# **Compu-Rip Optimizer**

The new 'defecting' Compu-Rip makes easy work of feeding a gang-rip saw for maximum value and gross or yield recovery. The width of the board is automatically measured upon entering the system. The Compu-Rip then determines the 'best' place to feed the board through the saw, given the arbor set up. Laser lights are <u>instantly</u> moved by AC servo drivers to show exactly where the saw cuts will fall on the board. (Systems come standard with two lasers; however, systems with up to seven lasers are available). Because the lasers show exactly where the cuts will be made, the operator can shift the answer or flip the board to avoid knots or wane.



The Compu-Rip is available with a full range of compliments such as a board ejector for removing low-yielding crooked boards, a moisture detector, and the "Go-Fast" option that makes the Compu-Rip the fastest rip system available; capable of processing 25 - 8' boards per minute. Also available is a linear scanning system that will scan both sides of the incoming lumber for dimensions, defects and wane.

## **Standard Features:**

- **Linear Footage Counter:** Scans the length of each board as it passes through the gang-rip saw and uses this information to develop precise tallies of the net footage output by width class. This measurement is also used when calculating lumber yield percentages.
- **Gross Width Measuring Device:** The width of each board is determined when the board automatically passes through electronic sensors. This feature develops lumber tallies.
- **Internal System Modem:** With high-speed data transmission of minimum 28,800 bps, the modem allows Barr-Mullin service engineers to troubleshoot the Turbo Wonder Saw from virtually anywhere in the world. Over 90% of our service calls are handled this way. This results in less costly service for your system, and greatly reduces down time.
- **Cabinet Mounted Phone:** If a problem with the Compu-Rip does arise, the machine operator can communicate with a BMI service engineer, without leaving the machine. Operator observations and technical help are communicated immediately as opposed to an hours long process of phone calls.
- **Power Line Conditioner:** Each system is provided with a power line conditioner/UPS which corrects under and over voltage conditions and provides battery power to allow the computer to shut down properly without losing operating data. This provides noise free power to the computer, which reduces false signaling and provides trouble free operation even in the event of plant power failure.
- **Pentium PC:** The control, optimization and network interfacing functions are done via a minimum 1 GHz Pentium III computer with minimum 128MB Ram, 20GB hard drive with full size enhanced keyboard. The system comes with a 14-inch color flat screen LCD monitor. The computer's operating system is Windows NT<sup>®</sup> which is easily networked to BMI's Command Center to provide the manufacturer with complete control of their lumber processing.

# **Compu-Rip Options**

- **Defect Scanner:** Board profile, wane, and other defect information can be obtained by implementing one of BMI's scanning options in front of the Compu-Rip. With this information, the rip decisions calculated by the Compu-Rip are much more accurate. An added benefit is "hands-free" operation were the Compu-Rip feeds the boards directly to the rip saw without operator's input.
- **Go-Fast Option:** Increases production potential by 10% 15% over the standard Compu-Rip. The unique design of the "flip fence" allows the guide fence to position itself for the next board, even if the fence is scheduled to move in the direction of the board already in the saw. With this option, the Compu-Rip is capable of processing up to twenty-five 8ft boards per minute depending on the feed speed of the saw.
- **Multiple Lasers:** The basic Compu-Rip comes equipped with two laser guide lights which display where the outermost cuts will be made on the board. However, if defecting at the gang rip is desirable, up to 5 additional lasers can be added to allow the operator to see every cut that will be made. With this "instant" feedback, the operator can select a different, more desirable cut option.
- **Moisture Detector:** Individual boards with high moisture content can be detected and removed from the system before being processed. BMI uses the Wagner 683iCE moisture detection unit with three sensors to detect those boards with high moisture.
- **Board Ejector:** An excellent companion to the moisture detector, the board ejector can remove high moisture boards or low-yielding boards from the system with a touch of a button. With additional materials handling equipment, these boards can be routed to a cut off first line, stacking unit, or just to another location in the plant.
- **Crook Buster (Patent Pending):** A must have for applications were maximizing yield of short cuttings or of random length is a priority. The Crook Buster system will greatly increase yield through the gang rip by chopping the board at the point of maximum crook, allowing the gang rip to process two "straight" boards instead of one very crooked board.

### **Compu-Rip Software Features**

- Automatic Operation
- Unlimited Arbor Storage Capacity
- Unlimited Arbor Width Capacity
- Scanner Ready
- Straight Line Capability
- Mirror Answer Display
- "Double Deal" Detection
- Command Center Compatible
- Production Run Continuation

- On-line Help Screens
- Graphic Troubleshooting Screen
- Simulation of Actual Board Data
- Simulation of Random Clear Widths
- Metric or English Tallies
- Printable Production Reports
- Printable Lumber Reports
- Board Footage, Square Footage, or Lineal Footage Tallies

#### **Compu-Rip Capacity and Specifications:**

Available Models: Material Thickness: Material Width: Maximum Input: Minimum Input: Capacity:

Feed Height: Floor Space: Feed works:

Roller and Chain Drives: Fence Drive: Laser Drive: Air Supply Power Supply:

SYS3-31-L (left), SYS3-31-R (right) Up to 3" (standard) Can be made to suite 31" (standard) Can be made to suite No Limit 4' (standard) Can be made to suite Up to 25- 8' boards per minute with "Go-Fast" option (dependent on saw speed) 34-1/2" (standard) Can be made to suite Approximately 21' x15' (315 square feet) Canted Steel Roll Case and 6 strand, 2080 chains **Bauer Gear Motors** High Efficiency AC Servo High Efficiency AC Servo 100psi @ 8 CFM 480 volt – 3 phase – 40 Amps – 60 Hertz



System depicted is "right-hand" SYS 3-31R