Cameron
AUTOMATION

**The Skew
Rip Optimization for the
Custom Shop**

The Skew

What the Skew can do for you

Cameron Automation has pushed the envelope once again to simplify sophisticated equipment and bring it to the small shop to increase yield and save labor.

The Skew is our answer for Rip Optimization in a custom shop. It will quickly transform any small hand-fed gang saw into a full and complete rip optimization system. Cameron has further refined their rip software to make it easy and affordable for the small shop.

Typical Skew users:

- Custom Moulding & Millwork.
- Mid-Size Custom Cabinet Shop
- Wholesale Lumber Distributor.

Advantages Over Hand Feeding

- Increase Safety.
- 7-10% Increase in yield.
- Extremely accurate positioning of boards.
  (No yield loss due to misalignment).
- Arbor Optimization.
- Simulations.
- Tallies both incoming and outgoing material automatically.
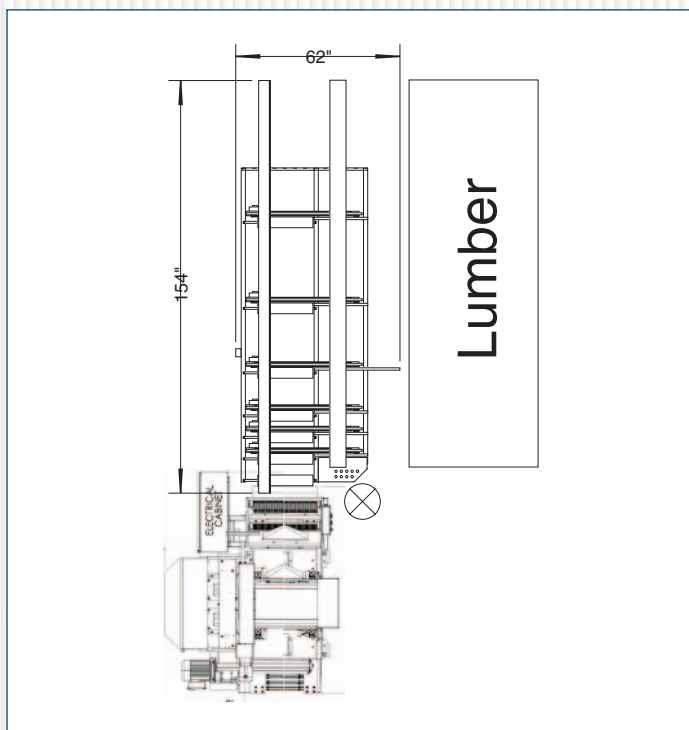
The Skew can be installed on your existing 12" gang rip saws:

- All Mereen Johnson rip saws
- Raimann KM310
- Progressive
- Newman Whitney
- Cantek
- Kentwood

Simple to Install… Simple to Use

- Machine ships assembled.
- Up & Running with operators trained in one (1) day.
- Communicates with moving blade saws to position blades automatically.
- Single operator loads and defects
- A simple push button control panel provides all the options for maximizing yield.
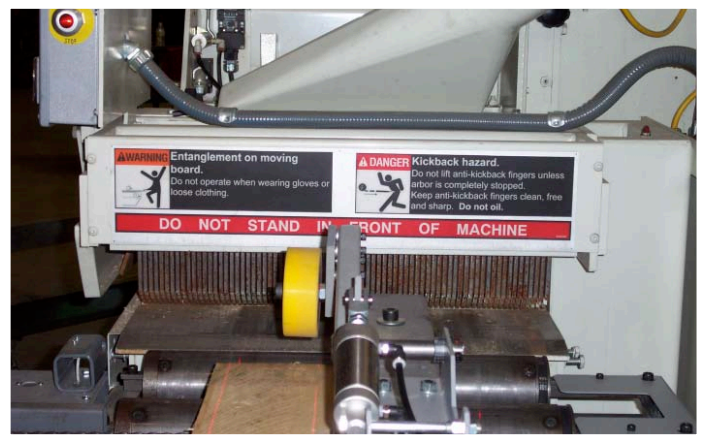
SAFETY FIRST - The Skew changes the operator position from behind the saw. (See layout).

Advantages & Operations
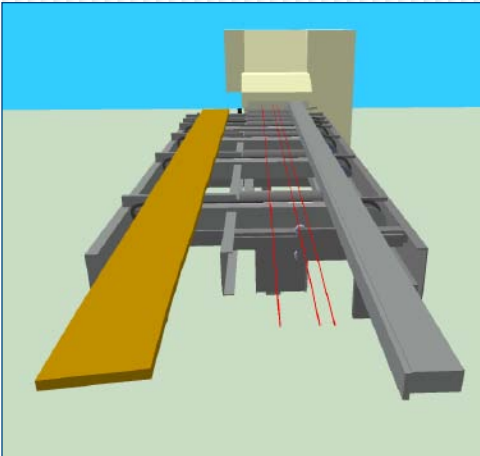
The board is put on lay up section, the process button is pushed and the chains transfer the board over the measuring sensors. The fence is automatically positioned and the board is pushed against the fence for evaluation.
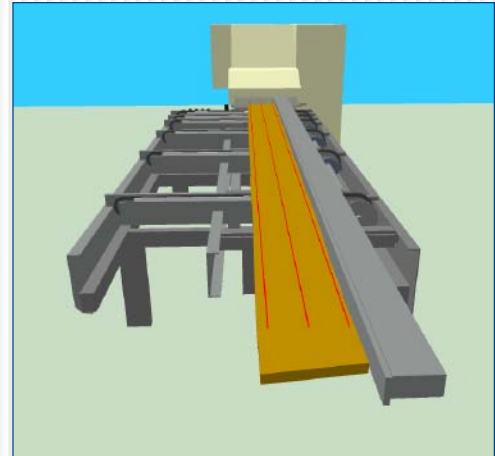
The laser lights from the saw project the highest value solution. The operator has the option to process or alter the solution for this board. The process button is pushed. As the board is fed into the saw, the next board is put up on the lay up section. As soon as the previous board is completely into the saw, the next board is automatically scanned and optimized.
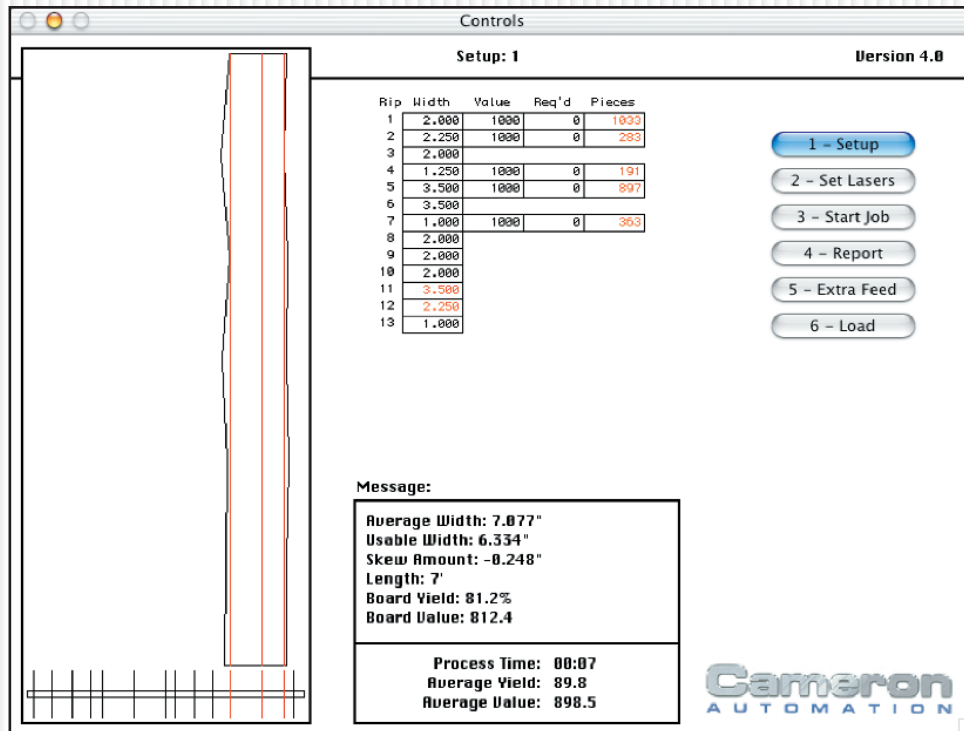
Advantages

- We call it The Skew because the fence will skew to the left or to the right to increase the yield on boards that do not have a straight edge.

- A price in the $35,000 range makes this system affordable and profitable for custom shops. The next closest system is more than twice the price.

- Payback: If you use 1,000 board feet per day at $1.50 per board foot, the Skew will save you $750.00 per week in material costs which is less than 1 year payback or 100% return in your investment.

- Our programmers write our software in-house allowing changes and free upgrades.

- Floor spaces is 62" x 154", the smallest in the industry.

- All incoming and outgoing pieces are tallied to help you control inventory and reduce material cost.

Very simply, because so few boards have a straight edge BEFORE the rip saw, our skewing system produces higher yields than the competition. We keep the advantages of manual feeding and ENHANCE them with automation

Software

Controls

Setup: 1   Version 4.0

Rip	Width	Value	Req'd	Pieces
1	2.000	1000	0	1033
2	2.250	1000	0	283
3	2.000			
4	1.250	1000	0	191
5	3.500	1000	0	897
6	3.500			
7	1.000	1000	0	353
8	2.000			
9	2.000			
10	2.000			
11	3.500			
12	2.250			
13	1.000			

1 – Setup
2 – Set Lasers
3 – Start Job
4 – Report
5 – Extra Feed
6 – Load

Message:

Average Width: 7.077"
Usable Width: 6.334"
Skew Amount: -0.248"
Length: 7'
Board Yield: 81.2%
Board Value: 812.4

Process Time: 00:07
Average Yield: 89.8
Average Value: 898.5

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Screen shot of software showing board profile and position on arbor

The Software

All software is designed and programed at Cameron Automation. This enables us to provide our customers with updates, changes, and fixes quickly and inexpensively; most often at no charge. It helps us to react to our customer's needs rapidly. The software is simple and intuitive. Easy to use, easy to understand yet powerful.

- Quickly and very accurately measure the board at multiple positions (up to 16).
- Quickly present the highest yield solutions to choose from.
- Calculate yield before ripping.
- Keep accurate tallies of net ripped widths.
- Adjust priorities to balance your production requirements.
- Evaluate arbor set ups to determine how to configure your saw.
- Arbor generating software included allows optimizing new arbor setups.
- Download and catalog each and every board that Quick Rip scans.
- Run simulations based on previously scanned boards or random width material.
- Network to other computers.
- Built in web server allows viewing of reports from a web browser.
- Wirelessly network with the Quick Chop to integrate tallies from rip & chop operations.

Features

- ## Factual Statistics

  Since the Quick Rip measures the width of each board in multiple locations, the true usable yield of the board can be calculated. The sum of rips produced is compared to the board width you bought, giving you factual yield values you can depend on.

- ## Pack Report

  Incoming material can be measured pack by pack. This allows you to check supplier totals and determine which supplier and/or grades are best for which jobs.

- ## Most Profitable Choice

  The Quick Rip uses actual values expressed in dollars per thousand board feet for each different net rip width in choosing the most profitable rip combination for each board. The system automatically gives priority to the rip width that is worth the most to you.

- ## Computes Product Value

  The Quick Rip also calculates, in dollars per thousand board feet, the board value after ripping by relating the value of rips produced to the cost of the original boards. When a run is completed, these values can be used to instantly determine how much value was gained in the ripping operation. Suppliers and loads of lumber can easily be evaluated by comparing these output values.

- ## Production Tracking

  The length measurement feature enables the system to record the lineal footage of each rip width and the actual board foot volume of lumber processed.

- ## "What If?" Simulation

  The Quick Rip can simulate a production run to test different arbor setups. Board data measured by the machine from an entire production run is saved for each set up. This data or a random sampling generated by the computer itself, can be used to calculate yield and production results without actually ripping boards. With this tool, you can quickly and easily fine tune your arbor configurations.

- ## Arbor Optimization

  One of the most important factors in maximizing yield (or value) when running a gang rip saw is properly configuring the saw spacing on the arbor. Because there can be as many as 39 million ways to arrange a particular arbor, this can be a daunting task for a human. A computer, however, can quickly evaluate and optimize these arbors. Built into the Quick Rip software is a powerful arbor optimization program that can result in dramatic yield increases. This arbor optimizer can be run either on the Quick Rip itself or on a desktop computer using the simulation software provided.

- ## Minimum Yield

  The Quick Rip can be configured to rip one edge of the board when other solutions will drop below the "minimum yield." This will allow the board to be used in another set up that may result in higher yields. This feature can be overridden by the operator at any given time. Also, any board can have one edge ripped by hitting a button on the control panel.

- ## Bundle Report

  Our software keeps track of rip widths and rip lengths. You can accumulate exact amounts into bundles for inventory control, downstream production, or customer orders.

- ## Customer Orders

  A recent software upgrade allows the office to download customer orders and our machine will sort by species and thickness to group rips and increase yield.

- ## Bottom Line

  Very simply, The Quick Rip will add dollars to your bottom line. Increased yield of raw material will increase your profits. The Quick Rip's design also allows you to value different rips according to your production needs. This reduces inventory and shortens delivery time. Our simple design is a small investment compared to your increased profit.

Why a Custom Shop Should Buy

The Skew

- ### Safety

  Moving your operator out from behind the saw improves the safety in your shop

- ### Yield

  A conservative estimate is 5% gain in yield If you process 1,000 bdft of hardwood pers day at $2 per bdft.

  Raw material savings = 1,000 x .05 x 2 = $100/Day
  $\qquad\qquad\qquad\qquad\qquad\qquad$ = $500/Week
  $\qquad\qquad\qquad\qquad\qquad\qquad$ = $26,000/Year

- ### Measure Incoming Material

  The Skew measures all incoming material which allows you to confirm and check supplier totals.

- ### Optimize your Arbor

  The Skew will review incoming and outgoing to improve your arbor set up and increase yield

- ### Group Customer Orders

  Our software allows you to put orders into a group so you can increase yield.

- ### Simple Setup

  Ships on one skid, sets up in one day - almost no down time during installation.

- ### Simple to Use

  We wrote the sotware and we build the machine. Our software is very straight forward.

- ### $ $ $

  At $35,000 our system does what the bigger systems do, but at half the price.

Specifications

Dimensions:
Overall Height: 30 - 36" (Adjustable to the saw)
Overall Width: 62"
Overall Depth: 154"

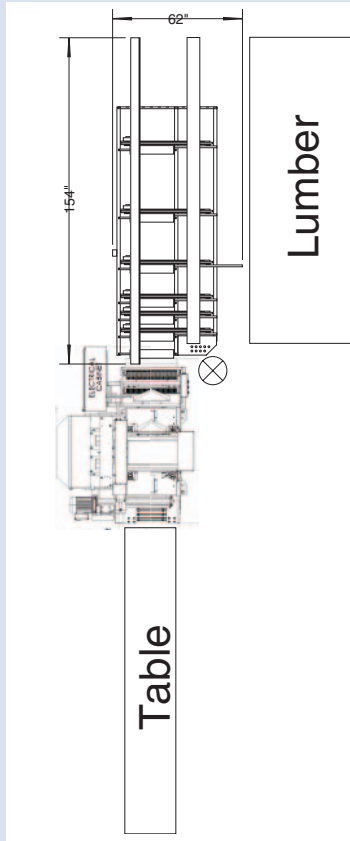## Specifications:
Fixed or Moving Lasers
Power Requirements: 220/440V (3 phase)
Board Capacity; 4' to 12 Length*, up to 8/4" Thickness

Options:
Fixed or Movable Laser Lights
Longer Model for 16' Lumber

For the highest yield, choose the machine that is right for you

FIXED
OR
MOVABLE
ARBOR

Still have questions? We wrote "The Book on Optimization." Call us or download it from our website. www.jamesltaylor.com

Q: Do you know your production requirements?
A: A movable arbor saw will process 8-9 boards per minute; A fixed arbor saw will produce 9-10 boards per minute.

Q: Do you rip for 100% fixed sizes?
A: If you do, you probably want a fixed arbor saw.

Q: Do you glue or do you have an outlet for random rips?
A: If you do, you probably want a movable arbor saw.

Q: Do you do a lot of edging?
A: If you do, you probably want a movable arbor saw.

Q: Do you glue a lot of stock? Edge glue many panels?
A: The fixed arbor saw will produce a better glue joint with less maintenance for a longer time.

Q: Do you have many short production runs that don't recur (like a job shop)?
A: You should have a movable arbor saw because you will need fewer arbor changes and the arbor changes are easier.

Clamp Carriers for Long, Large Panels

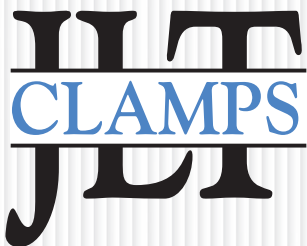**Rip Optimization**

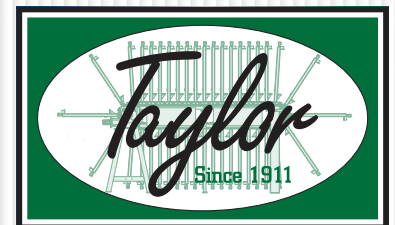**Cabinet Door Clamp**

Chop Optimization

Glue Applicators

Thick Blocks

Pod Press

Multi Station Door Clamp