

# BEAMSAW KS843HL

Rear load, Dual Beam, Twin Pusher

## **Maximum Productivity**





# — an Introduction:

KDT are a major manufacturer of panel-based machinery with over 20 years of technical knowledge and experience. They export successfully to all major world markets a comprehensive range of Edgebanders, Beamsaws, Panelsaws, Flow through production lines, CNC routing and Drilling machines. Annual production exceeds 19,000 machines.

Click here and take a look...

https://www.youtube.com/watch?v=xoqp9XiLNds&t=10s

KDT machines are built to work hard and designed to last.











#### KDT KS843HL - Size panels the easy way

#### HIGH SPEED & PRECISION REAR LOADING BEAMSAW



#### With twin independent grippers and dual Pusher Beams

- 1. Two sets of pushers drive independently and work together to cut two panels of different sizes at the same time, **increasing efficiency by 30%.**
- 2. The double beams are independently driven, sawing and loading are executed simultaneously, and the **idle running time is reduced by at least 10% compared** with a single beam.
- 3. KDT patented technology, both the main and auxiliary saws adopt quick-release mechanisms allowing you to quickly replace the saw blades.

See it in action <a href="https://youtu.be/1TlvqvuEcss">https://youtu.be/1TlvqvuEcss</a>







#### **Key Performance Parameters:**

- The maximum height of the pack is 120mm
- The movement of the saw carriage by servomotor. Accuracy-Speed-Durability,
- The cutting speed of the saw carriage is up to 120 m / min.
- The return speed of the saw carriage is up to 1-150 m / min.
- The speed of the programmable pusher is 95m / min.
- The programmable twin pushers are equipped with 10 + 1 pneumatic double-finger grippers.
- The working table of the machine is equipped with an air cushion to prevent scratching
- Automatic blade height setting to match stack height for improved cut quality
- Auto side aligner pre-positioning and saw pre-positioning to optimise cut cycle times





Your next panel is prepositioned while the first panel is being cut

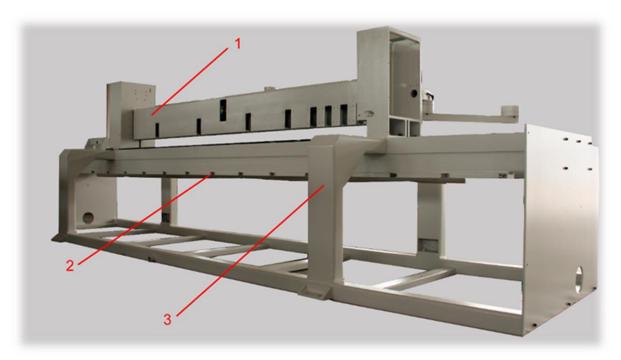




## A better work platform

CAD machine bed design with the maximum loads and requirements calculated and modelled

The welded frame is tempered to remove all internal stresses then all machined on a five-axis CNC – including all mounting holes and plates



- 1 Heavy steel construction of top pressure beam with integrated dust extraction
- 2 Precision machining of mounting pads for large diameter guide rails ensure perfectly straight and smooth carriage travel.
- 3 Massive heavy-duty steel frame guarantees accuracy and precision.

## 11960kg net weight!



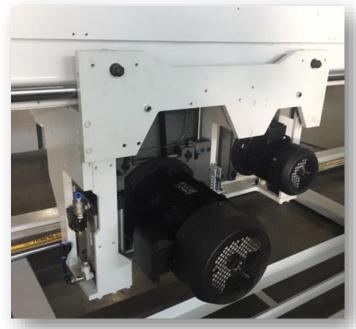




#### A better Saw unit too

High precision over an extended working life.

High precision parallel rods with oversize guide rollers







Quick change blade system – another KDT time saver

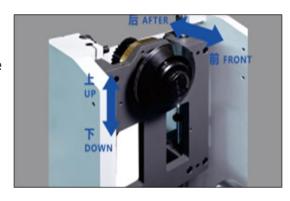
18.5 kw main with quick blade change.

1.5kw scorer



Electric height and sideways scorer positioning from the PC > easy, precise and a big time saver









#### Optimised work cycle saves time

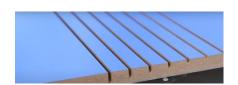
Automatic cut height projection – to improve cut quality

Auto pressure beam height setting to match panel book height – saves cycle time

Auto saw carriage travel / pre-positioning to match panel length – saves cycle time







## **Grooving – with servo depth setting**

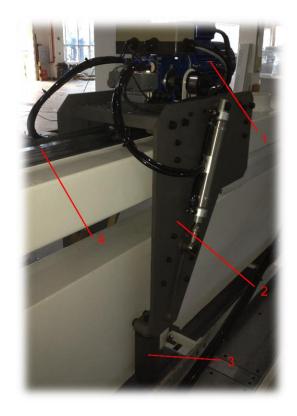
Simple programming and execution of grooving cuts.

#### Fast and accurate side alignment

Dual side aligner movement is by rack and pinion for maximum strength and accuracy, pressing panels against crosscut fence on both sides of pressure beam.

- 1- Heavy laser cut steel build for greater accuracy and precision.
- 2- Soft rubber guide rollers eliminate panel edge damage.
- 3- Side aligner travels on precision linear slide ways for years of trouble-free service whilst providing the greatest accuracy.
- 4- Oversize THK guides











#### Saw carriage travel by servomotor.







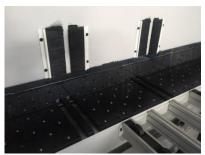
Heat treated precision rack and large diameter pinion drive for the saw carriage.

Powerful 2kw SERVO drive ensures fast, precise saw movement and positioning.

## No scratching of delicate Panels

Air cushion in the work area eliminates scratching of sensitive Panels.





Free positioning of the large air tables supports your cutting





## Powerful parallel double finger grippers

Powerful air cylinders provide maximum gripping force.

Rubber tips will not damage panels while ensuring maximum grip on the panel surface.

Heavy duty cast aluminium gripper construction: years of trouble - free service.

10 Powerful grippers to guarantee panels will not move. (+ 1scoring gripper included)

Precise pusher positioning via contact free Magnetic

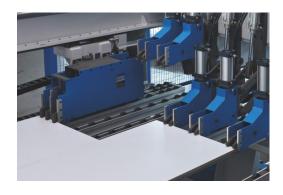
Strip reader and Swiss high precision reducer and rack for positioning tolerance of just +/-0.1mm





## Twin independent Pushers boost output. So do twin Beams!

Allows 2 different sizes to be cut with one saw stroke. Pre-positions your next panel(s) while the first are being cut.









#### **Smooth and precise lifting**

Hydraulic table lift -reliable and effective.

Driven Cross conveyor and auto alignment

4000kg capacity

4000 x2100mm panel sizes







Patented Magnetic grid positioning measurement – handles sheets as thin as 8mm





#### Safe

Easy to reach machine Start /Stop and Emergency stop

Pressure beam stays up in an unexpected power cut. Interlocks on blade covers.

Top quality CE compliant Siemens Electrics and Electronics used throughout







#### **User friendly WINDOWS working environment**

Standard PC keyboard and mouse. Windows based Industrial PC controller. Graphic display showing each stage of the cutting process. Connect to office network for easy downloading of cutting lists from the KDT **PreSet** Optimization' software.



Includes: Label printing formatting and output for Printer (Printer not included)

Import Cut lists from Excel for Optimisation.

Choice of Optimisation levels and Parameter mix.







Twin 200mm extraction points in the base and 2 x 125mm in the Beam = even and efficient extraction for clean results. (see layout drawing for details)











### **Key Specifications**

- Industrial PC controlled with 19" colour screen LCD monitor, graphic user interface with optimizing software.
- 18.5kw main saw motor. Quick blade change system
- 1.5kw Scoring saw motor
- Powerful 2kw rack and pinion Servo drive for saw carriage movement. Saw carriage running on precision round bars, rise and fall on round bars with linear bearings.
- Dual panel side aligners 90mm 1300mm for fast accurate positioning.
- Automatic blade height setting adjusts according to the panel thickness for improved cutting quality.
- Four air flotation support tables 1x fixed and 3x movable with rollers for easier panel loading and to avoid scratching panels. The main table of the machine under the top pressure beam is fitted with air floatation to avoid panel scratching.
- 10x Dual finger Panel gripping clamps made cast alloy with 120mm opening.
- Grippers positioned by precision Swiss made rack and pinion running on round guide
- Latest Design heavy duty fabricated steel machine main frame, top pressure beam and side support tables to ensure accurate chip free cutting.
- Rear of machine guarded by enclosed safety fence 1.8 metres high with interlocking access door.

# KDT Machinery offers Outstanding value for a Return on Investment second to none!







## **Dimensions, Power, and Weight**

Maximum cutting length and depth 4280mm

Maximum cut height 120mm

Cutting speed 0.5-120m / min

Saw return speed max 150m / min

Maximum Pusher speed 95m/min

Main saw diameter and speed 450mm/3800rpm

Scoring saw diameter and speed 200 mm/5300rpm

Main saw motor (variable frequency) 18.5kw

Scoring saw motor 1.5kw

Saw carriage servomotor 2kw

Gripper servomotor 2kw

Feeding servo – motor 2kw

Lift platform Hydraulic lift motor and cross drive motor 2.2kw/0.75kw

Total power 37kw

Lift platform capacity 4000kg

4x Air floatation tables (2x movable)

Weight of this machine 11960 kgs

Overall dimensions of machine 12755L\*6656W\*2030H

(including rear safety fence around gripper area)









