



Heavy Duty CNC Fully Automatic Continuous Finger Jointing Line

*Integrated finger shaping, automatic gluing, turning, pre-assembly and continuous
end pressing for long timber production.*

HC WoodTech Product Introduction

Prepared by HC WoodTech (International Trade Team)

1 About HC WoodTech



HC WoodTech is a woodworking machinery solutions provider focused on solid wood and panel processing. We deliver integrated equipment and production line systems for furniture factories, door manufacturers, architectural wood producers, prefabricated housing components, pallet production, and engineered wood applications.

Our work combines machine selection, line design, installation coordination, technical service, and long-term production support, helping customers improve automation, efficiency, yield, and overall factory performance.

2002	1,200+	40+	Global
Founded	Factory projects	Engineers	Market support

What we do	Factory layout planning, production line design, AI-based equipment configuration, equipment installation, commissioning, process optimization, operator training, and technical guidance.
Why choose us	AI-driven manufacturing expertise, proven factory project experience, one-stop solutions, strong engineering support, and sustainable production thinking.
International markets	North America, Europe, Middle East, Asia-Pacific, South America, Eurasia, and Africa.

Our Growth Journey



2002
Heze, China
Established the business



2007
Qingdao, China
Expanded operations



2013
Linyi, China
Opened new branch



2016
Weifang, China
Strengthened regional presence



2024
Muar, Malaysia
Entered Southeast Asia



2026
North America
Began North America market expansion

Officially Authorized

 QCM Machinery • Since 2007 • Global market development • Top-tier authorized dealer	 Nanxing Machinery • Since 2007 • Founding equity holder • Exclusive authorized dealer	 Mustang Machinery • Since 2024 • Officially authorized
---	--	--

2 Production Line Composition

The line combines an A/B finger-shaping system, an automatic turning table, a 7 m double-row chain pre-assembly conveyor, a continuous finger-jointing press and an outfeed roller stand.

Stage	Equipment and function
Finger shaping and gluing	HD-600S3 and HD-600S4 finger shapers process opposite timber ends. The HD-600S4 applies glue automatically.
Turning and pre-assembly	The turning table reorients the glued timber and transfers it to the 7 m chain conveyor for pre-assembly.
Pressing and outfeed	The H-6075CSP joins the timber into continuous lengths, followed by discharge onto the roller stand.

3 Product Summary

Input timber length	Shaper processing height	Line output rate
500-4000 mm	100-300 mm	35-50 m/min

A heavy-duty automated line for joining individual timber lengths into long, finger-jointed stock. Three cutter spindles perform staged finger shaping, while automatic gluing and integrated transfer reduce intermediate handling.



Complete production line layout reference

Configuration note: The reference image is labeled 250. The finger-shaper specification lists a processing height of 100-300 mm. Confirm the selected configuration and workpiece orientation before ordering.

4 Machine Overview

Timber from 500 to 4000 mm long passes through the paired finger shapers. After automatic glue application at machine B, the turning table transfers the material to the 7 m pre-assembly conveyor. The pre-assembled timber then enters the continuous press for end joining.

The stated line output rate is 35-50 m/min. CNC size adjustment and an HMI simplify setup; Mitsubishi PLCs coordinate the main machines. The welded steel structure and staged cutting system support stable operation and consistent finger depth.

5 Technical Specifications

Finger Shaping Machines

Item	HD-600S3	HD-600S4
Automatic glue application	Not specified	Included
Processing width	600 mm	600 mm
Processing height	100-300 mm	100-300 mm
Processing length	500-4000 mm	500-4000 mm
Servo drive motor	3.9 kW	3.9 kW
Upper and lower scoring saw motor	2 HP	2 HP
Scoring saw speed	4580 rpm with variable-frequency control	4580 rpm with variable-frequency control
Finger cutter spindle diameter	70 mm	70 mm
Finger cutter spindle motors	30 HP x 3	30 HP x 3
Finger cutter spindle speed	6750 rpm	6750 rpm
Cut-off saw motor	20 HP	20 HP
Cut-off saw speed	4800 rpm	4800 rpm
Dust extraction ports	Diameter 100 mm x 4; diameter 125 mm x 2	Diameter 100 mm x 4; diameter 125 mm x 2

Motor ratings are shown in their original units. Processing dimensions refer to each machine stage and must not be treated as interchangeable width, height or thickness limits.

5 Technical Specifications Continued

Automatic Turning Table and Preassembly Conveyor

Item	Specification
Turning table feed dimensions	3600 x 600 x 250 mm
Turning table feed motors	2 HP x 2
Double-row chain table dimensions	1150 x 7000 mm
Chain conveyor feed motors	3 HP x 2
Chain specification	12A-2

H 6075CSP Continuous Finger Jointing Press

Item	Specification
Model	H-6075CSP
Jointed output length	Continuous length
Maximum pressing length per cycle	6000 mm
Processing width	100-300 mm
Processing thickness	75 mm
Cut-off saw motor	15 HP
Cut-off saw speed	2920 rpm
Cut-off saw blade	600 x 4.5 x 30.3 mm
Hydraulic motor	15 HP, 4-pole
Hydraulic equipment	High-pressure pump and 3 HP oil cooler

Configuration confirmation: The feature description also cites a reinforced 15 HP cut-off spindle at 5000 rpm. Confirm the applicable saw unit and speed; the tables above retain the machine-specific ratings of 20 HP / 4800 rpm for the shapers and 15 HP / 2920 rpm for the press.

6 Standard Configuration

- Precision-welded heavy-gauge steel machine bodies.
- Three finger cutter spindles for staged cutting and consistent finger depth.
- CNC size adjustment through the HMI, described as adjustable without stopping the machine.
- Mitsubishi PLCs on the main machines throughout the line.
- Taiwan Eagle-brand saw blades and cutters for scoring and sawing.
- Automatic gluing, turning, chain pre-assembly, continuous pressing and roller outfeed.

7 Key Feature Photos

Heavy Duty Welded Machine Body

Thick steel plates are precision welded to provide a rigid structure for stable machine operation.



Finger-shaping machine and transfer area

Three Spindle Finger Shaping

Three cutter spindles divide finger shaping into successive stages to improve processing speed and maintain accurate finger depth.



Three finger cutter spindle assemblies

7 Key Feature Photos Continued

CNC Adjustment and Operator Interface

The HMI provides access to parameter settings, machine positions and cutter adjustments. CNC adjustment reduces manual setup work.



Operator interface overview

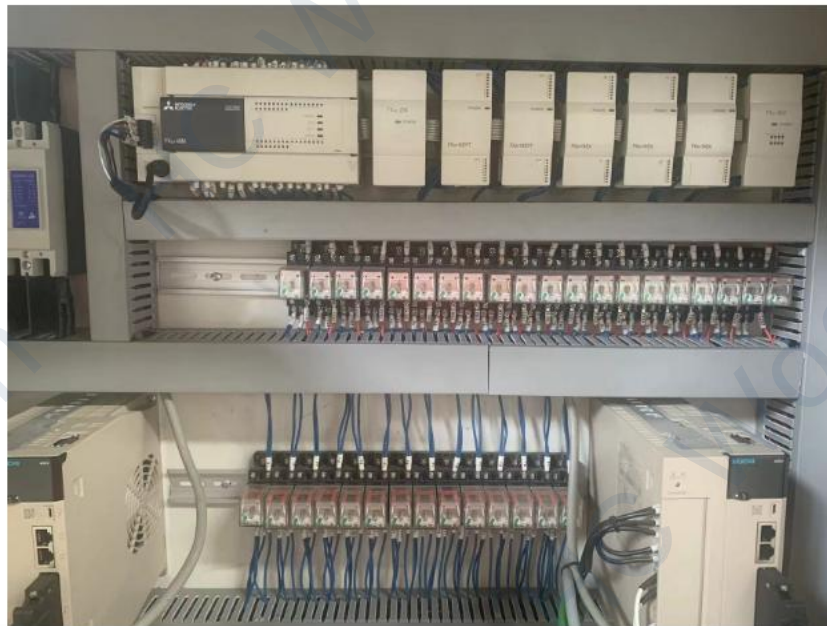


Cutter adjustment and position settings

Interface functions include parameter settings, alarm records, worktable settings, cutter spindle adjustment and finger-joint length. The original screen captures show the installed interface and adjustment controls.

Mitsubishi PLC Control

Mitsubishi PLCs control the main machines across the line for coordinated and stable operation.



PLC and electrical control cabinet

7 Key Feature Photos Continued

Scoring and Sawing Tools

Taiwan Eagle-brand saw blades and cutters are specified for scoring and sawing, supporting clean and stable cutting.



Saw blade and cutting assembly

Reinforced Cut Off Spindle

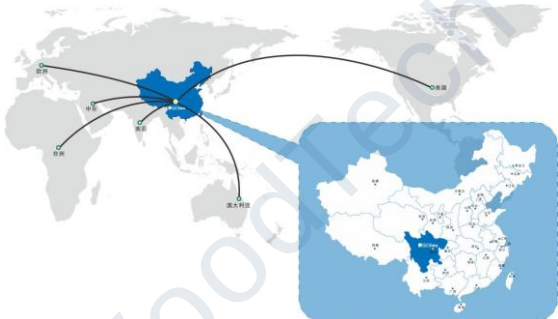
The reinforced cut-off arrangement is designed to produce a smooth cut surface and reduce burrs. The final motor and speed configuration must match the selected saw unit.



Cut-off spindle drive and motor assembly

8 Service Guarantee

Pre-sales	Experienced sales engineers analyze application needs and support suitable machine selection.
Project delivery	Support is provided for process flow, site layout, installation standards, software training, and equipment operation/maintenance.
After-sales	A broad service network supports timely and professional service for customers worldwide.



Global service network



On-site service and adjustment



Technical service support

9 Contact

Contact	Details
International support	HC WoodTech
Website	https://hcwoodtech.com
Telephone	+86-532-89652000 / +86-532-89656868
Office location	Jinhong West Road, Chengyang District, Qingdao, China