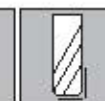
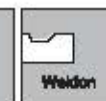
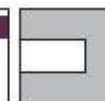
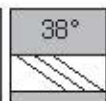
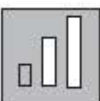
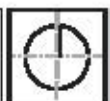


TuffCut® XR Series 178 / 178W

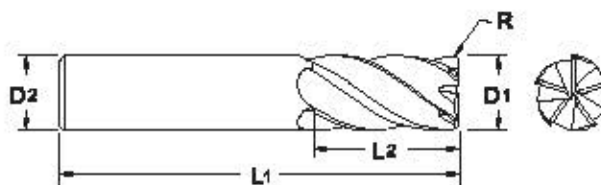
Z5



5
Flute

Designed for EXTREME Productivity. Gain 20% or more in productivity over four flute styles.
Smooth cutting action to eliminate vibration.

New-Standard Offering with Weldon Shank Flats.



ALTi maX		ALTi maX Weldon Flat		Diameter			Shank		OAL		Flute Length		Corner Radius	
Tool No.	EDP	Tool No.	EDP	D1			D2 (h6)		L 1		L 2		R	
				Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm	Inch	mm
17811800A	17959				3	.1181	6		57		8			
17811810A	17998				3	.1181	3		75		25			
17812500A	17800			1/8		.1250	1/8		1-1/2		1/8			
17812510A	17801			1/8		.1250	1/8		1-1/2		3/8			
17815600A	17802			5/32		.1562	3/16		2		3/16			
17815610A	17803			5/32		.1562	3/16		2		7/16			
17815700A	17961			4		.1575	6		57		11			
17815710A	17999			4		.1575	4		75		25			
17818700A	17804			3/16		.1875	3/16		2		3/16			
17818710A	17805			3/16		.1875	3/16		2		7/16			
17819600A	17963			5		.1968	6		57		13			
17819610A	18026			5		.1968	5		76		25			
17821800A	17806			7/32		.2187	1/4		2		1/4			
17821810A	17807			7/32		.2187	1/4		2-1/2		7/16			
17823600A	17965			6		.2362	6		57		13			
17823601A	17966			6		.2362	6		57		13		0.500	
17823610A	18027			6		.2362	6		75		25			
17825000A	17808			1/4		.2500	1/4		2		3/8			
17825002A	17829			1/4		.2500	1/4		2		3/8		0.015	
17825004A	17830			1/4		.2500	1/4		2		3/8		0.030	
17825010A	17809			1/4		.2500	1/4		2-1/2		5/8			
17825012A	17831			1/4		.2500	1/4		2-1/2		5/8		0.015	
17825014A	17832			1/4		.2500	1/4		2-1/2		5/8		0.030	
17825022A	18105			1/4		.2500	1/4		2-1/2		3/4		0.015	
17828100A	17810			9/32		.2812	5/16		2-1/2		5/8			
17828102A	17835			9/32		.2812	5/16		2-1/2		5/8		0.015	
17828104A	17836			9/32		.2812	5/16		2-1/2		5/8		0.030	
17831200A	17811			5/16		.3125	5/16		2		7/16			

177S / 178 / 178W

TuffCut® XR

HIGH PERFORMANCE



Page 340

Inch	
D1	Tolerance
1/8 - 1/4	+0.000/-0.002
> 1/4 - 1.0	+0.000/-0.003

Metric (mm)	
D1	Tolerance (h10)
3.00	+0.000/-0.040
>3.00 - 6.00	+0.000/-0.048
>6.00 - 10.00	+0.000/-0.058
>10.00 - 18.00	+0.000/-0.070
>18.00 - 25.00	+0.000/-0.084

Inch	
D2	Tolerance (h6)
.1182 - .2362	+0/-0.00031
.2363 - .3937	+0/-0.00035
.3938 - .7087	+0/-0.00048
.7088 - 1.000	+0/-0.00051

Metric (mm)	
D2	Tolerance (h6)
3.0	+0/-0.006
3.01 - 6.0	+0/-0.008
6.01 - 10.0	+0/-0.009
10.01 - 18.0	+0/-0.011
18.01 - 25.0	+0/-0.013

Inch	
R	Tolerance
1/4 - 1	+0.0000/-0.0016

Metric (mm)	
R	Tolerance
6.0 - 25.0	+0.00/-0.04

For product information, call your local distributor.