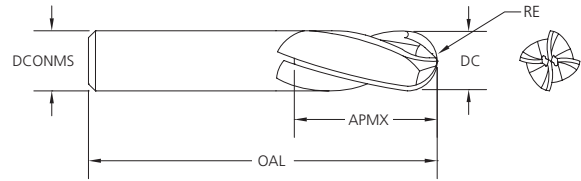
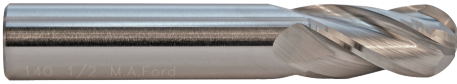
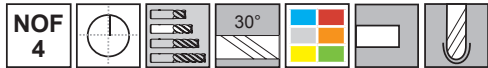


# TuffCut® GP - Series 140

Manufactured with a full ball radius end. Designed for milling fillets or similar rounded corners in the bottom of a cut.



- Ideal for most ferrous metal applications.

Uncoated		DC			DCONMS		OAL		APMX	
Tool No.	EDP	Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
14003120	14001	1/32		.0312	1/8		1-1/2		5/64	
14003940	14003		1.0	.0394		3.0		38		3.0
14004680	14005	3/64		.0468	1/8		1-1/2		7/64	
14005910	14007		1.5	.0591		3.0		38		6.0
14006250	14009	1/16		.0625	1/8		1-1/2		3/16	
14007810	14011	5/64		.0781	1/8		1-1/2		3/16	
14007870	14013		2.0	.0787		3.0		38		9.0
14009370	14015	3/32		.0937	1/8		1-1/2		9/32	
14009840	14017		2.5	.0984		3.0		38		12.0
14010930	14021	7/64		.1093	1/8		1-1/2		3/8	
14011810	14023		3.0	.1181		3.0		38		12.0
14012500	14025	1/8		.1250	1/8		1-1/2		3/8	
14013780	14027		3.5	.1378		4.0		51		12.0
14015620	14029	5/32		.1562	3/16		2		1/2	
14015750	14031		4.0	.1575		4.0		51		14.0
14017720	14033		4.5	.1772		5.0		51		14.0
14018750	14035	3/16		.1875	3/16		2		5/8	
14019680	14037		5.0	.1968		5.0		51		20.0
14021650	14039		5.5	.2165		6.0		64		20.0
14021870	14041	7/32		.2187	1/4		2-1/2		5/8	
14023620	14043		6.0	.2362		6.0		64		20.0
14025000	14045	1/4		.2500	1/4		2-1/2		3/4	
14027560	14047		7.0	.2756		8.0		64		20.0
14028120	14049	9/32		.2812	5/16		2-1/2		3/4	
14031250	14051	5/16		.3125	5/16		2-1/2		13/16	
14031500	14053		8.0	.3150		8.0		64		20.0
14035430	14055		9.0	.3543		9.0		64		20.0
14037500	14057	3/8		.3750	3/8		2-1/2		1	
14039370	14059		10.0	.3937		10.0		70		25.0
14043310	14061		11.0	.4331		11.0		70		25.0
14043750	14063	7/16		.4375	7/16		2-3/4		1	
14047240	14065		12.0	.4724		12.0		76		25.0
14050000	14067	1/2		.5000	1/2		3		1	
14055120	14069		14.0	.5512		14.0		89		30.0
14056250	14071	9/16		.5625	9/16		3-1/2		1-1/8	
14062500	14073	5/8		.6250	5/8		3-1/2		1-1/4	
14062990	14075		16.0	.6299		16.0		89		30.0
14068750	14077	11/16		.6875	3/4		4		1-3/8	
14070870	14079		18.0	.7087		18.0		102		35.0
14075000	14081	3/4		.7500	3/4		4		1-1/2	
14078740	14083		20.0	.7874		20.0		102		38.0
14086620	14085		22.0	.8662		22.0		102		40.0
14087500	14087	7/8		.8750	7/8		4		1-1/2	
14098430	14089		25.0	.9843		25.0		102		40.0
14010000	14019	1		1.0000	1		4		1-1/2	

Series 140 coated tools on page 200.

Inch		Inch		Metric (mm)		Metric (mm)	
DC	Tolerance	RE	Tolerance	DC	Tolerance (h10)	RE	Tolerance
1/32 - 1/4	+0.000/-0.002	<1/16	+0.001/-0.001	1.00 - 3.00	+0.000/-0.040	<1.5	+0.025/-0.025
>1/4 - 1	+0.000/-0.003	>1/16 - 1/8	+0.002/-0.002	>3.00 - 6.00	+0.000/-0.048	1.6 - 3.0	+0.050/-0.050
		>1/8	+0.003/-0.003	>6.00 - 10.00	+0.000/-0.058	>3.0	+0.075/-0.075
				>10.00 - 18.00	+0.000/-0.070		
				>18.00 - 25.00	+0.000/-0.084		

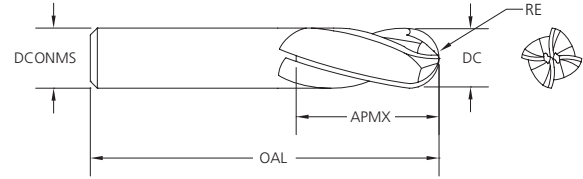


Page 242

# TuffCut® GP - Series 140 Coated



- New ALtima® coated sizes.



TiN		ALtima®		TiCN		DC			DCONMS		OAL		APMX	
Tool No.	EDP	Tool No.	EDP	Tool No.	EDP	Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm
		14003940A	14108				1.0	.0394		3.0		38		3.0
		14005910A	14109				1.5	.0591		3.0		38		6.0
		14007870A	14110				2.0	.0787		3.0		38		9.0
		14009840A	14111				2.5	.0984		3.0		38		12.0
14011810T	14072	14011810A	14000	14011810C	14036		3.0	.1181		3.0		38		12.0
14012500T	14074	14012500A	14002	14012500C	14038	1/8		.1250	1/8		1-1/2		3/8	
		14015620A	11498			5/32		.1562	3/16		2		1/2	
14015750T	14076	14015750A	14004	14015750C	14040		4.0	.1575		4.0		51		14.0
14018750T	14078	14018750A	14006	14018750C	14042	3/16		.1875	3/16		2		5/8	
14019680T	14080	14019680A	14008	14019680C	14044		5.0	.1968		5.0		51		20.0
		1402187A	11502			7/32		.2187	1/4		2-1/2		5/8	
14023620T	14082	14023620A	14010	14023620C	14046		6.0	.2362		6.0		64		20.0
14025000T	14084	14025000A	14012	14025000C	14048	1/4		.2500	1/4		2-1/2		3/4	
		14028120A	11505			9/32		.2812	5/16		2-1/2		3/4	
14031250T	14086	14031250A	14014	14031250C	14050	5/16		.3125	5/16		2-1/2		13/16	
14031500T	14088	14031500A	14016	14031500C	14052		8.0	.3150		8.0		64		20.0
14037500T	14090	14037500A	14018	14037500C	14054	3/8		.3750	3/8		2-1/2		1	
14039370T	14091	14039370A	14020	14039370C	14056		10.0	.3937		10.0		70		25.0
14043750T	14092	14043750A	14022	14043750C	14058	7/16		.4375	7/16		2-3/4		1	
14047240T	14093	14047240A	14024	14047240C	14060		12.0	.4724		12.0		76		25.0
14050000T	14094	14050000A	14026	14050000C	14062	1/2		.5000	1/2		3		1	
		14056250A	59001			9/16		.5625	9/16		3-1/2		1-1/8	
14062500T	14095	14062500A	14028	14062500C	14064	5/8		.6250	5/8		3-1/2		1-1/4	
14062990T	14096	14062990A	14030	14062990C	14066		16.0	.6299		16.0		89		30.0
		14068750A	11508			11/16		.6875	3/4		4		1-3/8	
14075000T	14097	14075000A	14032	14075000C	14068	3/4		.7500	3/4		4		1-1/2	
14078740T	14098	14078740A	14034	14078740C	14070		20.0	.7874		20.0		102		38.0
		14087500A	11509			7/8		.8750	7/8		4		1-1/2	
14098430T	54003	14098430A	54004	14098430C	54005		25.0	.9843		25.0		102		40.0
14010000T	54000	14010000A	54001	14010000C	54002	1		1.0000	1		4		1-1/2	

Series 140 uncoated tools on page 199.

