

# RAZORGAGE

AUTOMATIC OPTIMIZING SAW SYSTEMS

## RAZOROPTIMAL CYCLONE OPTIMIZING SAW

BETTER  
BY  
DESIGN



Our optimizing saw systems are built to provide durable, easy-to-operate cutting systems that are powerful, safe and can improve operating efficiencies while reducing waste

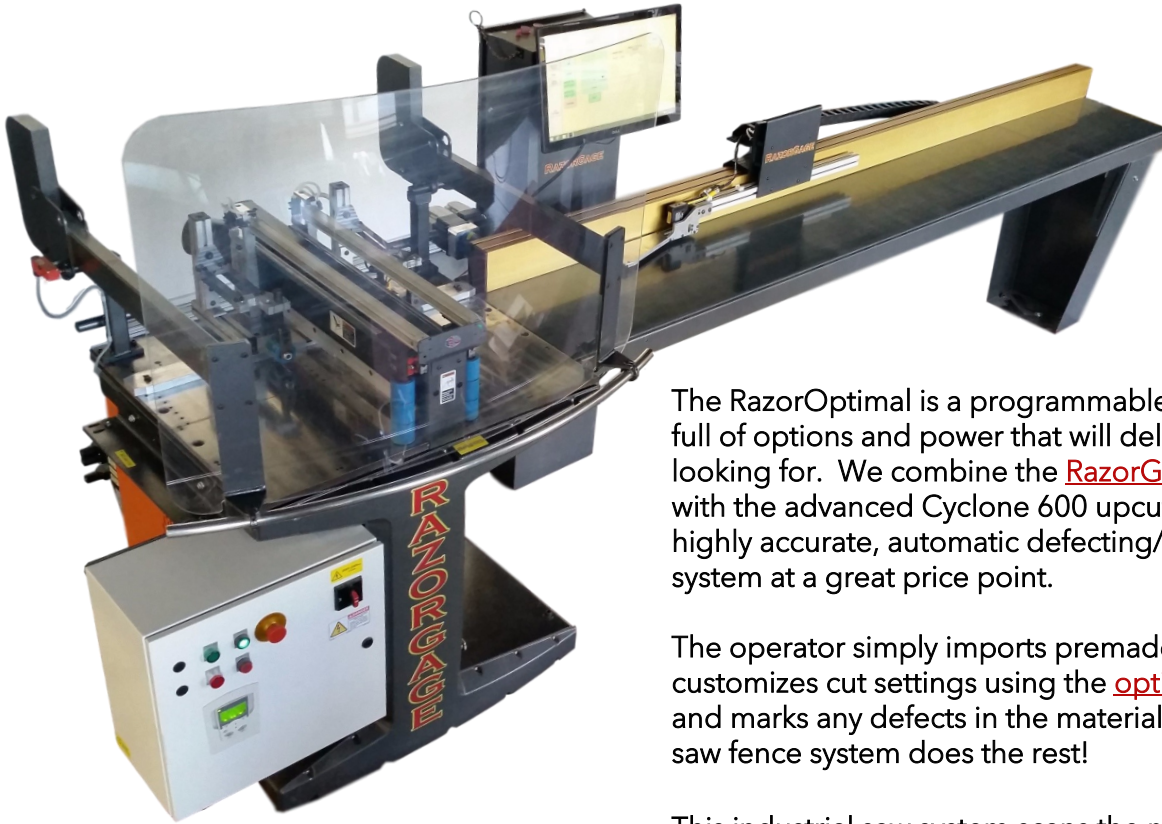


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# RazorOptimal Cyclone

*Automatic Optimizing Saw Systems*



The RazorOptimal is a programmable saw system that is full of options and power that will deliver what you are looking for. We combine the [RazorGage RG3](#) precision with the advanced Cyclone 600 upcut saw, to create a highly accurate, automatic defecting/optimizing saw system at a great price point.

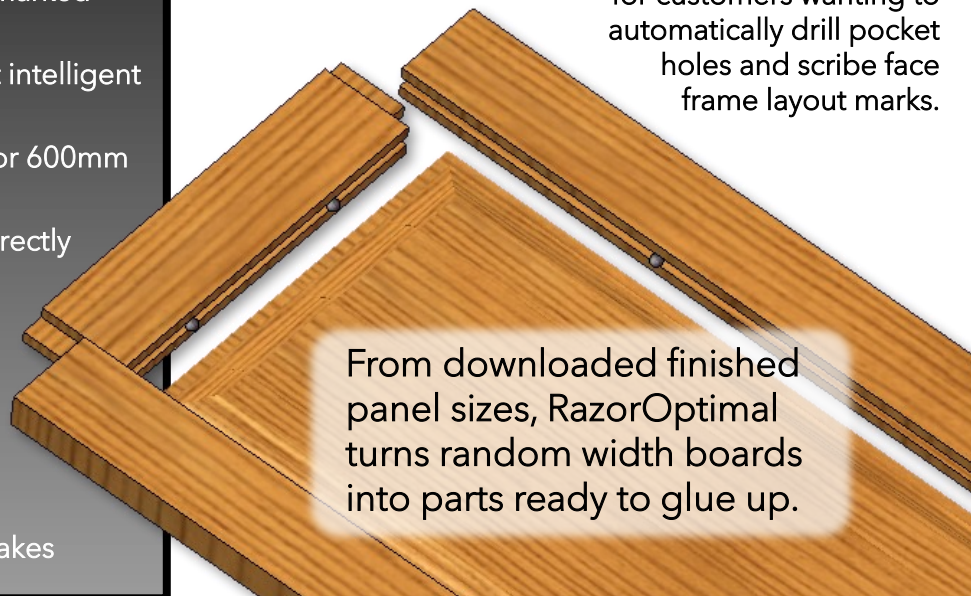
The operator simply imports premade cutlists or customizes cut settings using the [optimizing saw software](#) and marks any defects in the materials. The automated saw fence system does the rest!

This industrial saw system scans the material for defects, optimizes remaining parts to fit into the defect-free areas, automatically advances, cuts lineal stock and prints the part information directly on your material. The optimizing saw software is designed to maximize usable space on materials so that you don't end up with unnecessary waste.

The RazorOptimal Optimizing Saw System is unique in that it is available with either an up-cut saw or it can be outfitted with our 18-inch down-cut precision saw, for customers wanting to automatically drill pocket holes and scribe face frame layout marks.

## FEATURES

- ◆ Windows Tower PC operation on a large, color touch-screen monitor
- ◆ Easy to use software. Store 1000's of cutlists, optimize, sort cutlists into 1000's of groups according to multiple criteria, and much more
- ◆ Optimizes between crayon marked defects
- ◆ Automatic top, left and right intelligent clamping
- ◆ Fitted with either a 500mm or 600mm blade
- ◆ Paper label printing, print directly on material or do both
- ◆ Part length accuracy varies with application but +/- .005" is possible
- ◆ Optional RazArray sorting light grid can be added to further improve operational efficiencies and reduce mistakes



From downloaded finished panel sizes, RazorOptimal turns random width boards into parts ready to glue up.

# RazorOptimal Cyclone *Better Software*

Our industry-leading software is powered by Microsoft Windows, so networking and file sharing is simple and seamless. Transfer files between your RazorOptimal programmable saw and any other PC in your office, home, or shop.

The **RazorGage optimizing saw software** is based on a rapid development platform, and it is constantly evolving to meet the needs of our customers. The software is robust and can be customized to suit a variety of operations and projects. When you purchase a RazorOptimal programmable saw fence system, our onsite installer will provide hands-on training for both hardware and software. Tutorials and other reference documents are available on our website. Soon after installation, you'll be able to jump in and start using your new programmable saw to maximum effect.

## USER FRIENDLY INTERFACE

File: C:\Razor\Serial Number: 20220000  
3-4 Quartersawn Oak(All Parts) - Copy (7).r3d  
CLOSE THE FILE Start Trim: 1 End Trim: 1 Stock Length: 80 FIT PARTS RG3Mapper MOVE TO SCAN STATE SCAN GO SCAN WAIT  
Current Pos: 1.500

Group Parts Groups All Parts Printing  
QTY LEFT: 45 LENGTH LEFT: 1572.875

id	QTY	LENGTH	MATERIAL	MATERIAL ID	PART DESC	WIDTH	THICKNESS	ROOM NAME	ROOM#	CABINET NAME	CABINET#	SCRIBES	POCKET HOLES	PANEL W
6	1	18	3/4 Quartersawn Oak	0	BR	1.5	0.75	living room	1	Wall Single	5			0
7	1	18	3/4 Quartersawn Oak	0	CR	1.5	0.75	living room	1	Wall Single	5			0
8	1	60	3/4 Quartersawn Oak	0	LS	1.5	0.75	living room	1	Wall Single	5	4/46.5/1.5/6.5		0
9	1	60	3/4 Quartersawn Oak	0	RS	1.5	0.75	living room	1	Wall Single	5	1.5/6.5/1.5/46.5		0
21	1	18	3/4 Quartersawn Oak	0	BR	1.5	0.75	living room	1	Wall Single	3			0
22	1	18	3/4 Quartersawn Oak	0	CR	1.5	0.75	living room	1	Wall Single	3			0
23	1	60	3/4 Quartersawn Oak	0	LS	1.5	0.75	living room	1	Wall Single	3	4/46.5/1.5/6.5		0
24	1	60	3/4 Quartersawn Oak	0	RS	1.5	0.75	living room	1	Wall Single	3	1.5/6.5/1.5/46.5		0
42	1	31.25	3/4 Quartersawn Oak	0	LS	1.5	0.75	living room	1	Base Open	1	1.5/5/1.5/10.125/1.5/10.125		0
44	1	31.25	3/4 Quartersawn Oak	0	RS	1.5	0.75	living room	1	Base Open	1	1.5/10.125/1.5/10.125/1.5/5		0
45	1	33	3/4 Quartersawn Oak	0	BR	1.5	0.75	living room	1	Base Open	1			0
46	1	33	3/4 Quartersawn Oak	0	CR	1.5	0.75	living room	1	Base Open	1			0
47	1	33	3/4 Quartersawn Oak	0	CR	1.5	0.75	living room	1	Base Open	1			0
48	1	33	3/4 Quartersawn Oak	0	TR	1.5	0.75	living room	1	Base Open	1			0
60	1	31.25	3/4 Quartersawn Oak	0	LS	1.5	0.75	living room	1	Base Open	2	1.5/5/1.5/10.125/1.5/10.125		0
61	1	31.25	3/4 Quartersawn Oak	0	RS	1.5	0.75	living room	1	Base Open	2	1.5/10.125/1.5/10.125/1.5/5		0
62	1	33	3/4 Quartersawn Oak	0	BR	1.5	0.75	living room	1	Base Open	2			0
63	1	33	3/4 Quartersawn Oak	0	CR	1.5	0.75	living room	1	Base Open	2			0
64	1	33	3/4 Quartersawn Oak	0	CR	1.5	0.75	living room	1	Base Open	2			0
65	1	33	3/4 Quartersawn Oak	0	TR	1.5	0.75	living room	1	Base Open	2			0
82	1	18.5	3/4 Quartersawn Oak	0	CS	1.5	0.75	living room	1	Wall Pair	4			0
83	1	34	3/4 Quartersawn Oak	0	CS	1.5	0.75	living room	1	Wall Pair	4	4/18.5		0

Simple touch screen menus allow for easy access to all the features of your system

## MAIN SCREEN

RG3 v1.9.6.0 Serial Number: 20220000  
3-4 Quartersawn Oak(All Parts) - Copy (7).r3d  
CLOSE THE FILE Start Trim: 1 End Trim: 1 Stock Length: 80 FIT PARTS RG3Mapper  
Filtered Parts All Parts Update Qty  
Group Parts Groups All Parts Printing  
QTY LEFT: 45 LENGTH LEFT: 1572.875

id	QTY	LENGTH	MATERIAL	MATERIAL ID	PART DESC	WIDTH	THICKNESS	R
6	1	18	3/4 Quartersawn Oak	0	BR	1.5	0.75	liv
7	1	18	3/4 Quartersawn Oak	0	CR	1.5	0.75	liv
8	1	60	3/4 Quartersawn Oak	0	LS	1.5	0.75	liv
9	1	60	3/4 Quartersawn Oak	0	RS	1.5	0.75	liv
21	1	18	3/4 Quartersawn Oak	0	BR	1.5	0.75	liv

## GROUPING SCREEN

Group Parts Groups All Parts Printing  
MATERIAL WIDTH QTYLEFT LENGTHLEFT  
3/4 Quartersawn Oak 1.5 45 1572.875  
3/4 Quartersawn Oak 2.25 84 1749.25  
3/4 Quartersawn Oak 3 2 70.5  
3/4 Quartersawn Oak 3.25 1 10.75  
3/4 Quartersawn Oak 4 5 135  
3/4 Quartersawn Oak 4.5 1 26.5  
3/4 Quartersawn Oak 5.25 2 29  
3/4 Quartersawn Oak 5.5 2 47.375  
3/4 Quartersawn Oak 6 4 113.5  
3/4 Quartersawn Oak 7.125 2 54.375  
3/4 Quartersawn Oak 7.25 1 18.25  
3/4 Quartersawn Oak 7.5 2 38  
3/4 Quartersawn Oak 9.8125 6 152.625  
3/4 Quartersawn Oak 10.375 2 32.375

Select Options  
MATERIAL ID QTY PART DESC LENGTH THICKNESS ROOM NAME ROOM# CABINET NAME SCRIBES  
> Group By Move Up  
< MATERIAL WIDTH Move Down  
Save Cancel

## LABEL CREATION SCREEN

Group Parts Groups All Parts Printing  
SAVE Print Test Ink Jet Printer Ink Jet Printer  
Printing Enabled Paper Label Ink Jet Font Size 12  
FIELD 1 FIELD 2 FIELD 3  
LINE 1 45 PART DESC WIDTH IN LENGTH  
LINE 2 ROOM NAME CABINET NAME CABINET#  
LINE 3 EMPTY EMPTY EMPTY  
LINE 4 EMPTY EMPTY EMPTY



# RazorOptimal Cyclone

## Options / Specifications

### RazorOptimal Cyclone Specifications

Power Requirements	Positioner - 120 VAC, 10Amp Saw (7.5hp) - 208-230VAC, 3-phase, 30 Amp -or- 460VAC, 3-phase, 20Amp
Dust Collection	Two 4" diameter (102mm) requiring 600 cfm (17m <sup>3</sup> ) minimum for dry light materials. Other material may need higher velocity/pressure.
Compressed Air	Requires 80 psi (5.5 bar) at 5 cfm (0.14m <sup>3</sup> ) air filtered to 2.5 microns (oil and moisture free). Use industrial air dryer, rated for cfm (CM) flow. No lubrication required for air components. Air must be lubricant free.
Motor RPM	Variable from 2200 to 3450
20" Blade for Wood	120T x 1" Bore
24" Blade for Wood	144T x 1" Bore
Push Force	200 lbs at 40 inches per second
Maximum Push Speed	50 inches per second
Stock length Capacity	Up to 16 feet

### Cyclone 600 Width Capacity for Common Blades

Material Thickness	14" Blade	16" Blade	18" Blade	500mm Blade	22" Blade	24" Blade
0.5	6.97	10.38	13.23	15.42	18.27	20.62
0.75	6.04	9.77	12.76	15.02	17.93	20.32
1	4.89	9.10	12.25	14.59	17.57	20.00
1.25	3.32	8.35	11.70	14.13	17.19	19.67
1.5		7.49	11.10	13.64	16.79	19.32

### OUTFEED TABLE



- Height adjusts from 34.5" to 44.5"
- 1/4" Solid PVC Sheet
- Durable powder coat

### RAZARRAY SORTING ASSIST



Helps you organize parts as they come off the RazorOptimal.

### INK JET PRINTER



Print directly on parts to keep them organized.



### Space Requirements for Standard RazorOptimal Cyclone

