EB ASSOCIATES INC.
PRESENTS

Real Time Size Monitoring

...Size DOES Matter

37 YEARS IN SAWMILLS

- Project Engineer for 2 large log sawmills
- Became a Research Engineer specializing in sawmill simulation
- Installed one of the first Edger Optimizers in North America
- Developed what was probably the world's first curve saw gang optimizer
- Founded EB Associates Inc.
- Installed 3D primary breakdown optimizers in about 15 mills
- Installed SizeCheck at our 86th sawmill
- Installed the first SizeCheck system

What does $300,000 feel like?

You’re holding it! The average mill can generate $300,000 per year in increased profits by reducing green lumber size .25mm (the thickness of this card).
BASIC CONCEPT

In 1996 a good customer told us:

“We need a simple, reliable, and automatic way to check lumber sizes on a continuous basis...and to issue an alarm when something goes wrong.”
DOES YOUR SAWMILL NEED THIS?

- Not if your logs are cheap
- Not if you use thick saws
- Not if you use large target sizes
- Not if your customers don’t mind skip on their lumber
- Not if your mill already makes enough profit

LUMBER QUALITY CONTROL - HISTORY

- Measuring tape
LUMBER QUALITY CONTROL - HISTORY

- Measuring tape
- Go – No/Go Gauge
LUMBER QUALITY CONTROL - HISTORY

- Measuring tape
- Go – No/Go Gauge
- Calipers (mechanical and digital)
LUMBER QUALITY CONTROL - HISTORY

WHAT IS REAL TIME SIZE MONITORING?
HOW GOOD IS YOUR MILL?
HOW GOOD IS YOUR MILL?
The thickness problems are obvious in these pictures.

But what about width?

Width problems are harder to detect visually, and are also more important to the quality of the final lumber.
YOU NEED A NEW TOOL

Using this tool your mill can...

- respond quickly to upset conditions
- improve quality and grade yield
- reduce target sizes to improve recovery
- experience fewer unscheduled saw changes

SINGLE POINT LASERS

- EB Associates Inc. was the launch customer for the Hermary LRS-50 laser scanner, and has over 700 of them in operation
- They are perfectly suited for Lumber QC, being about 10 times more accurate than typical sawmill scanners
LASER MEASUREMENT

LASER MEASUREMENT
SCAN ZONES FOR EVERY MACHINE

Edger Boards
thickness, variation, and taper
SCAN ZONES FOR EVERY MACHINE

Edger Boards
width, variation & taper

Edger Boards
width, variation & taper
MULTI-BOARD EDGER OUTFEED

Using a 3D laser scanner, we can measure the widths of all boards.

EDGER WANE MONITORING
SCAN ZONES FOR EVERY MACHINE

Gang Boards
multi-board scanning
SCAN ZONES FOR EVERY MACHINE

Gang Boards
thickness, wedging, & mismatch
WORDS OF WISDOM

- This is NOT just a technical problem. It is also about leadership and culture.

- It is best to involve EVERYONE in the system, not just quality control experts.

- A good system will deliver size information to many different types of customers within the mill.

- The benefits from these systems can be huge. Some customers have seen benefits of $1,000,000 per year.
The customers for size monitoring information include people throughout the mill. Each one of them has a different set of needs.
FOR A SAWMILL, SIZE DOES MATTER

A world class sawmill needs the smallest possible kerfs, the smallest possible target sizes, and a real time size monitoring system to make it all possible.