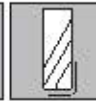
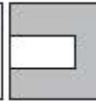
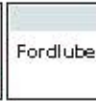
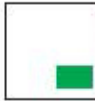


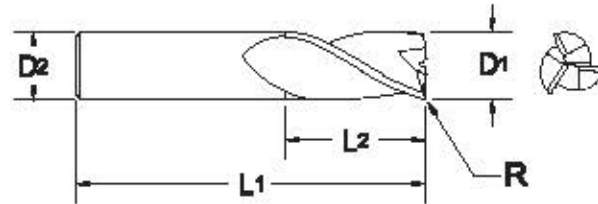
TuffCut® X-AL Series 138 / 138R

Z3



3
Flute

Series 138 takes aluminum milling to the extreme with chip loads and speeds, definitely designed for extreme productivity.



Uncoated		Fordlube®		Diameter			Shank		OAL		Flute Length		Corner Radius	
				D1			D2 (h6)		L1		L2		R	
Tool No.	EDP	Tool No.	EDP	Inch	mm	Decimal	Inch	mm	Inch	mm	Inch	mm	Inch	mm
13811810	13892	13811810F	14295		3.0	.1181		6.0		52.0		8.0		
13811810R.020	13100				3.0	.1181		6.0		52.0		8.0		0.50
13811810R.039	13101				3.0	.1181		6.0		52.0		8.0		1.00
13812500	13800	13812500F	14203	1/8		.1250	1/8		1-1/2		3/16			
13812501	13801	13812501F	14204	1/8		.1250	1/8		1-1/2		1/4			
13812502	13802	13812502F	14205	1/8		.1250	1/8		1-1/2		5/16			
13812503	13803	13812503F	14206	1/8		.1250	1/8		1-1/2		3/8			
13812504	13804	13812504F	14207	1/8		.1250	1/8		1-1/2		1/2			
13812505	13805	13812505F	14208	1/8		.1250	1/8		1-1/2		5/8			
13812506	13806	13812506F	14209	1/8		.1250	1/8		2		3/4			
13812507	13807	13812507F	14210	1/8		.1250	1/8		2		1			
13815750	13893	13815750F	14296		4.0	.1575		6.0		55.0		11.0		
13815750R.020	13102				4.0	.1575		6.0		55.0		11.0		0.50
13815750R.039	13103				4.0	.1575		6.0		55.0		11.0		1.00
13818750	13808	13818750F	14211	3/16		.1875	3/16		2		1/4			
13818751	13809	13818751F	14212	3/16		.1875	3/16		2		3/8			
13818752	13810	13818752F	14213	3/16		.1875	3/16		2		1/2			
13818753	13811	13818753F	14214	3/16		.1875	3/16		2-1/2		5/8			
13818754	13812	13818754F	14215	3/16		.1875	3/16		2-1/2		3/4			
13818755	13813	13818755F	14216	3/16		.1875	3/16		2-1/2		1			
13819680	13894	13819680F	14297		5.0	.1968		6.0		58.0		13.0		
13819680R.020	13104				5.0	.1968		6.0		58.0		13.0		0.50
13819680R.039	13105				5.0	.1968		6.0		58.0		13.0		1.00
13823620	13895	13823620F	14298		6.0	.2362		6.0		58.0		13.0		
13823620R.020	13106				6.0	.2362		6.0		58.0		13.0		0.50
13823620R.039	13107				6.0	.2362		6.0		58.0		13.0		1.00
13823620R.059	13108				6.0	.2362		6.0		58.0		13.0		1.50
13823620R.079	13109				6.0	.2362		6.0		58.0		13.0		2.00
13825000	13814	13825000F	14217	1/4		.2500	1/4		2		3/8			
13825000R.015	13000			1/4		.2500	1/4		2		3/8		0.015	

Inch	
D1	Tolerance
1/8 - 1-1/4	+0.000/-0.0005

Metric (mm)	
D1	Tolerance
3.00 - 20.00	+0.000/-0.013

Inch	
R	Tolerance
1/8 - 1	+0.0008/-0.0008

Metric (mm)	
R	Tolerance
3.0 - 20.0	+0.02/-0.02



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*Allow 2 weeks to ship non-stock items.
Weldon flats available. Please specify when ordering.
When ordering Weldon flats please call customer service for pricing.

For product information, call your local distributor.

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TuffCut® XR-AL / X-AL

HIGH PERFORMANCE