



# Finishing cutter **Multicut XF**



# Multicut XF

## EXtreme Finish

The new **Multicut XF** is perfect for tight tolerance applications where you need excellent surface finish and increased productivity. The advantages of the **Multicut XF** over conventional finishing cutters is reflected in the performance to price ratio as well as the improved surface quality. In some cases you can skip grinding operations using the **Multicut XF**, helping you to save time and money.

The **Multicut XF** is different from other finishers because of its extremely high helix, unequal spacing and odd number of flutes. This leads to vibration-free machining with straight walls and excellent finishes.

### Surface qualities

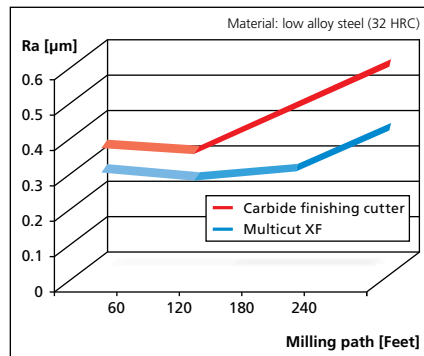


Fig. 2: Illustration of the component roughness Ra for the above milling path in the case of conventional finishing cutters and Multicut XF

### Reduction of the machining costs per workpiece

The ideal feed values are more than 50% higher compared to conventional tools for finishing operations. Additionally, this tool enables finishing processes to be performed in only one step. These features lead to a reduction of the machining costs by more than 30%.

### Reduction of the tool costs

**Multicut XF** increases tool life over other finishers by at least 50%, which results in a reduction of the tool costs by more than 30%.

### The best surface quality of the components

The very robust and rigid geometry gives you great accuracy and finishes which are lower than  $Ra=0.4$  even after a milling time of 90 minutes.

### Resharpener

The **Multicut XF** can be resharpener several times, if handled by experts, so send them back to Fraisa USA to save even more money on tool costs.

### Feed rates

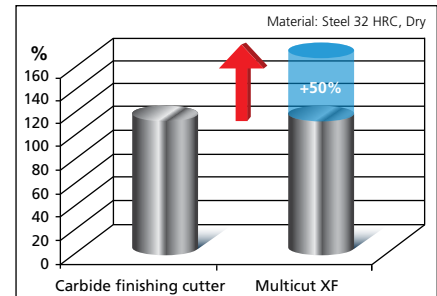


Fig. 1: Feed rates of conventional finishing cutters and Multicut XF

### The advantages:

- Extreme dimensional and positional accuracy
- Extremely good surface finishes
- Extreme process security
- No vibrations
- Shorter machining times
- Lower production costs

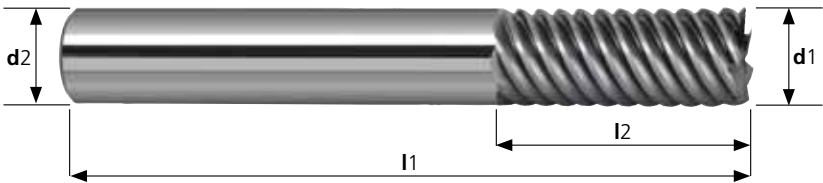


If you have any question, please send an email to [info@fraisausa.com](mailto:info@fraisausa.com)

For further information, please refer to [www.fraisa.com](http://www.fraisa.com)

High-Performance Finishing Cutter  
Multicut XF

HM XA	$\lambda$ 65° $\gamma$ 8°
45°	



Roughing					Finishing					Best	Good

Steel <24 HRC	Steel 24-34 HRC	Steel 34-42 HRC	Steel 42-48 HRC	Steel 48-56 HRC	Steel 56-60 HRC	Steel >60 HRC	Stainless	Titanium	Cast Iron Nickel Alloys Aluminium
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dimensions tolerances	d1 e8	d2 h6	l1	l2	fl	List Price	ReTool®
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Order #	Coating: POLYCHROM AlCrN						
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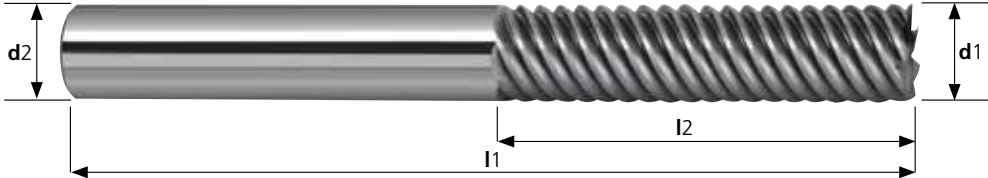
<b>Standard</b>							
P15850188	1/8	1/4	2 1/4	1/4	5	•	
P15850252	3/16	1/4	2 1/4	3/8	5	•	
P15850312	1/4	1/4	2 1/2	3/4	5	•	•
P15850432	3/8	3/8	2 1/2	7/8	7	•	•
P15850530	1/2	1/2	3	1	7	•	•
P15850605	5/8	5/8	3 1/2	1 1/4	7	•	•
P15850652	3/4	3/4	4	1 1/2	7	•	•
P15850775	1	1	5	2	7	•	•

<b>Mid-Long</b>							
P15851434	3/8	3/8	3	1 1/8	7	•	•
P15851532	1/2	1/2	3 1/2	1 1/2	7	•	•
P15851607	5/8	5/8	4 1/2	2	7	•	•
P15851652	3/4	3/4	5	2 1/2	7	•	•
P15851775	1	1	6	3	7	•	•
P15851815	1 1/4	1 1/4	8	5	9	•	•

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# High-Performance Finishing Cutter

Multicut XF

HM XA	λ 65° γ 8°										
45°											
		Performance roughing					Performance finishing				
		<div></div>					<div></div>				
							<div>Best</div> <div>Good</div>				
Steel <24 HRC	Steel 24-34 HRC	Steel 34-42 HRC	Steel 42-48 HRC	Steel 48-56 HRC	Steel 56-60 HRC	Steel >60 HRC	Stainless	Titanium	Cast Iron Nickel Alloys Aluminium		
dimensions tolerances		d1 e8	d2 h6	l1		l2		fl		List Price	ReTool®
Order #		Coating: POLYCHROM AlCrN									
Long											
P15851432		3⁄8	3⁄8	3 1⁄2		1 1⁄2		7		•	•
P15851530		1⁄2	1⁄2	4		2		7		•	•
P15851605		5⁄8	5⁄8	5		2 1⁄2		7		•	•
P15851654		3⁄4	3⁄4	5 1⁄2		3		7		•	•
P15851777		1	1	7		4		7		•	•
Extra-Long											
P15852530		1⁄2	1⁄2	4 1⁄2		2 1⁄2		7		•	•
P15852605		5⁄8	5⁄8	5 3⁄4		3 1⁄4		7		•	•
P15852652		3⁄4	3⁄4	6 1⁄2		3 3⁄4		7		•	•
P15852775		1	1	8		5		7		•	•
P15852815		1 1⁄4	1 1⁄4	9		6		9		•	•

Multicut XF

Technical drawing of a bolt. The drawing shows a cylindrical shaft with a threaded end. The dimensions are labeled as follows:  $d_2$  is the diameter of the smooth section,  $l_1$  is the total length,  $l_2$  is the length of the threaded section,  $d_1$  is the diameter of the threaded section, and  $r$  is the radius of the fillet at the transition between the smooth and threaded sections.

<b>dimensions</b> tolerances	<b>d1</b> e8	<b>d2</b> h6	<b>l1</b>	<b>l2</b>	<b>radius</b> 0/+0.0012	<b>fl</b>	<b>List Price</b>	<b>ReTool®</b>
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information on the  
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