

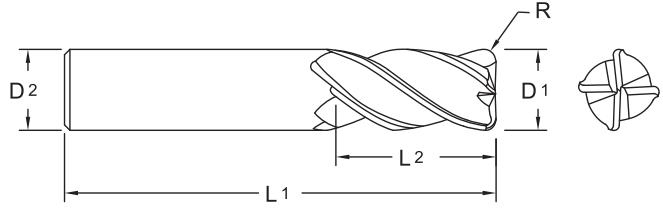
# NEW TuffCut® XR Series 177/177W



Designed for EXTREME Productivity. Unique flute geometry reduces harmonics at increased feeds and speeds.

New-Standard Offering with Weldon Shank Flats

**4**  
Flute



ALtima®		ALtima® Weldon Flat		Diameter			Shank		OAL		Flute Length		Corner Radius	
Tool No.	EDP	Tool No.	EDP	D1			D2 h6		L1		L2		R	
				Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm	Inch	mm
17705900A	17680				1.5	.0591		3.0		38		3.0		
17706250A	17692			1/16		.0625	1/8		1-1/2		1/8			
17707810A	17694			5/64		.0781	1/8		1-1/2		5/32			
17707870A	17682				2.0	.0787		3.0		38		4.0		
17709370A	17696			3/32		.0937	1/8		1-1/2		3/16			
17709840A	17684				2.5	.0984		3.0		38		5.0		
17711800A	17928				3.0	.1181		6.0		57		8.0		
17711801A	17783				3.0	.1181		6.0		57		8.0		0.50
17711803A	17686				3.0	.1181		3.0		38		6.0		
17711808A	17929				3.0	.1181		6.0		57		8.0		0.25
17712500A	17700			1/8		.1250	1/8		1-1/2		1/8			
17712502A	17729			1/8		.1250	1/8		1-1/2		1/8			0.015
17712510A	17701			1/8		.1250	1/8		1-1/2		3/8			
17712512A	17730			1/8		.1250	1/8		1-1/2		3/8			0.015
17713700A	17688				3.5	.1378		6.0		57		7.0		
17715600A	17702			5/32		.1562	3/16		2		3/16			
17715602A	17731			5/32		.1562	3/16		2		3/16			0.015
17715610A	17703			5/32		.1562	3/16		2		7/16			
17715612A	17732			5/32		.1562	3/16		2		7/16			0.015
17715700A	17930				4.0	.1575		6.0		57		11.0		
17715701A	17784				4.0	.1575		6.0		57		11.0		0.50
17715708A	17931				4.0	.1575		6.0		57		11.0		0.25
17717700A	17690				4.5	.1772		6.0		57		9.0		
17718700A	17704			3/16		.1875	3/16		2		3/16			
17718702A	17733			3/16		.1875	3/16		2		3/16			0.015
17718704A	17734			3/16		.1875	3/16		2		3/16			0.030
17718710A	17705			3/16		.1875	3/16		2		7/16			
17718712A	17735			3/16		.1875	3/16		2		7/16			0.015

Inch	
D1	Tolerance
1/16-1/4	+0.00/-0.002
> 1/4-1.0	+0.00/-0.003

Metric (mm)	
D1	Tolerance h10
1.50-3.00	+0.00/-0.040
>3.00-6.00	+0.00/-0.048
>6.00-10.00	+0.00/-0.058
>10.00-18.00	+0.00/-0.070
>18.00-25.00	+0.00/-0.084

Inch	
D2	Tolerance (h6)
.1182 - .2362	+0/-0.00031
.2363 - .3937	+0/-0.00035
.3938 - .7087	+0/-0.00043
.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



# Series 177/177W Continued

ALtima®		ALtima® Weldon Flat		Diameter			Shank		OAL		Flute Length		Corner Radius	
Tool No.	EDP	Tool No.	EDP	D1			D2 h6		L1		L2		R	
				Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm	Inch	mm
17718714A	17736			3/16		.1875	3/16		2		7/16		0.030	
17719600A	17932				5.0	.1968		6.0		57		13.0		
17719601A	17785				5.0	.1968		6.0		57		13.0		0.50
17719608A	17933				5.0	.1968		6.0		57		13.0		0.25
17721800A	17706			7/32		.2187	1/4		2		1/4			
17721802A	17737			7/32		.2187	1/4		2		1/4		0.015	
17721804A	17738			7/32		.2187	1/4		2		1/4		0.030	
17721810A	17707			7/32		.2187	1/4		2-1/2		7/16			
17721812A	17739			7/32		.2187	1/4		2-1/2		7/16		0.015	
17721814A	17740			7/32		.2187	1/4		2-1/2		7/16		0.030	
17723600A	17934				6.0	.2362		6.0		57		13.0		
17723608A	17786				6.0	.2362		6.0		57		13.0		0.25
17723601A	17935				6.0	.2362		6.0		57		13.0		0.50
17723603A	17787				6.0	.2362		6.0		57		13.0		1.00
17723604A	17788				6.0	.2362		6.0		57		13.0		1.50
17723605A	18070				6.0	.2362		6.0		57		13.0		2.00
17725000A	17708			1/4		.2500	1/4		2		1/4			
17725002A	17741			1/4		.2500	1/4		2		1/4		0.015	
17725004A	17742			1/4		.2500	1/4		2		1/4		0.030	
17725010A	17709			1/4		.2500	1/4		2-1/2		1/2			
17725012A	17743			1/4		.2500	1/4		2-1/2		1/2		0.015	
17725014A	17744			1/4		.2500	1/4		2-1/2		1/2		0.030	
17728100A	17710			9/32		.2812	5/16		2-1/2		5/8			
17728102A	17745			9/32		.2812	5/16		2-1/2		5/8		0.015	
17728104A	17746			9/32		.2812	5/16		2-1/2		5/8		0.030	
17731200A	17711			5/16		.3125	5/16		2		5/16			
17731202A	17747			5/16		.3125	5/16		2		5/16		0.015	
17731204A	17748			5/16		.3125	5/16		2		5/16		0.030	
17731210A	17712			5/16		.3125	5/16		2-1/2		13/16			
17731212A	17749			5/16		.3125	5/16		2-1/2		13/16		0.015	
17731214A	17750			5/16		.3125	5/16		2-1/2		13/16		0.030	
17731500A	17937				8.0	.3150		8.0		63		19.0		
17731501A	17938				8.0	.3150		8.0		63		19.0		0.50
17731503A	17789				8.0	.3150		8.0		63		19.0		1.00
17731504A	17790				8.0	.3150		8.0		63		19.0		1.50
17731505A	17791				8.0	.3150		8.0		63		19.0		2.00
17731507A	18072				8.0	.3150		8.0		63		19.0		3.00
17734300A	17713			11/32		.3438	3/8		2-1/2		13/16			
17734302A	17751			11/32		.3438	3/8		2-1/2		13/16		0.015	
17734304A	17752			11/32		.3438	3/8		2-1/2		13/16		0.030	
17737500A	17714			3/8		.3750	3/8		2		3/8			
17737502A	17753			3/8		.3750	3/8		2		3/8		0.015	
17737504A	17754			3/8		.3750	3/8		2		3/8		0.030	
17737510A	17715			3/8		.3750	3/8		2-1/2		7/8			
17737512A	17755			3/8		.3750	3/8		2-1/2		7/8		0.015	
17737514A	17756			3/8		.3750	3/8		2-1/2		7/8		0.030	



End Mills

