



### **Heavy-Duty Air Strain**

# 54" VERTICAL BAND RESAW

Your Profit Edge Since 1888

- Center Sawing
- Gauge Sawing
- Rip Sawing
- Bevel Sawing
- For Planing Mills, Sawmills, Box Plants, Pallet Plants, Woodworking Shops, Retail Lumber Yards & Concentration Yards

MACHINES BY MCDONOUGH SINCE 1888
MADE IN EAU CLAIRE, WIS. U.S.A.

AMERICAN AMERICAN AMERICAN
WORKERS MATERIALS OWNERSHIP

# THE OUTSTANDING VERTICAL E ... a new standard of exc



Single Cylinder Super Duty Type Air Strain



Cartridge-Type Pressure Guides



Feedworks & Drive Mechanisms

McDONOUGH's Exclusive Super Duty Type Air Strain System is the heart of our 54" Heavy Duty Resaw. Its unique design provides the capability of adjusting to any saw strain from low to normal to high by simply turning a dial. The modular design utilizes all non-ferrous components which virtually eliminates maintenance. We have also added a coalescent filter which protects the precision regulator from the moisture common in most air supply systems.

The beauty of the air strain system is its simplicity. A single air cylinder applies saw strain equally and instantaneously to both sides of the stationary eccentric Top Wheel Shaft. The advantage of this type of strain system is that saws hold tension longer. This is very cost effective because this system is easy on saws. Many users report years of operation without a single crack. Saw snaking tendency is virtually eliminated because saw strain automatically increases as the load on the saw increases. This reduces the skidding that usually occurs so wheel grinding is not required as often. This system is also safe. Even if the air system fails completely, a safety spring supplies enough tension to keep the saw on the wheels. It's a fast, responsive, sensitive, friction-free strain without weights, struts, rocker shafts, linkages or any weak points. Strain system maintenance is virtually eliminated.

McDONOUGH Cartridge-Type Pressure Guides stabilize the saw blade, permitting any required feed speed with the ultimate in sawing accuracy. A 30° angle on the top of each guide block directs slivers and debris away from the saw blade.

Four 51/2"-diameter driven feed rolls are standard (7"-diameter feed rolls available at extra cost). All feed rolls run in ball bearings and are independently adjustable for aligning with the saw. Total feed roll opening is 18", 12" outside and 6" inside sawline. Rolls outside sawline lock for gauge sawing, rolls inside sawline yield. Rolls can be set for center or gauge sawing, and will tilt up to 15°. Maximum depth of cut is 20". (See Technical Specs.)

Every McDONOUGH Heavy-Duty Air Strain Resaw is equipped with a device for cleaning and lubricating the saw blade. Consisting of a solvent tank with a felt wick that contacts the entire side width of the saw, it not only dissolves the pitch, but lubricates the guides and wheel faces. This system adds stability to the saw blade on the return side and reduces the probability of saw cracking due to flutter. Adjustable copper sawdust shears and bronze wheel scrapers keep wheel faces clean.

Balance pockets cast into the inside of the top and lower wheel rims make it possible to achieve perfect static and dynamic balance. Bolted-on balance weights are NEVER used.

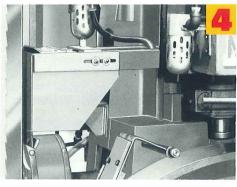
Spherical roller bearings with an extremely high load rating are mounted in the hub of the top wheel on a non-rotating alloy shaft.

The Air-Operated Roll Set Mechanism is ideal for any resawing operation. Each pair of feed rolls yields 4" for a total of 8" when center sawing. For example, a roll opening for 2" stock will allow any random thickness up to 10" to be split without changing the feed roll setting.

This system allows an 8" thick cant to be reduced to 1" boards without any machine adjustments and permits any thickness of stock to follow any other thickness of stock with a total variation of 8". When the rolls are set for gauge sawing, the flexible rolls will yield 4".

Feed roll opening is controlled by a foot-operated air valve which can be placed in any convenient location.

Top guide is adjustable to depth of cut. A special McDONOUGH guide block dressing machine is supplied to dress the face of the guide blocks. When the guide blocks are re-installed in the band unit, the original sawline is automatically re-established. Guide block adjustments on the band unit itself are completely eliminated.



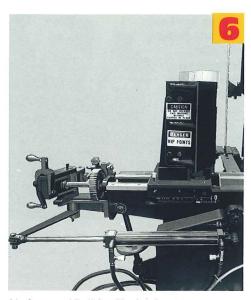
Saw Blade Cleaning & Lubricating System



Exclusive Wheel Design, Wheel Shafts & Bearings

# AND RESAW ellence

## 54" McDONOUGH Vertical Band Resaw Capabilities and Cutting Options\*

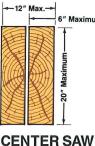


Air-Operated Roll Set Mechanism



**McDONOUGH Guide Block Dressing Machine** 

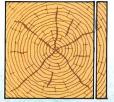
Depth of cut: 20"	Tilt Capability: 15° Vertical	
Max. Center Saw: Split 12" Stock	Outside Feedrolls: 0" Minimum 12" Maximum	
Max. Gauge Saw: 12" from 18" Stock	Inside Feedrolls: 0" Minimum 6" Maximum	



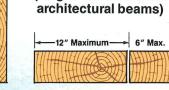
V BEVELS

BEVEL SAW 15° TILT MAX.

**GAUGE SAW** 

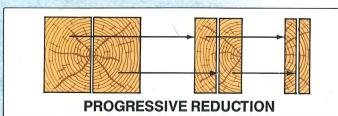


**TIMBER SIZER** 



**RIP SAW** 

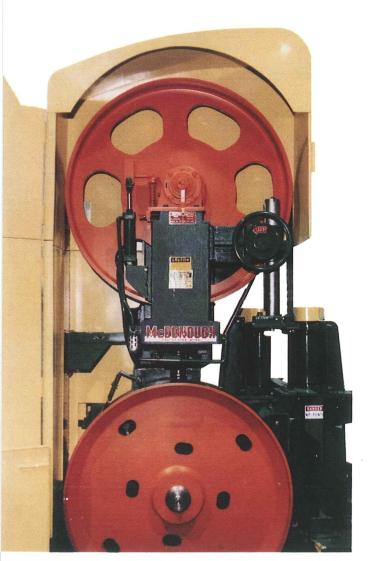
(Bright sawn faces on





# McDONOUGH...

## **Built to Last...Backed by the Best!**



View from outfeed side with guard open. Shows standard 3 HP Variable Speed, 8:1 Ratio Compound Variable Pitch Sheave Feed Roll Drive.

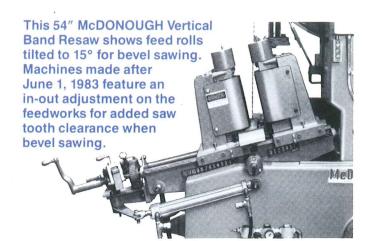
#### McDONOUGH...Built To Last.

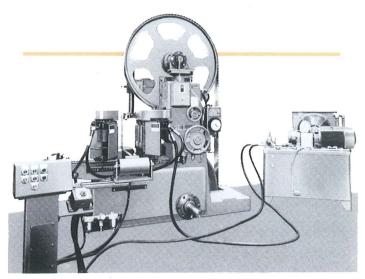
McDONOUGH Heavy-Duty Air Strain 54" Vertical Band Resaws are ruggedly designed and continually improved to provide heavy-duty, trouble-free service.

Wearing parts, such as bearings, gears, shafts, etc., are continually being improved as new developments are introduced.

All this makes it possible to produce a compact machine with large capability that will operate efficiently, accurately and dependably. A great value, year after year.

McDONOUGH knows that parts and service are as important as QUALITY. Without delivering all three consistently, we could not have maintained our position as leaders since 1888.





This 54" McDONOUGH vertical band resaw is equipped with a six roll feedworks having a hydraulic feedworks drive, special infeed and outfeed stock support rolls and operator control console.

### **McDONOUGH...**

### **Backed By The Best.**

McDONOUGH is a strong, well-established company (incorporated in 1888) with an excellent machine shop staffed with highly-skilled, experienced machinists and craftsmen.

A big advantage to equipment designed by McDONOUGH is the unexcelled service McDONOUGH provides to its customers.

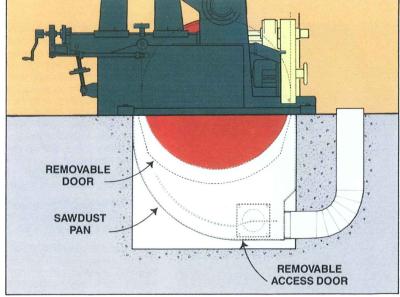
The 54" McDONOUGH Heavy-Duty Air Strain Vertical Band Resaw can be modified to fit most special requirements. For instance, the selection of feed roll drives shown demonstrates how the best drive for any circumstance can be supplied.

Our experienced McDONOUGH engineers will be happy to help you solve any special resawing problems you may have.



## Optional Equipment 54" Vertical Band Resaw

A Sawdust Pan Kit is available at extra cost for installations using a dust collector system. The kit includes all equipment to collect and direct sawdust into a 10" branch pipe with a connection at the floor line. This accessory item provides an exceptionally clean Resaw installation with a minimum of airborne sawdust.



Other supporting and auxiliary equipment includes:

- 3 HP SCR Feedworks Drive
- Hydraulic Feedworks Drive
- Motorized Top Wheel Lift
- Motorized Top Guide Lift
- 1" wider wheels for 8" wide Band Saws
- Steel Wheel Guard
- Infeed and Outfeed Tables
- Servo Setworks for random set changes
- Sawdust Pan Kit

# Technical Specifications: 54" Heavy-Duty Air Strain Vertical Band Resaw

Wheels:	61/4" face for 7" wide saws, standard, left hand	Feedworks Drives:	(All with start, stop and jog reverse) Standard: 3 HP infinitely Variable Speed with 8:1	
	71/4" face for 8" wide saws, optional, left hand		Ratio	
Saw Length:	26'0" ordering length 21 gauge (.032) 20 gauge (.035) 19 gauge (.042) minimum recommended 18 gauge (.049) practical average 17 gauge (.058) maximum recommended		Compound Variable Pitch Sheaves, hand wheel speed controls, 36 FPM to 288 FPM with 5½"-diameter feed rolls. 47 FPM to 350 FPM Standard: Hydraulic Drive—50-300 FPM Optional: 3 HP SCR D.C. Drive—25-250 FPM with 5½" Rolls	
Kerf Loss:	Plate thickness (.032, .035, .042, .049 or .058), plus	Depth of Cut:	20" maximum	
	.007 for each inch of saw width. Can vary with species.	Center Sawing	Split 12" cant in center (6" each side of sawline) with 5½"-diameter feed rolls. Split 10" cant in	
Saw Speed:	Approximately 6,400 FPM to 10,000 FPM, depending upon species, desired feed speeds,	Capability:	center (5" each side of sawline) with 7"-diameter feed rolls.	
	production and other variables.	Gauge	Remove 12" piece from 18" cant with	
Wheel RPM:	Saw speed in FPM divided by 14.135	Sawing	5½"-diameter feed rolls, 12" opening from saw on gauge rolls, 6" opening from saw on yielding rolls.	
	(circumference of 54" wheel).	Capability:	7"-diameter feed rolls reduce roll openings to 12"	
Horsepower	50 HP light duty		gauge and 5" yielding.	
Required:	60 HP normal duty	Bevel Tilt		
	75 HP steady heavy-duty	Capability:	15° from vertical, std., 45° tilt optional.	
	WR2—5,795 total both wheels for 7", 6,320 for 8"	Space	7/4//	
Feed Rate:	Variable Speed Feedworks provided. Optimum	Required:	7'1" long x 10'6" wide x 9'6" high	
	feed rate contingent on saw speed in FPM,	Weight:	10,000 pounds (approximately)	
	species, depth of cut and input horsepower.	Air Required:	2 cubic feet per minute at 80 PSI	

McDONOUGH Manufacturing Company, because it desires to incorporate improvements in its products whenever possible, reserves the right to change specifications or designs at any time without notice and without incurring obligation.

McDONOUGH Makes More Types and Sizes of Standard or Special Band Sawing Machines Than Anybody.

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