

# Product Catalog



**DIATRIM**

Manufacturer of diamond cutting and grinding tools since 1981

Air Tools | Blades | Holesaws | Special Cutters | CBN | PCD

## Diamond Cutting and Grinding Solutions

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Productivity improvements and lowering costs  
for our customers is our priority

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For more than 35 years

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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.

Close to 40 years later Diatrim’s approach focuses  
on the same principles

**Stay close to the industry to better understand its requirements**



**Constantly work to meet our clients’ needs**



**Use acquired experience of nearly 4 decades to create top quality tools**

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. Useful for customers restricted to using small air compressors. Comes with two continuous rim blades and a dust collector guard. Open guard available upon request.



3" Trimmer

Item : 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. The 3" model includes the dust collector guard and comes with two blades. Open guard 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 35 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 available upon request.

# Air Tools for composites - Trimmers



5" Heavy-duty Trimmer

Item : 10-5

Our second most popular trimmer! It is the same powerful motor used on our 4" trimmer. It includes two side spoked blades and a dust collector guard. Open guard 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.



8" Heavy-duty Trimmer

Item : 10-8

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.

# Air Tools for composites - Trimmers



10" Heavy-duty Trimmer

Item : 10-10

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.

TRIMMERS - TECHNICAL INFORMATION								
Item	Description	Blade			Cutting Depth	Air Consumption	Speed RPM	Weight lbs
		Arbor	Diameter	Thickness				
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 up to 1/4" thick composite.

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

## Sanders and Planers



4" Sander

Item : 40-DS45

This unique 4" 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 the dust extraction system. Cutter depth can be adjusted from 0 to 1/8". Cutter Item# 75-DS4 sold separately.



2 1/4" Planer

Item : 40-DP35

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 lbs
40-DS45	4" Disc Sander	4"	0 to 1/8"	4"	23 cfm @ 80psi	12,700	6 lbs
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

Item : 20-FT25

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.

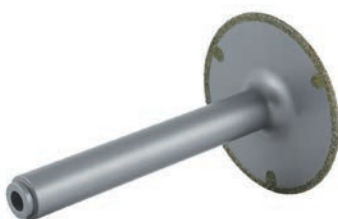


Flange Trimmer

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 Item# 53-338 (3" diameter) integral spindle saws and dust collection guard.

FLANGE TRIMMER - TECHNICAL INFORMATION						
Item	Description	Blade Diameter	Flange Width	Air Consumption	Speed RPM	Weight lbs
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			
Item	Description	Flange Width	
		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

Item : 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. Width of the cut determined by diameter of backfacing cutter. Cutter sold separately.

## 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. Width of cut is determined by length of 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

Item	Description	Cutting width		Air consumption	Speed RPM	Weight lbs
		Min	Max			
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

Item	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

Item	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.



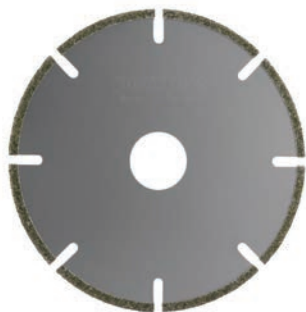
### Continuous Rim Blade

Continuous rim blades are the most widely used for general purpose cutting. Width of diamond coating is 1/8".



### Side Spoke Blade

Side spoke blades are recommended for thicker material or slightly curved cutting. Will prevent the blade from jamming in the cut. Width of diamond coating is 1/8".



### Gulletted/Slotted Blade

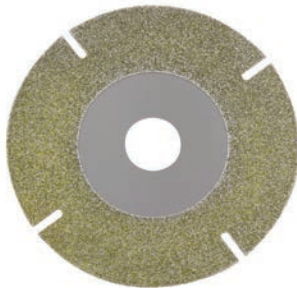
Gulletted blades are recommended for material thickness greater than 3/4". Width of diamond coating is 1/8".



### SuperSpeed I Blade

SuperSpeed I blades have been designed to include the benefits of side spoked blades and gulletted blades.

# Blades

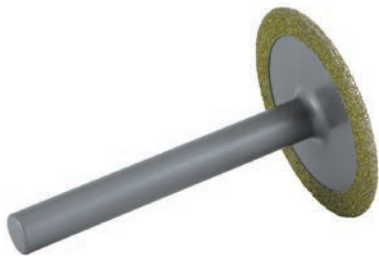


## SuperSpeed II Blade

SuperSpeed II blades have all the benefits of SuperSpeed I plus allow the operator to sand parts without changing tools.

BLADES - TECHNICAL INFORMATION							
Diameter	Thickness	Arbor size	Item				
			Continuous rim	Side spoked	Gulletted	SuperSpeed	
						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 diameter, thickness and arbor sizes available upon request							

# Blades

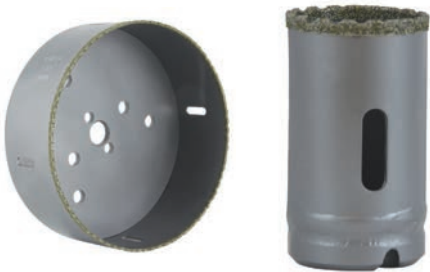


## Integral Spindle/Mounted Blade

The saws are used where it is necessary to cut close into a corner. The blade and spindle are made 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			
Item	Blade Diameter	Shank	
		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			

# Holesaws



## Holesaws

Our holesaws have a corrugated edge which provides extra cutting clearance for speed of drilling and also good core ejection. These holesaws are used with a standard 1/4" pilot drill (not included). An optional ejector spring is available. Standard holesaw sizes are listed in the following table. Special size holesaws are available upon request.



## Auto – Ejection Holesaw

Our auto ejection holesaw 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).

# Holesaws



## Arbors / Pilots

Holesaw arbors and spring. Refer to table for appropriate size.

HOLESAWS - TECHNICAL INFORMATION								
Item	Diameter		Item	Diameter		Item	Diameter	
	Inches	MM		Inches	MM		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	1 1/16"	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	1 3/16"	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 upon request								

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

## Special cutters



### Router Bits

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

ROUTER BITS - TECHNICAL INFORMATION				
Item	Diamond Coating		Overall Length	Shank Diameter
	Diameter	Length		
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		
Item	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		
Item	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	3"	As required	As required
Custom sizes available upon request			

### Backfacing Routers

Routers for 20-BF10 backfacer.



BACKFACING ROUTERS - TECHNICAL INFORMATION	
Item	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	

### 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			

### CUBIC BORON NITRIDE – CBN

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

### CNC PRECISION MACHINING SERVICES

We specialize in CNC precision machining services. Through our state of the art machines, experience and expertise we are capable of machining the most complex parts. While a significant portion of our efforts serve the highly demanding aerospace and defense industries, other areas we work in are transportation, telecom, lighting, marine, tooling, sports, automotive, computing and consumer products.

### PCD DRILL BITS

PCD Drill Bits are an excellent solution for drilling holes in a number of materials including FRP/composites (fiberglass, carbon fiber, Kevlar, etc), non-ferrous materials, light & heavy metals and synthetic glass. Particularly long tool life especially when compared to carbide and HSS drills.

# Warranty

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## Pneumatic Tools

All our pneumatic tools except for the 30-SE50 high-speed router are guaranteed for one year from date of purchase. Our 30-SE50 high-speed router is guaranteed for 90 days. If there is any flaw in workmanship or material detected during this time, we will promptly repair or replace the tool at no charge<sup>1</sup> as long as this defect is not the result of mishandling or abuse.

## Diamond Products

All diamond products are guaranteed against peeling. If peeling should occur, products will be replaced free of charge, with authorization number, when returned to Diatrim.<sup>1</sup>

*1. Shipping and any other fees associated to returns must be paid by the client.*

## PROCEDURE TO RETURN PRODUCTS

1) Contact our customer service department to get a return authorization number. No product will be accepted without this return authorization number. Returns must be pre-authorized.

2) Write the return authorization number on all documentation and also on the shipping package.

3) Ship the product to Diatrim:

Diatrim Tools Ltd.  
2830 de Miniac  
Montreal, Quebec, Canada  
H4S 1K9

## TERMS AND CONDITIONS

- Accepted payment method checks, Visa, wire transfers and PayPal.
- A credit check is required prior to opening a business account.
- All products delivered remain the property of Diatrim until fully paid.
- Fees of 1.5% per month (18% per year) will be charged on all past due accounts.
- No returns on customized special tools.
- Any claims regarding shipments or invoices must be made within 10 days of reception.
- Prices are subject to change without notice.
- Freight will be prepaid for backordered items.

### Procedures to order:

Fax: 514-336-1344

Email: [info@diatrim.com](mailto:info@diatrim.com)

Phone: 1-888-336-4893 or 514-336-7280





ORDER AND INFORMATION

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

TOLL FREE: 1-888-336-4893  
TEL.: (514) 336-7280  
FAX.: (514) 336-1344  
[info@diatrim.com](mailto:info@diatrim.com)

[www.diatrim.com](http://www.diatrim.com)

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