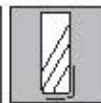
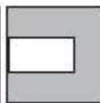
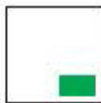
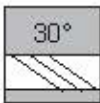


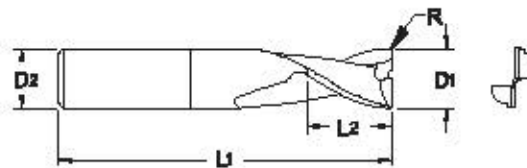
TuffCut® AL Series 135

Z2



2
Flute

The geometry of M.A. Ford® 135 Series solid carbide end mill allows it to be run at extremely high chip loads surpassing the current market leaders.



- Extremely high chip loads - .040"/1mm per tooth and above.
- Performs equally well across a broad range of operating speeds.
- Zirconium coating also available.

Uncoated		Diameter			Shank		OAL		Flute Length		Corner Radius	
Tool No.	EDP	D1			D2 (h6)		L1		L2		R	
		Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm	Inch	mm
13511810	13523		3.0	.1181		3.0		38		3.5		0.20
13515750	13533		4.0	.1575		4.0		51		4.8		0.20
13518750	13500	3/16		.1875	3/16		2		1/4		0.008	
13518751	13513	3/16		.1875	3/16		3		1/4		0.008	
13519680	13502		5.0	.1968		5.0		51		6.0		0.25
13523620	13504		6.0	.2362		6.0		64		7.0		0.30
13525000	13506	1/4		.2500	1/4		2-1/2		5/16		0.011	
13525001	13514	1/4		.2500	1/4		3-1/2		5/16		0.011	
13531500	13508		8.0	.3150		8.0		64		9.5		0.35
13537500	13510	3/8		.3750	3/8		2-1/2		1/2		0.015	
13537501	13511	3/8		.3750	3/8		3		1/2		0.015	
13537502	13512	3/8		.3750	3/8		4		1/2		0.015	
13539370	13515		10.0	.3937		10.0		70		12.0		0.50
13539371	13516		10.0	.3937		10.0		76		12.0		0.50
13539372	13517		10.0	.3937		10.0		89		12.0		0.50
13547240	13525		12.0	.4724		12.0		76		14.0		0.50
13547241	13526		12.0	.4724		12.0		102		14.0		0.50
13547242	13527		12.0	.4724		12.0		127		14.0		0.50
13550000	13520	1/2		.5000	1/2		3		5/8		0.020	
13550001	13521	1/2		.5000	1/2		4		5/8		0.020	
13550002	13522	1/2		.5000	1/2		5		5/8		0.020	
13555120	13552		14.0	.5512		14.0		89		16.0		0.50
13555121	13554		14.0	.5512		14.0		102		16.0		0.50
13555122	13573		14.0	.5512		14.0		127		16.0		0.50
13562500	13538	5/8		.6250	5/8		3-1/2		3/4		0.025	
13562501	13539	5/8		.6250	5/8		4-5/8		3/4		0.025	
13562502	13543	5/8		.6250	5/8		5-1/4		3/4		0.025	
13562990	13535		16.0	.6299		16.0		89		18.0		0.75
13562991	13536		16.0	.6299		16.0		117		18.0		0.75
13562992	13537		16.0	.6299		16.0		133		18.0		0.75
13570870	13563		18.0	.7087		18.0		102		20.0		0.75
13570871	13568		18.0	.7087		18.0		127		20.0		0.75
13570872	13574		18.0	.7087		18.0		152		20.0		0.75
13575000	13530	3/4		.7500	3/4		4		1		0.030	

Inch	
D1	Tolerance
3/16 - 1/4	+ .000/- .002
>1/4 - 1	+ .000/- .003

Metric (mm)	
D1	Tolerance (h10)
3.00	+ .000/- .040
>3.00 - 6.00	+ .000/- .048
>6.00 - 10.00	+ .000/- .058
>10.00 - 18.00	+ .000/- .070
>18.00 - 25.00	+ .000/- .084

Inch	
R	Tolerance
< 3/8	+ .002/- .002
≥ 3/8	+ .003/- .003

Metric (mm)	
R	Tolerance
< 10.0	+ .05/- .05
≥ 10.0	+ .075/- .075



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TuffCut® XR / AL

HIGH PERFORMANCE