## WISE GUIDE

## Automatic Stock Guide Positioning System with yield optimization capabilities

The system allows the operator to easily program a cutting list of multiple widths with the touch screen. It then calculates the best possible yield from each board, automatically positions the guide before each cut and tallies the cut piece against the cutting list to eliminate over production.

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An actual screen shot showing the yield optimization system at work. Cutting list with % of each size already cut

The Wise Guide automatic positioning stock guide is shown on a new Diehl ESL-25. squares show the cuts that achieve maximum yield

Yellow

The Wise Guide automatic positioning extended stock guide and roller conveyor is shown on a Diehl Remanufactured SL-52.

## **Operation Of Diehl Wise Guide With Yield Optimization**

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1 - The operator enters the required widths and quantities from the cutting list, up to a maximum of 8 entries. The system will accurately position the stock guide to within .003 of programmed widths.

2 - The operator positions the board, using the laser line, leaving the least possible waste and then straight line rips the right edge of board. The board is returned to operator for step 3. See A

3- The board's usable width is found by positioning the laser at the far left side, leaving the smallest possible amount of waste. Stepping on the foot switch will then automatically move the stock guide until it senses board edge and determines usable stock width.

## See B 🛸

4 - The screen will then show the best possible yield and widths to rip from that board. See C Release foot pedal and stock guide automatically moves to the narrowest selected width. Rip is made and board is returned to operator for step 5. 5 - Quantity total is updated and the stock guide automatically moves to next width on list. Process is repeated for all remaining rips.



**6** - The 3 widths ripped from the original board showing the right and left edge waste and the 93.64% yield achieved. Screen shown below.



Operator is then ready for another board. Steps 2 - 5 are repeated until entire production is completed.



Production screen showing selected widths, quantity for each and selected first cut to achieve the 93.64% yield.

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**A** - The stock guide will automatically move to the operator programmed "bust" position, normally 10" - 12" to the right of blade ( or 1" - 2" wider than widest board to be ripped ).

*B* - The stock guide can be jogged in either direction for exact placement of the blade path giving maximum usable width.

**C** - Within seconds the best possible yield from board is displayed on the screen (shown above) and accounts for saw kerf waste. The widths and quantities chosen for sizes are highlighted with a yellow square. The blue rectangle indicates the width to be cut first. This combination can be accepted and used, or rejected by selecting the "next" button for the next lower yield percentage. This offers the operator a choice to balance the quantities of all sizes for completion at nearly the same time.