Product Catalog



Diamond Cutting and Grinding Solutions

Productivity improvements and lowering costs for our customers is our priority

For more than 40 years

In 1971 we began selling diamond tools and air saws to the FRP/Composite industry. Since that time our goal has always been to help our customers find easier ways to trim and shape their products. This objective of striving to offer better tools to the industry convinced us to begin manufacturing our own diamond cutting tools in 1981 so that we could supply exactly what the "guy in the shop" needed.

Stay close to the industry to better understand its requirements Constantly work to meet our clients' needs

Use acquired experience for over 4 decades to create top quality tools and solutions

We are committed to providing high-quality products that will increase productivity by getting the job done quickly and efficiently.

The Diatrim Team







Air Tools for composites - Trimmers

Our pneumatic tools use heavy-duty, high-quality motors that meet the highest standards for fast and ongoing production runs in manufacturing plants. These tools come with dust collector guards.



2" Trimmer Item : 10-2

Our 2" trimmer is a light, powerful tool designed to trim in hard to reach areas and often modified as a scoring tool. Useful for customers restricted to using small air compressors. Comes with two continuous rim blades and dust collector guard. Open guard is available upon request.



3" Trimmer

ltem : 10-3

These light, powerful air saws are recommended for trimming smaller, thinner parts and are used by companies restricted to using smaller air compressors. These tools can be modified for custom applications and is often used for scoring. The 3" model includes the dust collector guard and comes with two side spoked blades. Open guard is available upon request.



4" Heavy-duty Trimmer

Item : 10-4

This powerful dependable saw has been designed for fast production trimming of composite parts up to 1" thick. Over the past 40 years, this trimmer has become one of the most widely used handheld air saws in the industry. Comes with two continuous rim blades and a dust collector guard. Open guard is available upon request.



Air Tools for composites - Trimmers



5" Heavy-dut	ty Trimmer
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Item : 10-5

Our second most popular trimmer! It is the same powerful motor used on our 4" trimmer. This tool can be modified for unique applications including that of an adjustable flange trimmer. It includes two side spoked blades and a dust collector guard. Open guard is available upon request.



7" Heavy-duty Trimmer

Item : 10-7

Our NEWEST trimmer. Replaces our 6" and 6 1/2" trimmers. This powerful 7" trimmer aggressively trims composite material up to 2" thick. Comes with two SuperSpeed I blades and a dust collector guard. Open guard is available upon request.



8" Heavy-duty Trimmer	ltem : 10-8
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This handheld trimmer was designed to cut composite material up to 2 1/2" inches thick. This model includes two SuperSpeed I blades and a dust collector guard. Open guard is available upon request.



Air Tools for composites - Trimmers



10" Heavy-duty Trimmer Item : 1	0-10
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This powerful handheld trimmer, originally designed for the wind turbine market, cuts through composite up to 3 1/2" inches thick. This model includes two SuperSpeed 1 blades and a dust collector guard. Open guard is available upon request.

TRIMMERS - TECHNICAL INFORMATION								
			Blade		Cutting	Air	Speed	Weight
ltem	Description	Arbor	Diameter	Thickness	Depth	Consumption	RPM	lbs
10-2	2" trimmer	1/4"	2"	1/16 - 3/32"	0.300"	13.5 cfm @ 80psi	20,000	2.5 lbs
10-3	3" trimmer	1/2"	3"	1/16 - 3/32"	1/2"	19 cfm @ 90psi	12,000	3 lbs
10-4	4" trimmer	3/4"	4"	1/16 - 3/32"	1"	23 cfm @ 80psi	12,700	4.5 lbs
10-5	5" trimmer	3/4"	5"	1/16 - 3/32"	1 1/2"	23 cfm @ 80psi	12,700	5 lbs
10-7	7" trimmer	7/8"	7"	3/32"	2"	49 cfm @ 85 psi	8,400	11 lbs
10-8	8" trimmer	7/8"	8"	3/32 - 1/8"	2 1/2"	49 cfm @ 85 psi	8,400	11 lbs
10-10	10" trimmer	7/8"	10"	3/32 - 1/8"	3 1/2"	49 cfm @ 85 psi	8,400	12 lbs



Air Tools for composites - Routers



High-speed Router	Item : 30-SE50

50,000 RPM high speed router with a 1/4" collet chuck. Each unit is fitted with a dust collector cowl for jig following. 1/4" diamond coated router bit included. Excellent for routing through composite up to 1/4" thickness.

HIGH-SPEED ROUTER - TECHNICAL INFORMATION							
Item	Description	Collet Chuck	Air Consumption	Speed RPM	Weight Ibs		
30-SE50	High-speed Router	1/4"	12 cfm @ 90psi	50,000	2.25 lbs		

Sanders and Planers



4" and 5" Sander

Item : 40-DS45

This unique diamond disc sander allows the operator to grind and sand the flat FRP part while collecting a significant amount of the dust created when attached to a dust extraction system. Cutter depth of cut can be adjusted from 0" to 1/8" with each pass. 4" cutter (item# 75-DS4) and 5" cutter (item# 75-DS5) sold separately.

2 1/4" Planer	ltem : 40-DP35
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Our diamond planing tool has an adjustable nylon faceplate which allows the operator to plane or grind any area 2 1/4 wide and 1/32"- 1/8" deep in a single pass. The unit comes equipped with dust collector guard. Cutter Item# 45-DP214 sold separately.

SANDER AND PLANER - TECHNICAL INFORMATION								
Item	Description	Diameter	Cutting Depth	Width	Air Consumption	Speed RPM	Weight Ibs	
40-DS45	4" Disc Sander	4"	0 to 1/8"	4"	23 cfm @ 80psi	12,700	6 lbs	
40-DS55	5" Disc Sander	5"	0 to 1/8"	5"	23cfm @ 80psi	12,700	6lbs	
40-DP35	2 1/4" Planer	n/a	1/32" or 1/8"	2 1/4"	23 cfm @ 80psi	12,700	6 lbs	



Air Tools for composites - Flange Trimmers



Flange Trimmer - Top Guide	Item : 20-FT25
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This flange trimmer has been designed to trim flanges at production speed. Our adjustable nylon guide can be set to various flange widths. Possibility of trimming up to 4" wide. All blade diameters are 3 1/2". For blade choices, refer to our flange trimmer blade table below. Blades are sold separately. See spindle saw for 20-FT25.



Flange Trimmer - Bottom Guide

Item: 10-SP3

Our newest flange trimmer has been designed to trim flanges at production speed. It has an adjustable bottom plate designed to ride on the flat side or outside surface of the part to make an accurate cut. This tool comes equipped with two 3" diameter integral spindle saws (item# 53-338) and dust collection guard.

FLANGE TRIMMER - TECHNICAL INFORMATION							
Item	Description	Blade Diameter	Flange Width	Air Consumption	Speed RPM	Weight Ibs	
20-FT25	Flange Trimmer	3.5"	1/2 to 4"	23 cfm @ 80psi	12,700	5 lbs	
10-SP3	Flange Trimmer	3"	0 - 1 1/2"	12 cfm @ 90 psi	18,000	3.5 lbs	



FLANGE TRIMMER - BLADES						
		Flange Wid	th			
Item	Description	Min	Max			
53-FT351	Spindle Saw for 20-FT25	1/2"	2 1/8"			
53-FT352	Spindle Saw for 20-FT25	1 1/2"	3"			
53-FT353	Spindle Saw for 20-FT25	3"	4"			



Air Tools for composites - Backfacers



Backfacer - Flat Parts	ltem : 20-BF15

This heavy-duty backfacer will machine an accurate thickness on flat parts. Adjustable nylon back plate will accommodate up to 3/4" thick composite material. The width of the cut is determined by the diameter of backfacing cutter. Cutter sold separately (sizes 1 1/2" to 4").

Backfacer - Curved or Flat Parts

Item : 20-BF10

This powerful unit allows the operator to machine an accurate thickness on flat or curved composite parts. Adjustable rollers will accommodate up to 3/4" composite material. The width of cut is determined by the length of the router used. Standard diamond routers are available in 1 1/4", 1 1/2", 2" and 2 1/2" in length. Unit comes equipped with a dust collector guard and 1 1/2" diameter dust pipe. Routers are sold separately.

Inline Backfacer

Item : 20-BF20

The adjustable features of this inline backfacer offer the operator a practical and efficient tool. The adjustable guide allows for a range of thicknesses (1/4" - 1/2") of the composite material, while the telescopic component provides for a range of depth of cut $(1 \ 1/4" - 2")$. The flexibility of the tool using only one router bit makes for a highly cost-effective backfacer. Routers sold separately.

	BACKFACERS - TECHNICAL INFORMATION						
		Cutting width Air Speed Weight					
ltem	Description	Min	Max	consumption		lbs	
BF-15	Flat Parts Backfacer	5/16"	1 9/16"	23 cfm @ 80psi	12,700	4.5 lbs	
BF-10	Curved and Flat Parts Backfacer	1 1/4"	2 1/2"	23 cfm @ 80psi	12,700	4.5 lbs	
BF-20	Inline Backfacer	1 1/4"	2"	12 cfm @ 90psi	18,000	3.5 lbs	

CUTTERS FOR BF-15						
ltem	Cutter Diameter	Width of Cut				
70-BF112	1 1/2"	5/16"				
70-BF2	2"	9/16"				
70-BF212	2 1/2"	13/16"				
70-BF3	3"	1 1/16"				
70-BF4	4"	1 9/16"				

ROUTERS BF-10				
Item Width of Cut				
70-2232	1 1/4"			
70-2238	1 1/2"			
70-2250	2"			
70-2265 2 1/2"				

ROUTERS BF-20			
ltem	Depth of Cut		
70-5000 1 1/4" to 2"			



Blades

All diamond blades should be operated at speeds between 7,000 and 10,000 feet per minute. Blades will come with standard arbor size unless otherwise specified at time of order. Special sizes available upon request.



Continuous Rim Blade

Continuous rim blades are the most widely used for general purpose cutting. Can be used for straight and some limited curved cuts. Width of diamond coating is 1/8".

Side Spoke Blade

Side spoke blades are recommended for straight and curved cutting. The diamond spokes will assist with the radius cut and will help prevent the blade from jamming.

Gulleted/Slotted Blade

Gulleted blades are recommended for material thickness greater than 3/4". Width of diamond coating is 1/8".

SuperSpeed I Blade

SuperSpeed I blades have been designed to include the benefits of both side spoked blades and gulleted blades. Width of diamond is 1/4" around the blade and 1/8" around the gullets/slots.



Blades



SuperSpeed II Blade

SuperSpeed II blades have all the benefits of SuperSpeed I plus allow the operator to sand parts without changing tools. Width of diamond is 1".

BLADES - TECHNICAL INFORMATION							
le l							
		Arbor	Continuous	Side		SuperSpeed	
Diameter	Thickness	size	rim	spoked	Gulleted	Model 1	Model 2
1 1/2"	1/16"	1/4" or as required	50-112116	51-112116	52-112116		
2"	1/16"	1/4" or as required	50-2116	51-2116	52-2116		
2"	3/32"	1/4" or as required	50-2332	51-2332	52-2332		
2 1/2"	1/16"	1/2" or as required	50-212116	51-212116	52-212116		
2 1/2"	3/32"	1/2" or as required	50-212332	51-212332	52-212332		
3"	1/16"	1/2" or as required	50-3116	51-3116	52-3116		
3"	3/32"	1/2" or as required	50-3332	51-3332	52-3332		
4"	1/16"	5/8" or as required	50-41165	51-41165	52-41165		
4"	1/16"	3/4" or as required	50-4116	51-4116	52-4116	54-4116	52-4116-1
4"	3/32"	3/4" or as required	50-4332	51-4332	52-4332	54-4332	52-4332-1
5"	1/16"	3/4" or as required	50-5116	51-5116	52-5116	54-5116	52-5116-1
5"	3/32"	3/4" or as required	50-5332	51-5332	52-5332	54-5332	52-5332-1
6"	3/32"	3/4" or as required	50-6332	51-6332	52-6332	54-6332	
7"	3/32"	5/8" or as required	50-7332	51-7332	52-7332	54-7332	
8"	3/32"	5/8" or as required	50-8332	51-8332	52-8332	54-8332	
8"	1/8"	5/8" or as required	50-818	51-818	52-818	54-818	
10"	3/32"	As required	50-10332	51-10332	52-10332	54-10332	
10"	1/8"	As required	50-1018	51-1018	52-1018	54-1018	
10"	5/32"	As required	50-10532	51-10532	52-10532		
12"	1/8"	As required	50-1218	51-1218	52-1218		
14"	1/8"	As required	50-1418	51-1418	52-1418		
14"	5/32"	As required	50-14532	51-14532	52-14532		
16"	5/32"	As required	50-16532	51-16532	52-16532		
		Custom diame	ter, thickness and a	arbor sizes availab	le upon request		



Blades



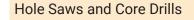
Integral Spindle Saws/Mounted Blades

The saws are used where it is necessary to cut close into a corner and other hard to reach areas. The blade and spindle are machined from one piece of metal and present an absolutely flush side to the work. Available in continuous rim or side spoked models. Special shank sizes available upon request.

SPINDLE SAWS - TECHNICAL INFORMATION					
	Blade	Shank			
ltem	Diameter	Diameter	Length		
53-1	1"	1/4"	2"		
53-112	1 1/2"	1/4"	2"		
53-2	2"	1/4"	2"		
53-238	2"	3/8"	3"		
53-212	2 1/2"	1/4"	2"		
53-338	3"	3/8"	3"		
53-312	3"	1/2"	3"		
(Custom sizes available upon request				

Hole Saws





Our hole saws and core drills have a corrugated edge which improves dust evacuation, thereby enhancing speed of drilling and core ejection. Both use a standard arbor (sold separately). Core drills are machined to be concentric and have tighter tolerances. Standard hole saw sizes are listed in the following table with special sizes available upon request.



Auto – Ejection Hole Saw

Our auto ejection hole saw will automatically eject composite cores as quickly as holes are drilled. This unique holesaw was designed for use in a fixture for production drilling (drill press, CNC, robot, etc).



Hole Saws



Arbors / Pilots / Springs

Hole saw arbors and spring. Refer to table for appropriate size.

HOLE SAWS - TECHNICAL INFORMATION								
	Diameter Diameter			Diam				
Item	Inches	MM	Item	Inches	ММ	Item	Inches	MM
60-0916	9/16"	14	60-11316	1 13/16"	46	60-378	3 7/8"	98
60-058	5/8"	16	60-178	1 7/8"	48	60-4	4"	102
60-01116	11/16"	17	60-2	2"	51	60-418	4 1/8"	105
60-034	3/4"	19	60-2116	2 1/16"	52	60-414	4 1/4"	108
60-01316	13/16"	21	60-218	2 1/8"	54	60-438	4 3/8"	111
60-078	7/8"	22	60-214	2 1/4"	57	60-412	4 1/2"	114
60-1	1"	25	60-238	2 3/8"	60	60-5	5"	127
60-1116	1 1/16"	27	60-212	2 1/2"	64	60-512	5 1/2"	140
60-1316	1 3/16"	30	60-258	2 5/8"	67	60-6	6"	152
60-114	1 1/4"	32	60-234	2 3/4"	70	60-7	7"	178
60-1516	1 5/16"	33	60-278	2 7/8"	73	60-8	8"	203
60-138	1 3/8"	35	60-3	3"	76	60-9	9"	229
60-1716	1 7/16"	37	60-318	3 1/8"	79	60-10	10"	254
60-112	1 1/2"	38	60-314	3 1/4"	83	60-11	11"	280
60-158	1 5/8"	41	60-312	3 1/2"	89	60-12	12"	305
60-11116	1 11/16"	43	60-358	3 5/8"	92			
60-134	1 3/4"	44	60-334	3 3/4"	95			
	·		Custom	sizes available upo	n request			

	HOLE SAWS - ARBORS				
ltem	Arbors used by these holesaws	Chuck Size			
67-1	9/16" to 1 3/16"	3/8"			
67-2	1 1/4" to 6"	7/16"			
67-3	1 1/4" to 6"	3/8"			
67-7	Spring				



Special cutters



Router Bits

Router bits are available in several standard sizes. These standard bits can be used to cut through composite up to 1/4" thick. Contact us for custom routers to rout material greater than 1/4" thick.

ROUTER BITS - TECHNICAL INFORMATION						
	Diamond C	oating	Overall	Shank		
ltem	Diameter	Length	Length	Diameter		
85-316	3/16"	1/2"	2"	1/4"		
85-14	1/4"	1"	2 1/2"	1/4"		
85-125	3/32" x 3/16"	1"	2 1/2"	1/4"		
85-516	5/16"	1"	2 1/2"	1/4"		
Custom sizes available upon request						

Backfacing Cutters

Cutters for 20-BF15 and other backfacers.



BACKFACING CUTTERS - TECHNICAL INFORMATION					
ltem	Diameter	Width of Cut			
70-BF112	1 1/2"	5/16"			
70-BF2	2"	9/16"			
70-BF212	2 1/2"	13/16"			
70-BF3	3"	1 1/16"			
70-BF4	4"	1 9/16"			
Custom sizes available upon request					

Surface Planing Tools

Cutters used for surfacing and planing flat surfaces. For use on drill press or milling machines.



SURFACE PLANING TOOLS -TECHNICAL INFORMATION					
ltem	Cutter Diameter	Spindle Size			
75-112	1 1/2"	As required			
75-2	2"	As required			
75-212	2 1/2"	As required			
75-3	3"	As required			
Custom sizes available upon request					
75-DS4	4"	Sanding Disc			



Special cutters

Counterbores / Countersinks

To counterbore holes in pipe flanges, bathtubs, showers etc. May be used on any portable drill.



COUNTERBORES - TECHNICAL INFORMATION						
Item	Cutter Diameter	Spindle Size	Pilot Diameter			
80-112	1 1/2"	As required	As required			
80-2	2"	As required	As required			
80-212	2 1/2"	As required	As required			
80-3	80-3 3" As required As required					
Custom sizes available upon request						

Jigsaws and Reciprocating Blades

Typically used for complicated cuts and tight radius curves.



JIGSAW AND RECIPROCATING BLADES - TECHNICAL INFORMATION				
Item	Blade Width	Length	Shank Model	
88-312	5/16"	3 1/2"	Universal 1/4"	
88-6	3/4"	6"	Universal 1/2"	
Different shank styles available upon request				

Backfacing Routers

Routers for 20-BF10 backfacer.



BACKFACING ROUTERS - TECHNICAL INFORMATION		
ltem	Width of Cut	
70-2232	1 1/4"	
70-2238	1 1/2"	
70-2250	2"	
70-2265	2 1/2"	
Custom sizes available upon request		

Customized Cutters

With a full in house machine shop, we can manufacture almost any customized cutter and then diamond coat it.



Contact us for more details and get a quote.



Related Items

CBN

CBN – used for precision grinding of various metal alloys such as titanium, nickel, aluminum, cobalt, etc.



CBN – TECHNICAL INFORMATION Contact us for additional details

Electroplated Flexible Hand Pads

Suitable to use for wet and dry grinding and polishing the edges and corners of a wide range of materials including composites and stone. Long life and faster results versus conventional pads.



DIAMOND ELECTROPLATED FLEXIBLE HAND PADS TECHNICAL INFORMATION			
Item	Description Diamond Electroplated Flexible Hand Pads		
130-9055M60-GREEN	90mm x 55mm - Green M60		
130-9055M120-BLACK	90mm x 55mm - Black M120		
130-9055M200-RED	90mm x 55mm - Red M200		
130-9055M400-YELLOW	90mm x 55mm - Yellow M400		
130-9055R800-WHITE	90mm x 55mm - White R800		
130-9055R1800-BLUE	90mm x 55mm - Blue R1800		
130-9055R12000-ORANGE	90mm x 55mm - Orange R12000		

PCD Bits

PCD bits are typically an excellent solution for drilling smaller holes in a number of materials, including thicker composite. Longer tool life when compared to carbide and HSS drills.



PCD DRILL BITS – TECHNICAL INFORMATION Available in standard and customized sizes

Electroplated Flexible Circular Pads

Suitable to use for wet and dry grinding and polishing the edges and corners on a wide range of materials using an orbital sander. Long life and faster results versus conventional circular pads.



DIAMOND ELECTROPLATED FLEXIBLE CIRCULAR PADS TECHNICAL INFORMATION

Item	Description Diamond Electroplated Flexible Circular Disks
130-5M60-GREEN	125mm x 20mm bore - Green M60
130-5M120-BLACK	125mm x 20mm bore - Black M120
130-5M200-RED	125mm x 20mm bore - Red M200
130-5M400-YELLOW	125mm x 20mm bore - Yellow M400
130-5R800-WHITE	125mm x 20mm bore - White R800
130-5R1800-BLUE	125mm x 20mm bore - Blue R1800
130-5R12000-ORANGE	125mm x 20mm bore - Orange R12000



ORDER AND INFORMATION

DIATRIM TOOLS LTD 2830 DE MINIAC MONTREAL, QUEBEC, CANADA H4S 1K9

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