CASE STUDY:
An Optimised Edger Upgrade without Realigning Machine Centres
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CREDITS

ScanTECH 2008
Optimisation Definition:

- The procedure or procedures used to make a system or design as effective or functional as possible.
- What is the criteria for “effective or functional”?
- Value vs. Cost
In between Cost Control:
More Volume or More Margin, Which is it?

Volume is difficult due to Good Cheap Logs aren’t available and to increase volume every machine centre has to be upgraded.
More Margin - NOW THAT’S TICKET!:

More dollars for each flitch by improving one machine centre.

In the US Wood market, if a capital improvement does not have a payback of 24 months or less, it doesn't get funded.
Which centre should the sawmill choose?

In many mills, not all wood goes through the edger but in every mill the best wood does.

Can we create optimisation HERE without modifying any other centre?
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Diagram showing:
- Edger
- Headrig
- Band resaw

Other machines and conveyor systems are also depicted.
Conventional Optimisers:

1. Transverse Scan/Charger systems require at least (2) two meters of additional width to accommodate the scan and position area.

2. Linear Scan/Position systems require (using one scanner) at least (6-1/2 meters) of additional infeed length to scan, position, and set prior to Edging.
Design Requirement: Scan over original infeed

The Compact-Optimizer is designed to fit in the same footprint as a conventional Edger with a full length infeed table.

But how?

The Compact edger optimizer system combines smart camera technology with infra red lighting along with lasers to produce a high resolution image of the real board.
DynaVision® chroma+scan 3300 solution

Provides MORE information

making higher VALUE decisions

increasing dollar RECOVERY for a;

VALUE ADDED SCANNING

I like Barry’s term “Value added” but when will you own it?
Positioning a board after scanning adds positioning error.

Yesterday Joey didn't say, "Ideally they are stable on a belt as they run under the scanner and remain that way until they hit the saw box. "

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Joe said this yesterday.

What about even higher accuracy for lower cost?
Accuracy: final cut compared to solution

Transverse Scan: chain movement or crunch factor
Linear Scan: Scan, position & maintain position “on the fly”

**Compact Optimizer**

The Compact edger optimizer grips, centers, scans, & skews w/o releasing the board.
Versatility: Feed either side or both

Transverse Scan: can’t do both without dual scan banks
Linear Scan: can feed from both but requires double length infeed or multiple scanners.

Compact Optimizer

The Compact edger optimizer is designed to feed from either or both sides.
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<table>
<thead>
<tr>
<th>Board ID</th>
<th>6957</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bass No Bark</td>
<td>Thickness 4/4</td>
</tr>
</tbody>
</table>

**Product 1**
- Grade: #2
- Length: 12.6'
- Width: 8.18"
- BF: 8
- Value: $5.12

**Product 2**
- Grade: Sel_Btr
- Length: 16.6'
- Width: 8.12"
- BF: 9
- Value: $8.99
Optimizer says cut here

MOST

Edger cuts here
¼ inch cut uncertainty can mean 5% lost recovery

But 1% increase in down time can mean 10% lost of recovery
Redundancy reduces down time along with a hiccup strategy
Hiccup Strategy

Chicken head left skew the board
Chicken head right moves the saws
Optimise your Operator

- Every photo saved
- Operator over-rides are available to compare
- Old photos can be optimized with new parameters
- Owners can leave the mill without costly errors in the chipper
- Optimisation = VALUE

Photo of flitch w/ defects
OR cartoon
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Technology Exchange

Importing Technology

Exporting Technology
Who do you Call?

A.E. Gibson & Sons Pty, LTD
What is OPTIMISATION?

1. Getting better equipment
2. Getting value added scanning
3. Getting better solutions
4. And being able to own it before you need to upgrade

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