# Finger Jointer



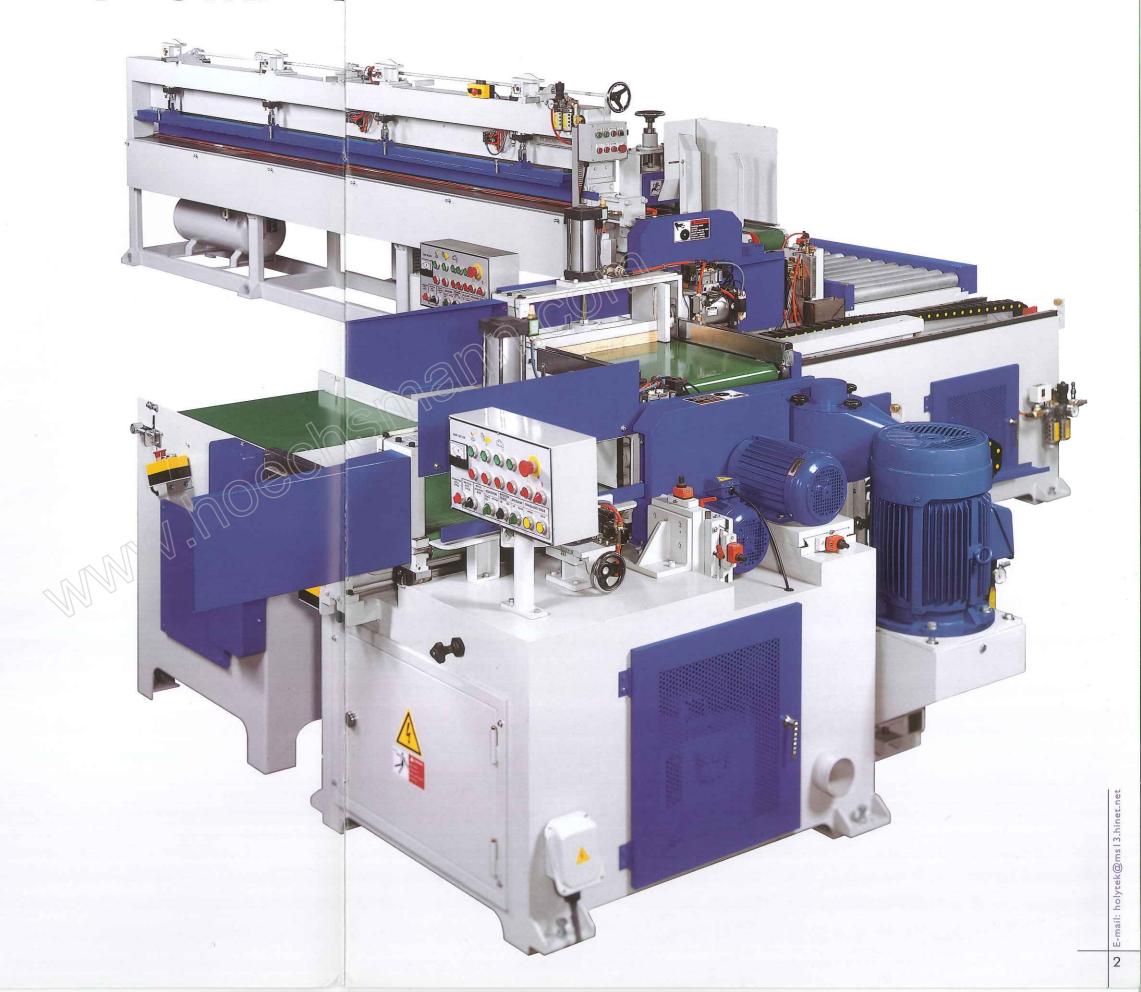
HOLYTEK

## HOLYTEK

## AUTOMATIC FINGER JOINT SYSTEM

## **MACHINE FEATURES:**

- The finger joint system is ruggedly constructed throughout for maximum rigidity and stability.
- Equipped with an air reservoir to ensure stable motions of air systems.
- All axial adjustments in 0.01mm. using mechanical digital readout.
- Designed for large solid wood processing companies to exploit residual timber economically.
- Completely new machine concept with outstanding price/performance ratio.
- Movable air clamps on the finger assembler provide smooth jointing without workpiece fixing problems.
- Specially designed continuous air exhaust ensures positive clamping effect.
- A transfer conveyor table located in front of the finger assembler provides convenience for workpiece feeding.
- All air cylinders are separately controlled for convenient operation and maintenance.
- Employs German linear motion guides on the left and right finger shaper.
- Synchronized transmission for top and bottom feeding rollers for assembler.



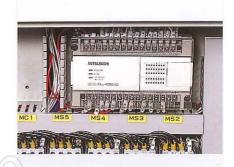
## HOLYTEK LEFT FINGER SHAPER





### **CENTRALIZED CONTROL** PANEL

The left and right finger shapers have individual control panels located at the front of each machine. Motions on the left and right finger shaper can be controlled independently or simultaneously for convenience. Manual control switches are clearly identified.



## **PLC CONTROL**

The machine employs a high performance PLC controller. Control circuits inside the control box are carefully designed and arranged for dependable performance.



### **POWERFUL SHAPER** DRIVE

The left and right finger shaper spindles are driven by a 20 HP motor, making the shapers ideal for heavy duty cutting.

## Specifications:

Specifications:	
MODEL	25LC
Max. length of table	630 mm
Max. length x height of workpiece	800 x 150 mm
Min. length x height of workpiece	150 x 20 mm
Speed of cut off saw	3600rpm ~ 60 Hz, 3000rpm ~ 50Hz
Speed of finger cutter	6000rpm ~ 60 Hz, 5400rpm ~ 50Hz
Speed of scoring saw	3600rpm ~ 60 Hz, 3000rpm ~ 50Hz
POWER REQUIRED	
Cut off saw + Trimming cutter	7.5 HP
Finger cutter	20 HP
Conveyor driving motor	1/2 HP
Lower scoring saw	1 HP
Hydraulic pump	2 HP
Dia. of exhaust hood	4" x 3
Dust suction volume required	Aprox. 60 m³/min
Air consumption	6 kg/cm <sup>2</sup>
Machine dimensions	2120 x 1400 x 1350 mm
Packing dimensions	2340 x 1475 x 1550 mm
N.W.	1420 kgs
G.W.	1620 kgs



## TRIMMING AND SCORING MECHANISM (Left shaper)

The trimming sawblade cuts the left end of the workpiece with a hogging unit eliminating tearing problems. All motors have individual motor control.



## TRIMMING AND SHAPING **MECHANISM** (Left shaper)

The trimming sawblade cuts the left end of the workpiece, and the shaper cutter performs finger shaping. The sawblade and the cutter are equipped with safety guard covers to protect the operator. (CE optional)



#### **HYDRAULIC POWER UNIT**

Employing high quality hydraulic parts, the hydraulic system delivers powerful hydraulic force to the machine. A heat exchanger is provided on the hydraulic power unit to maintain constant oil temperature at all times. This also assures stable operational performance.

## RIGHT FINGER SHAPER

Smart design of opposite push-out stocks. No more glue touching the feeding belt conveyor!



## Specifications:

Specifications.	
MODEL	25RC
Max. length of table	630 mm
Max. length x height of workpiece	800 x 150 mm
Min. length x height of workpiece	150 x 20 mm
Speed of cut off saw	3600rpm ~ 60 Hz, 3000rpm~ 50Hz
Speed of finger cutter	6000rpm ~ 60 Hz, 5400rpm~ 50Hz
Speed of scoring saw	3600rpm ~ 60 Hz, 3000rpm~ 50Hz
POWER REQUIRED	
Cut off saw + Trimming cutter	7.5 HP
Finger cutter	20 HP
Conveyor driving motor	1/2 HP
Upper scoring saw	1 HP x 1
Lower scoring saw	1 HP x 1
Hydraulic pump	2 HP
Dia. of exhaust hood	4" x 3
Dust suction volume required	Aprox. 60 <sup>3</sup> m /min
Air consumption	6 kg/cm <sup>2</sup>
Machine dimensions	2580 x 1400 x 1350 mm
Packing dimensions	2740 x 1475 x 1550 mm
N.W.	1510 kgs
G.W.	1720 kgs



## TRIMMING, SCORING AND SHAPING MECHANISM (Right shaper)

The trimming and top/bottom scoring sawblade cuts the right end of the workpieces without tearing problems. The right shaper cutter produces fingershaped tenons accurately. All motors have individual motor control.



### PNEUMATIC INJECTION **GLUING MECHANISM**

The automatic gluing mechanism applies the precise glue dosage and is easily cleaned by a patented pneumatic injection system.



#### **EFFICIENT GLUE MIXING TANK**

Pneumatic injection glue system with large glue mixing tank.



## INFEED CONVEYOR TABLE

Located at the front of the left finger shaper, this material infeed conveyor provides efficient workpiece infeed to the finger shaper.

## OUTFEED ROLLER TABLE (Powerful)

Located at the rear of the right finger shaper. With powerful automatic guide system roller table. Trouble-free glue lamination.



**25SRT** 

## HOLYTEK FINGER ASSEMBLER

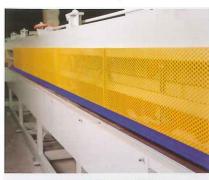
With top and bottom hydraulic feeding motor. Ensures simultaneous feeding.



Large oil tank (120 ℓ.) with high quality hydraulic control components.

## Specifications:

Specifications.	II	
MODEL	15AH	20AH
Length of working table	4600 mm	6200 mm
Available length of workpiece	2500 ~ 4600 mm	2500 ~ 6200 mm
Available thickness of workpiece	20 ~ 80 mm	20 ~ 80 mm
Available width of workpiece	30 ~ 150 mm	30 ~ 150 mm
Cut off saw		
Spindle diameter	25.4 mm (1")	25.4 mm (1")
Spindle speed	3600rpm ~ 60 Hz, 3000rpm ~ 50Hz	3600rpm ~ 60 Hz, 3000rpm ~ 50Hz
Saw diameter	304.8 mm (12")	304.8 mm (12")
Power required		
Feeder	1 HP	1 HP
Cut off saw	3 HP	3 HP
Hydraulic pump	5 HP	5 HP
Feeding speed	63.8m/min ~ 50Hz, 70.2m/min ~ 60Hz	63.8m/min ~ 50Hz, 70.2m/min ~ 60Hz
Dia. of exhaust hood	4" x 1	4" x 1
Air consumption	6 kg/cm <sup>2</sup>	6 kg/cm <sup>2</sup>
Machine dimensions	5700 x 1270 x 1550 mm	7250 x 1270 x 1550 mm
Packing dimensions	5900 x 900 x 1700 mm	7400 x 900 x 1700 mm
N.W.	2100 kgs	2550 kgs
G.W.	2450 kgs	3000 kgs



## **SAFETY GUARD** (OPTIONAL)

The Finger Assembler is equipped with a full length safety panel at the product outfeed side, providing safety protection for the operator.

## **TWO-STEP SEQUENCE ASSEMBLING**

You can continue feeding - multiple step cut-off when the press is synchronized.



**15AH (4.6M)** (With 2 ends limit switch for two size cutting mode.)

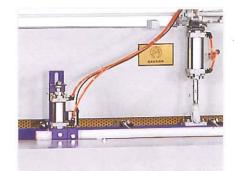
**20AH (6.2M)** (With 3 ends limit switch for three size cutting mode.)

## **AUTO. INFEED CONVEYOR**

Fast and precise infeed with guide fence for easy loading.

### **SECURE JOINTING**

The workpieces are jointed by a powerful hydraulic cylinder, creating an extremely secure jointing effect. Jointing pressure is adjustable to suit various types of workpieces.



## **ACCURATE CUT-OFF**

Two air cylinders provide separate control of cutting for short and long products.

· All specifications, dimensions and design characteristics shown in this catalogue are subject to change without notice.

## The Most Economical

# HOLYTEK SEMI-AUTO. FINGER JOINTING LINE



## **Specifications:**

MODEL	16RS	25RS
Max. length of table	410 mm	630 mm
Max. length x height of workpiece	1000 x 150 mm	1000 x 150 mm
Min. length x height of workpiece	150 x 20 mm	150 x 20 mm
Speed of cut off saw	3600rpm ~ 60 Hz, 3000rpm~ 50Hz	3600rpm ~ 60 Hz, 3000rpm~ 50Hz
Speed of finger cutter	6000rpm ~ 60 Hz, 5400rpm~ 50Hz	6000rpm ~ 60 Hz, 5400rpm~ 50Hz
Speed of scoring saw	3600rpm ~ 60 Hz, 3000rpm~ 50Hz	3600rpm ~ 60 Hz, 3000rpm~ 50Hz
POWER REQUIRED		
Cut off saw	5 HP	7.5 HP
Finger cutter	15 HP	20 HP
Conveyor driving motor	1/2 HP	1/2 HP
Scoring saw	1HP x 2 pcs	1HP x 2 pcs
Hydraulic pump	2 HP	2 HP
Dia. of exhaust hood	4" x 3 pcs	4" x 3 pcs
Dust suction volume required	Aprox. 60 m <sup>3</sup> /min	Aprox. 60 m <sup>3</sup> /min
Air consumption	6 kg/cm <sup>2</sup>	6 kg/cm <sup>2</sup>
Machine dimensions	2060 x 1440 x 1350 mm	2460 x 1620 x 1350 mm
Packing dimensions	2250 x 1350 x 1550 mm	2560 x 1470 x 1550 mm
N.W.	1150 kgs	1360 kgs
G.W.	1260 kgs	1480 kgs

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High capacity at a low price.

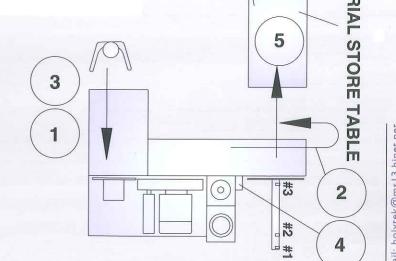
## Design Features:

- · Designed for finger shaping and gluing both sides of timber in the one machine.
- Complete solution consisting of shaper, transfer station and press.
- Equipped with a scoring unit and all axis adjustment in 0.01mm range.
- · Pneumatic injection gluing mechanism.
- Easy installation, simple operation and maintenance free.
- · Good for small or medium sized companies.

## 16RS, 25RS Finger Shaper Procedure Steps and Assembler.

- Feed material into the shaper by hand and start first cycle.
- 2 Automatic hydraulic feed the table to the left side. Push back the material a little way by pushing the cylinder (about 30 mm. induct #2 sensor). Then return table to the original position.
- Turn over the other end of the material and prepare for the second circuit. The second cycle starts.
- The glue spreader moves to position automatically. Then push the materials from the working table to the transfer table. (up to #3 sensor position, meanwhile not effecting #2 sensor)
- 6 At the transfer roller table, the working table will return and the position of the push cylinder will also return back to its original position (#1 sensor). And a new cycle starts again.
- 6 Infeed the material into the finger assembler by the operator.
- The finished product feeds out.

**The Most Economical** Semi-Auto. Finger Jointing Line.



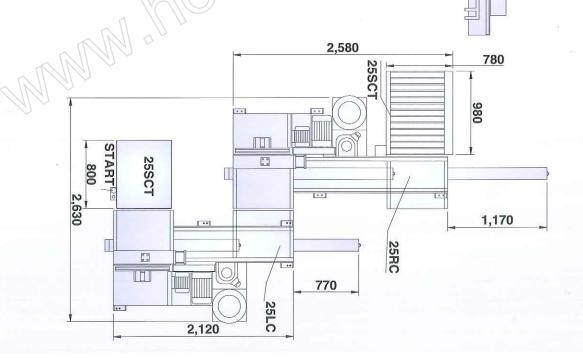
16RS / 25RS

**15AH** 

THE WORK
FLOW CHART
OF THE AUTO.
FINGER
JOINTING
SHAPER &
ASSEMBLER.

## **CAPACITY:**

- Shaper: 3~4 Packages/Min.
- Assembler: 3 Cycles/Min.



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## HOLYTEK

#### HOLYTEK INDUSTRIAL CORP.

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