



# MEREEN-JOHNSON MACHINE CO.

# MODEL 400

Fixed Arbor Chain Feed MULTIPLE RIP SAWS



Models: 412-DC, 419-DC, 424-DC, 431-DC



# MODEL 400 SERIES

## Infinite Saw Spacing with Guaranteed Glue Joint Accuracy and Higher Yield

MEREEN-JOHNSON **Multiple Rip Saws** offer straight line ripping with high production, high yields, and high precision. Over 1,000 in use around the world meeting a wide range of applications:

- **Guaranteed Glue-Joint Multiple Ripping for Panel Production**  
Straight, Smooth, and Square Joints  
Field Proven Glue Joints using High Frequency or Clamp Carrier Systems
- **Straight Line Multiple Ripping for Dimension Parts**  
Minimum Moulder Stock Removal in Solid Wood, MDF or Particle Board  
Width Accuracy Guarantee  $\pm .005"$
- **Panel Re-Ripping Production with NEW 31" Arbor Width Capacity**  
Short Stock Capability  
Auto Infeed Systems Available
- **More Models — More Choices**
  - DC Series:** Our Dip Chain Series is the "Standard of the Industry"; Available in 12", 19", 24" and **Now 31"** Width Capacity
  - DCS Series:** Multiple Ripping Short Stock  
The Same Precision and Capacity of the DC Series
  - Select-A-Rip Series:** Squeeze More Yield Out of Any Material  
One to Six Movable Saws with Rip Optimization  
Feed Speeds to 225 FPM      Arbor Drive to 125 HP

### CAPACITIES

Feed rates infinitely variable to 225 FPM. Saw arbors are 2-3/16" diameter integral and direct driven by Mereen-Johnson built motors to 75 HP, belt driven to 125 HP.

### LABOR SAVINGS

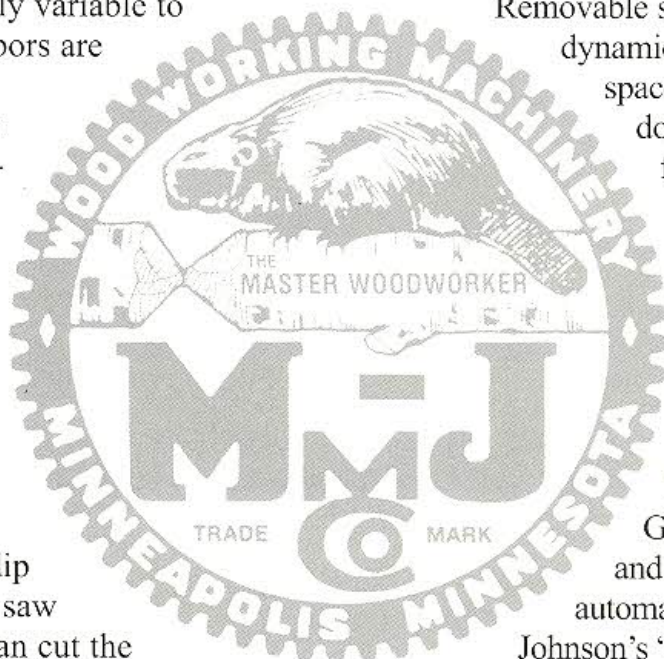
Economical operation; one Mereen-Johnson dip chain multiple rip saw with two people can cut the same board footage as 4 or 5 single blade rip saws requiring 8-10 people; saving labor hours and space requirements.

### CHANGE OVER

Removable saw sleeve with dynamically balanced saw spacers assures minimum downtime (less than five minutes), optional saw sleeve transport dolly and set-up bench facilitates set-ups.

### TOLERANCES

Glue joint accuracy and straight cuts are automatic. Mereen-Johnson's "Posi-Feed" dip bed provides optimum accuracy and no slippage using the same dependable straight feeding exclusive "Double Vee" chain as used on Mereen-Johnson Tenoners.





# Standard of the Industry Offers More Choices

The Model 431-DC features a 31" capacity arbor providing multiple choices of gang rip pocket solutions to produce yields approaching Movable Saw machines with straight gang dependability, glue joint quality of cut, low maintenance and lower cost.

The Model 431-DC features a heavy cast iron arbor column and bearing housing, 5 HP variable speed feed drive, 5" diameter air loaded press rolls, powered vertical adjustment of the arbor, powered vertical thickness adjustment of the press rolls, disc type arbor brake and Mereen-Johnson's excellent service and parts inventory.

Accuracy has been the hallmark of all Mereen-Johnson machines from Double End Tenoners to Panel Sizers, and the Model 431-DC is no exception.

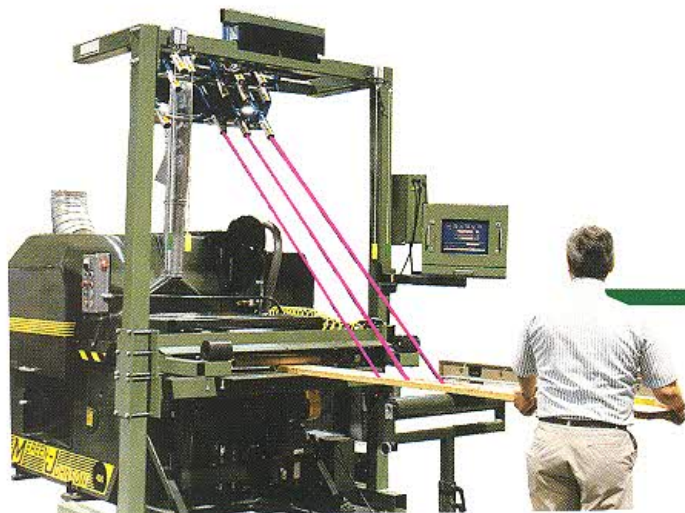
Proven quality, productivity, ripping accuracy . . . and all backed by American services/parts support.



As an alternative for panel processing or for attaining very high yields in your rough mill, the Model 431-DC may just be the best machine for the job!

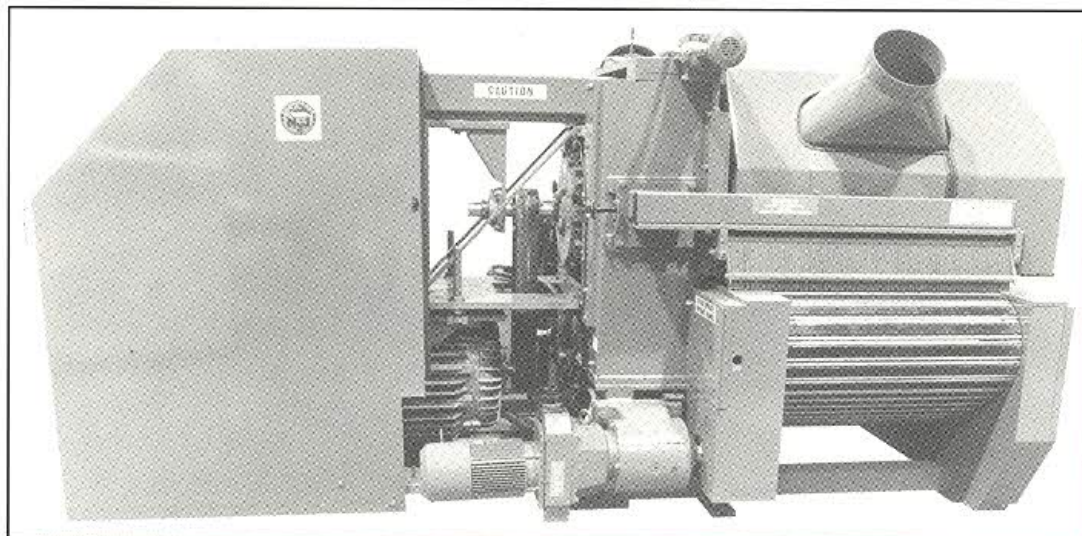
## RIP OPTIMIZING

Computerized Rip Optimizing Systems and Semi-Automatic Infeed Conveyors offer a universal and economical solution to maximizing lumber value recovery from a Mereen-Johnson Fixed Arbor Gang Rip Saw.





# Arb



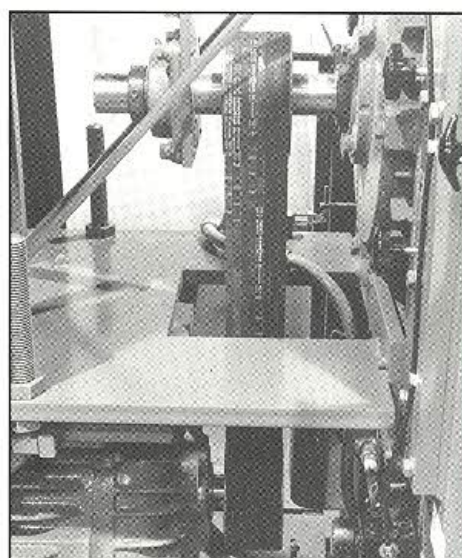
## World Class Performance



Close-up of a full-width bevel arbor disc.

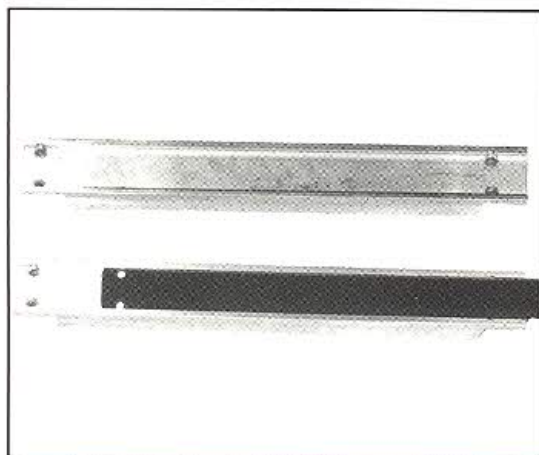


Close-up of ripped board leaving machine. First in the industry to provide outfeed anti-kickback fingers to prevent the edge trim strips from falling as they exit machine.

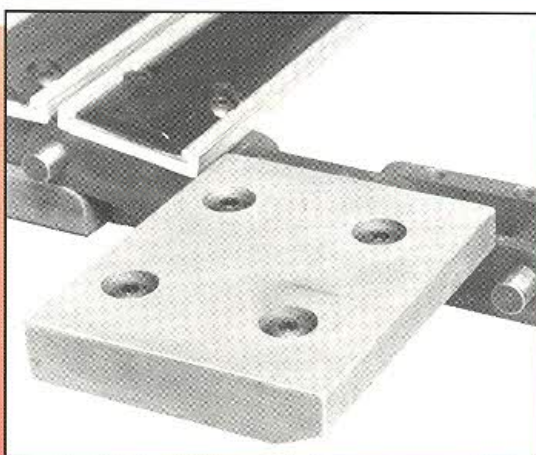


Detail of 100 HP arbor belt driven from below. Allows flexibility in horse power and RPM.

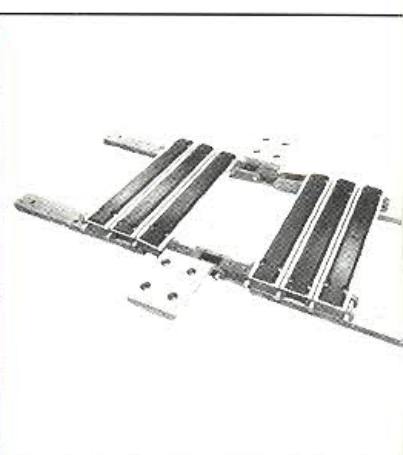
## Posi-Feed



Posi-Feed heavy structural aluminum feed slat with easily replaceable steel-backed long wearing rubber insert.



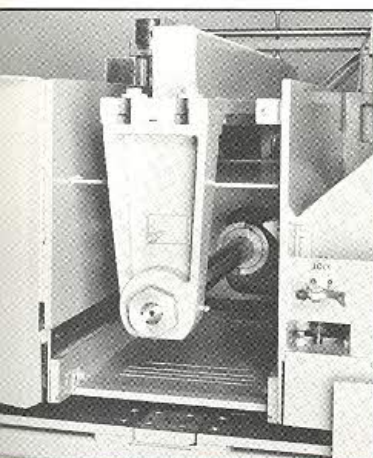
Close-up of precision 5" pitch Double-Vee feed chain with hardened extended pins and hardened "Quad Life" dip cam.



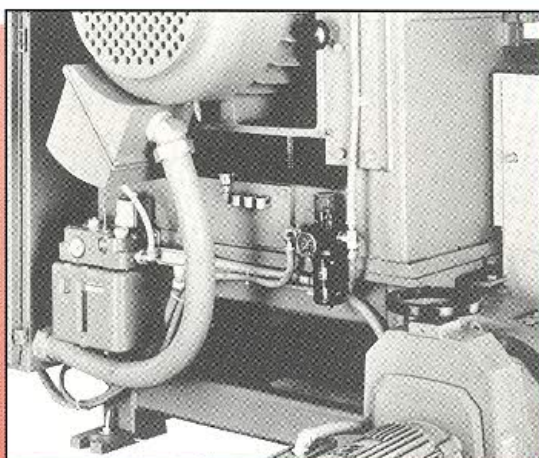
Detail view of Mereen-Johnson famous precision feed chain. Provides positive feeding; smooth, square cutting eliminates motion and rocking. Features heat-treated tracks, pins, sprockets and cams.



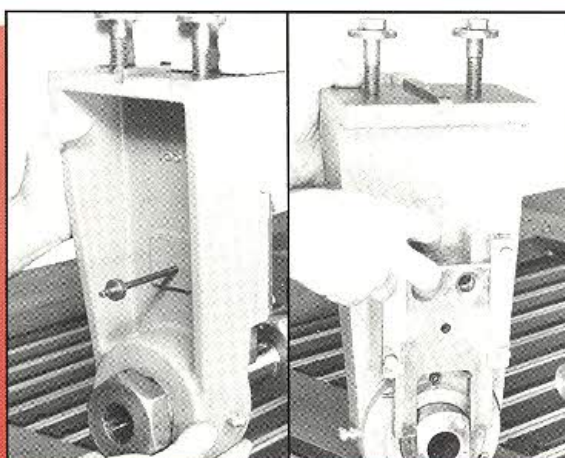
or



board bearing unit, spring-loaded plate arrangement, air activated and safety interlock on access door.



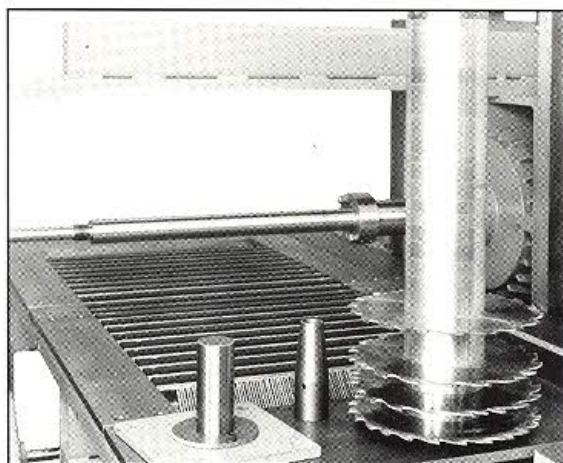
Rear view illustrating the Mereen-Johnson saw arbor motor between heavy cast iron vertical motor columns. Oil mist unit illustrated provides continuous lubrication to feed chains. Saw arbor is integral with motor eliminating costly belt replacement and tensioning problems.



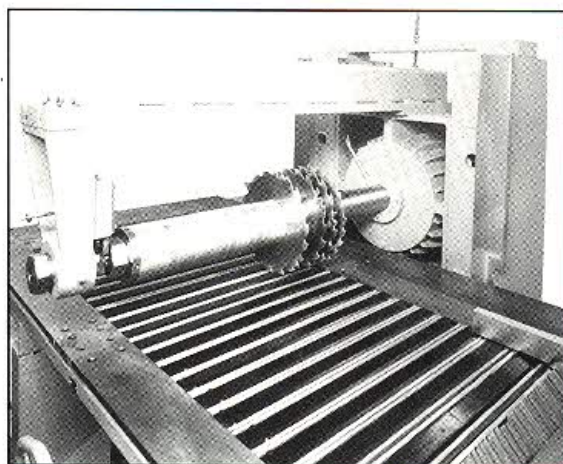
Detail of easily removable saw arbor outboard bearing unit with hardened hex sleeve clamp nut and sliding lock used to secure sleeve while tightening and loosening the nut.



Detail (left to right) illustrating sleeve stabilizer, arbor sleeve pilot and saw sleeve with spacers and tooling mounted.



Detail of DC Rip Saw illustrating arbor beam, sleeve mounted blades, removable outboard bearing with sleeve lock, lower anti-kickback fingers and traveling Posi-Feed bed with replaceable friction slat inserts.



## Change Over



Transport cart with adjustable shaft for aid in removal of saw sleeve from machine and transporting sleeve to set-up area.



# A Mereen-Johnson Rough Mill System Increases Yield, Production, Accuracy And Reduces Change-Overs



## VISION SCANNING

Complete Rough Mill Rip Optimizing Systems available using High Speed Vision Scanning Technology. Maximum board utilization can be realized by optimizing the board by width and length to your defined cutting requirements.

## SPECIFICATIONS

### MODELS:

412-DC, 419-DC, 424-DC, 431-DC Series  
412-DCS, 419-DCS, 424-DCS (Short Stock Series)

### APPLICATION:

Multiple straight line and glue joint ripping

### CAPACITY:

Arbor space of 12", 19", 24", and 31" as signified by model number. Thickness of 1/4" to 3-1/2". Right hand throat clearance 6" beyond capacity. DC Series minimum length: 22" for bust up; 29" for guaranteed glue joint rips; nominal 48" with rip optimizing system. DCS Series minimum length: 14" for bust up; 22" for glue joint accuracy.

### PRODUCTION:

Feed rates infinitely variable in a 5:1 range to 150 FPM with 3 HP feed motor standard. Variety of optional HP and feed rates available to 225 FPM.

### ARBOR:

2-3/16" diameter arbor complete with slip-off outboard bearing, arranged for 10" to 14" dia. blades. Horsepower range to 150 HP. Saw sleeves arranged for 3-1/8" bore tooling. Metric arbor diameters available.

### FEED:

Traveling Posi-Feed friction bed carried on precision Double-Vee heat-treated chains and track. Feed bed dips under arbor to allow infinite saw spacing. Oil mist lubrication of chain and track with low level/pressure shut-off switch in oil reservoir.

### GUIDE:

Slide type quick-adjusting guide optional. Powered guides optional.

### HOLDDOWNS/BED PLATE:

Powered vertical adjust of press rolls and bed plate. Four adjustable air tensioned overhead idle pressure rolls on DC Series, six air-loaded on DCS Series. Spring loaded full width bed plate.

### SOUND ENCLOSURE:

Machine mounted sound enclosure.

### FEATURES:

Standard equipment includes upper dust hoods, (3,820 CFM req'd) lower dust chute, infeed double top and single bottom anti-kickbacks, outfeed top anti-kickbacks, overhead bed plate, arbor lock-out on dust hood cover, one complete set of assorted saw spacers and set-up tools.

### OPTIONAL:

Additional removable saw sleeves; saw blades and spacers to order; setup table; saw sleeve transport dolly.

### DIMENSIONS:

7' L X 7' W x 5-1/2' H.

### SHIP WEIGHT:

Approx. 9,500 lbs.

HELPING TO SHAPE TODAY'S ADVANCED MACHINING REQUIREMENTS THROUGH ENGINEERING AND TECHNOLOGY



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