCT2-91622	BCT2-91623
3/4	3/4	2		3	6	BALL	BCT2F-7500-XL-BN	BCT2-9163	\$ 319.07	\$ 358.95	BCT2-91631	BCT2-91632	BCT2-91633

## High Feed Mills



Carbide	4 Flute Center Cutting	8° Helix	AlTiSiN	+0.00 / -.002 3/16 and Greater	±.0005 1/8 and Below	HRc <56		Series: HF4	
SHANK DIA	CUT DIA	FLUTES	LBS	LOC	OAL	CORNER	PART NAME	EDP	List
1/4	3/32	4	0.500	0.090	3	0.023	HF4-.0938	440000	\$ 83.88
1/4	1/8	4	0.650	0.095	3	0.031	HF4-.1250	440010	\$ 83.88
1/4	3/16	4	0.750	0.125	3	0.047	HF4-.1875	440020	\$ 83.88
1/4	1/4	4	1	0.150	3	0.062	HF4-.2500	440030	\$ 73.61
5/16	5/16	4	1.187	0.155	3	0.078	HF4-.3125	440040	\$ 89.37
3/8	3/8	4	1.250	0.175	4	0.094	HF4-.3750	440050	\$ 133.63
1/2	1/2	4	1.500	0.200	4	0.125	HF4-.5000	440060	\$ 191.92
6.0mm	2.0mm	4	12mm	2mm	75mm	0.5mm	HF4-2mm	440070	\$ 83.88
6.0mm	3.0mm	4	16mm	2.8mm	75mm	0.75mm	HF4-3mm	440080	\$ 83.88
6.0mm	4.0mm	4	20mm	3.5mm	75mm	1.0mm	HF4-4mm	440090	\$ 83.88
6.0mm	5.0mm	4	20mm	3.5mm	75mm	1.25mm	HF4-5mm	440100	\$ 83.88
6.0mm	6.0mm	4	25mm	3.8mm	75mm	1.5mm	HF4-6mm	440110	\$ 73.61
8mm	8.0mm	4	30mm	4mm	75mm	2mm	HF4-8mm	440120	\$ 89.37
10mm	10mm	4	33mm	4.3mm	100mm	2.5mm	HF4-10mm	440130	\$ 140.31
12mm	12mm	4	38mm	4.6mm	100mm	3.0mm	HF4-12mm	440140	\$ 171.18