## YL-610B







### SEMI-AUTOMATIC FINGER JOINT SYSTEM

### 1M Chain Length

Semi-Automatic Finger Joint System integrates many outstanding features, such as high precision, high productivity, extra smooth motions and minimum trouble. Furthermore, the YL-610B will fully exhibit high efficiency finger shaping and finger jointing operations. The machine has been trusted and recognized for a long period.

■ 1 meters chain length.

A semi-automated finger shaping and jointing production line.

PLC control provides smooth motions and easy operation.

Precise tenon cutting and secure jointing.

Optimal cost to performance ratio.

Comprehensive technical support.

## 半自動指接系統 1米鏈條長度

精心設計打造的 YL-610B半自動指接系統,擁有高精度、 高產能、動作順暢及最低故障率等特色。此外, YL-610B更徹 底展現高效率打榫、接榫作業,長期以來深獲客戶的信賴與肯 定。

- 1米鏈條長度
- 半自動打榫、指接牛產線
- PLC控制,動作順、操作簡易。
- 精密打榫、接榫牢固。
- ■最佳性價比。
- ■完善的技術支援。



# YL-610BL







### SEMI-AUTOMATIC FINGER JOINT SYSTEM

### 5.5M Chain Length

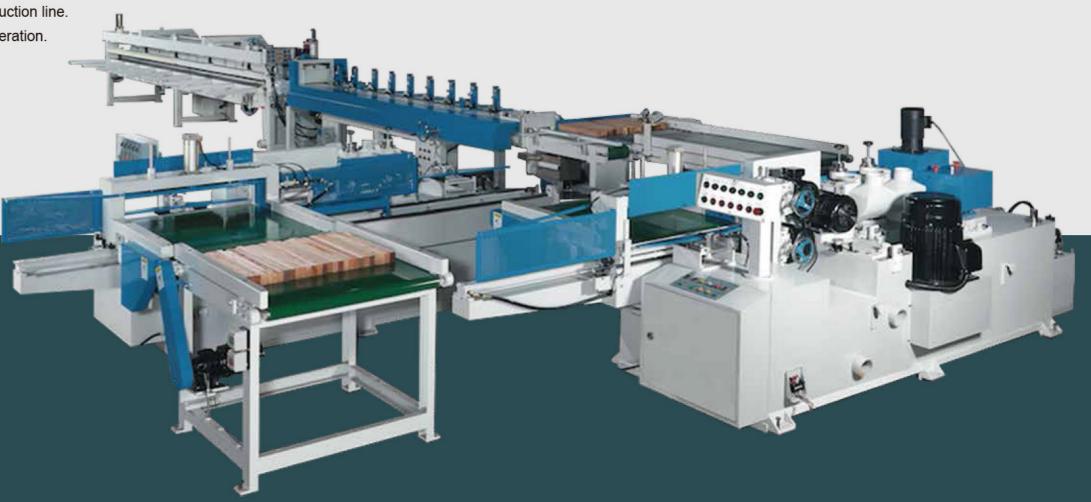
Semi-Automatic Finger Joint System is to enhance high throughput and process smoothness. Moreover, its optimal operation performance has been fully recognized by domestic and foreign customers.

- 5.5 meters chain length.
- A semi-automated finger shaping and jointing production line.
- PLC control provides smooth motions and easy operation.
- Precise tenon cutting and secure jointing.
- Optimal cost to performance ratio.
- Comprehensive technical support.

## 半自動指接系統 5.5米鏈條長度

YL-610BL半自動指接系統之設計概念著重在高產能 及流程動作順暢性。並以最佳操控性,贏得國内外業界 肯定。

- 5.5米鏈條長度。
- 半自動打榫、指接生產線。
- PLC控制,動作順、操作簡易。
- ■精密打榫、接榫牢固。
- ■最佳性價比。
- ■完善的技術支援。



## YL-610A



AUTOMATIC FINGER JOINT SYSTEM 自動指接系統

### Hydraulic Drive

Ultra Stable And Smooth Motions
Finger shaping and jointing are fast accomplished

YL-610A series of Automatic Finger Joint System employs hydraulic cylinders to drive the tables on the right and left finger shaper. The entire motion sequences are performed fast and steadily, allowing the YL-610A to fully exhibit its extraordinary performance.

- Automated finger shaping and jointing are fast accomplished.
- PLC control provides smooth motions and easy operation.
- Twin shaping spindles (optional)
- Specially designed infeed rollers and pressure plate provides 80% of pre-jointing tightness.
- Highly rigid machine structure throughout exhibits outstanding stability in high speed operations.
- Comprehensive technical support.

#### **Table Driven By Hydraulic Power**

■ The right and left finger shapers employ a hydraulic cylinder for drive, featuring powerful driving force and smooth movement.

#### 工作台油壓驅動

■ 左/右打榫機之工作台行程採用油壓缸驅動,驅動力強、移動平穩順暢。

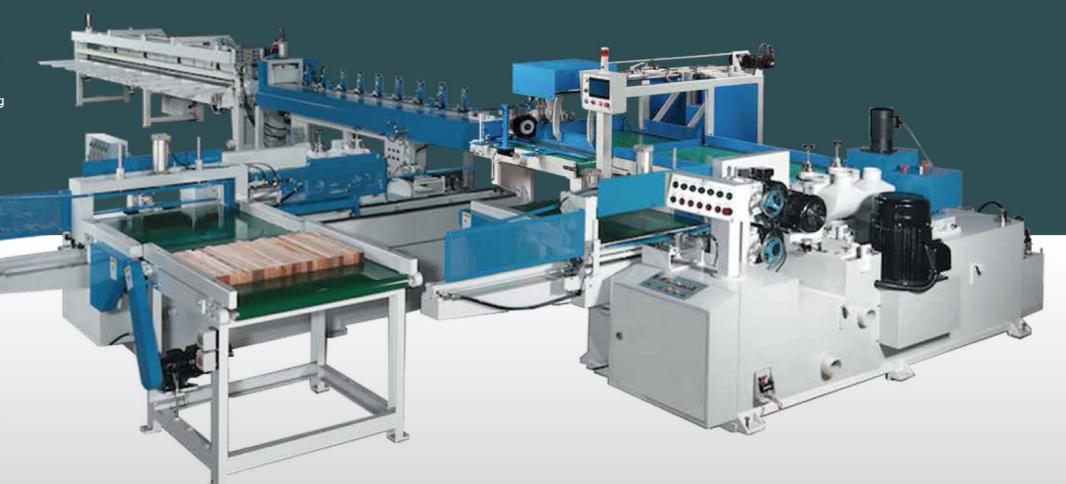
## 油壓驅動

動作平穩順暢 打榫、接榫 一氣呵成

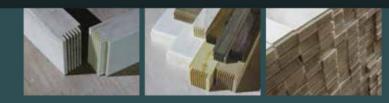
YL-610A系列自動指接系統之打榫工作台採用油壓缸驅動,打榫動作輕巧順暢。整體動作流程快速、平穩,更凸顯FJS-610A之非凡性能。

- ■自動化打榫、接榫快速完成。
- PLC控制·動作順暢·操作簡易。
- 雙打榫刀軸(選配)。

- 特殊入料滾輪及壓板設計,可達到80%預接緊度。
- 整體機器結構高剛性·高速作業穩定性優異。
- 完善的技術支援。



## YL-610S



**AUTOMATIC FINGER JOINT SYSTEM** 自動指接系統

### Servo Motor Drive

### Built for high efficiency & high throughput

With outstanding features that are recognized by all customers, the tables on the right and left finger shaper of Automatic Finger Joint System are driven by servo motors to exhibit fast and accurate shaping operations. This enables the YL-610S to fully satisfy customers who require automated, highly productive finger shaping and jointing operations.

- Automated finger shaping and jointing are fast accomplished.
- PLC control provides smooth motions and easy operation.
- Twin shaping spindles (optional).
- Specially designed infeed rollers and pressure plate provides of pre-jointing tightness.
- Highly rigid machine structure throughout exhibits outstanding

## 伺服馬達驅動

### 專為高效率、高產能而打造

以卓越性能深獲客戶肯定的 YL-610S自動指接系統,打榫 工作台採用伺服馬達驅動,展現快速、精密的打榫作業,可徹 底滿足客戶對自動化、高產能的打榫、接榫作業。

- 自動化打榫、接榫快速完成。
- PLC控制·動作順暢·操作簡易。
- 雙打榫刀軸(選配)。

- 特殊入料滾輪及壓板設計·可達到80%預接緊度。
- 整體機器結構高剛性,高速作業穩定性優異。
- 完善的技術支援。



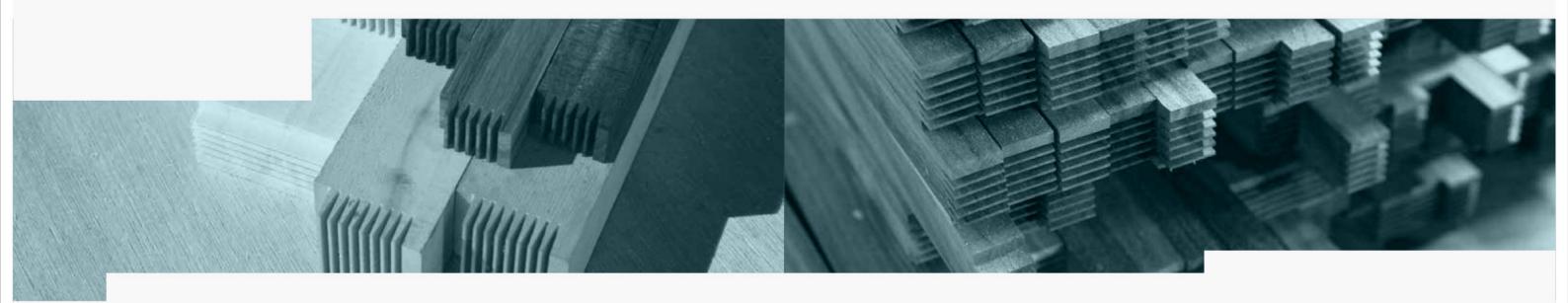
#### **Table Driven by Servo Motor**

■ The tables on the right and left finger shaper can be driven by servo motor, which combined with the use of linear guide ways and the rack for transmission. As a result, high moving speed can be achieved.

#### 工作台伺服馬達驅動

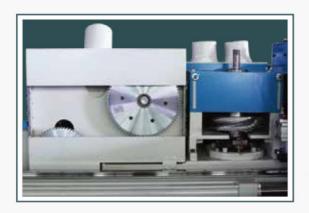
■ 左/右打榫機之工作台行程,可採用伺服馬達驅 動特色。







YL-530A3 LEFT FINGER SHAPER 左打榫機



#### LEFT FINGER SHAPER

- The left finger shaper is used for performing scoring, trimming and tenon shaping at the left side of wood material.
- With scoring at the bottom of wood, tearing problem can be avoided while cutting tenon.

#### 左打榫機

- 左打榫機可執行木料左邊之打溝、修邊 、打榫加工。
- 木料經由底部打溝、可避免打榫時之碎 裂問題。



YL-530A4 RIGHT FINGER SHAPER 右打榫機

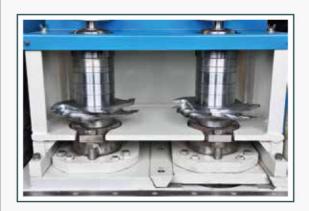


#### **RIGHT FINGER SHAPER**

- The right finger shaper is used for performing scoring, trimming, tenon shaping and gluing operations at the right side of wood material.
- With scoring at the top and bottom side of wood, tearing problem can be avoided while cutting tenon.

#### 右打榫機

- 右打榫機可執行木料右邊之打溝、 修邊、打榫、佈膠作業。
- 木料經由上、下面打溝,可避免打 榫時之碎裂問題。



### Twin Shaping Spindles (Optional)

- Specially designed to suit deeper tenon and high cutting speed, the twin shaping spindles not only effectively prevent tenon from tearing while upgrading machining efficiency.
- Applicable for right and left finger shapers.

#### 2支打榫刀軸(選配)

- 針對榫深較深及高速打榫加工需求而特別 設計的雙打榫刀軸。除了可有效避免指榫 裂開,並且可提升加工效率。
- 適用於左、右打榫機。

09 10



- Jointing length 4.6M (Optional)
- Specially designed infeed rollers in combination with pressure plate to achieve 80% tightness of pre-jointing.
- Powerful hydraulic drive ensures secure jointing effect.
- 接榫長度4.6米(選配)
- 特殊設計入料滾輪配合壓板,可達 80%預接緊度。
- 強力油壓驅動,接榫牢固。



### 80% Tightness of Pre-jointing

■ The infeed end of the finger jointer is designed with 3 sets of up / down infeed rollers. With the speed differential principle on the infeed rollers in combination with powerful large area pressure plate, the finger jointer can reach up to 80% tightness of pre-joint.

#### **Pneumatically Loaded Infeed** Rollers

■ The top three infeed rollers are loaded with individual air cylinder, making wood infeed smoother.

#### 80%預接緊度

■ 指接機之入料端配置上、下3組入料滾輪。 利用滾輪之差速原理, 並配合強力、大面 積壓板,具有高達80%之指榫預接效果

#### 氣壓式滾輪控制

■ 3個上入料滾輪各附有氣壓缸控制。使入料



#### **Link Chain Type Automatic Material Preparation Conveyor (Optional)**

■ The automatic material preparation conveyor is mounted before the left finger shaper, providing operators with sufficient time to place wood

#### **Length of Material Preparation** Conveyor

■ The length of the automatic material preparation conveyor is dependent on the table width of the finger shaper.

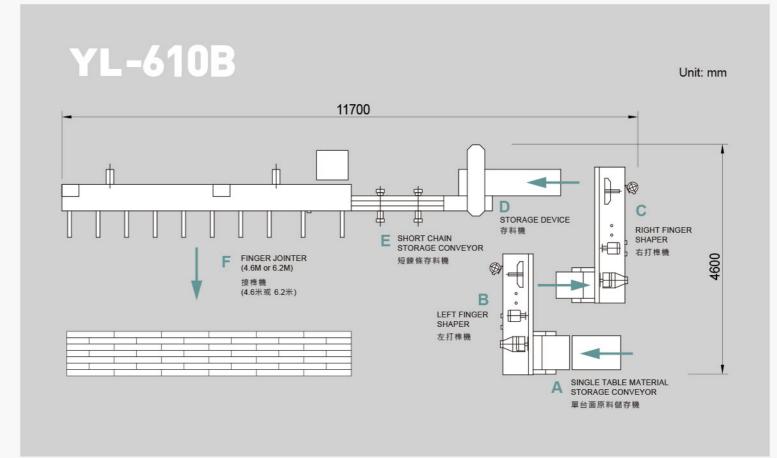
#### 履帶式自動備料機(選配)

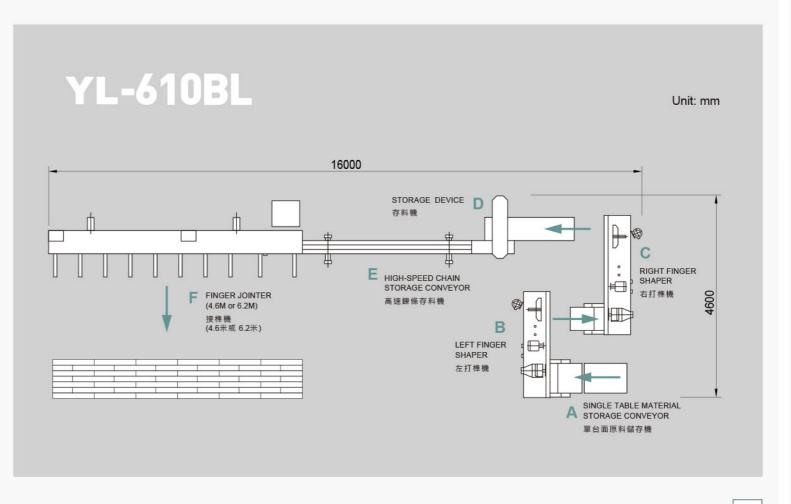
■ 自動備料機安裝在左打榫機前面,提供作業員 足夠的置料時間

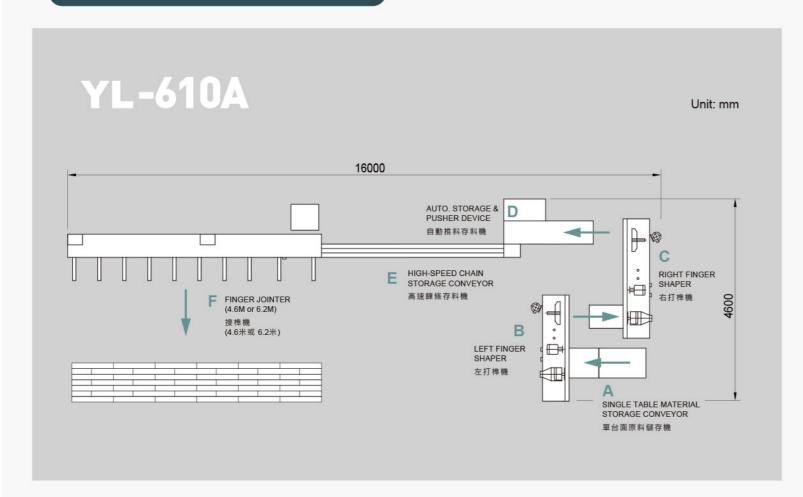
#### 備料機長度

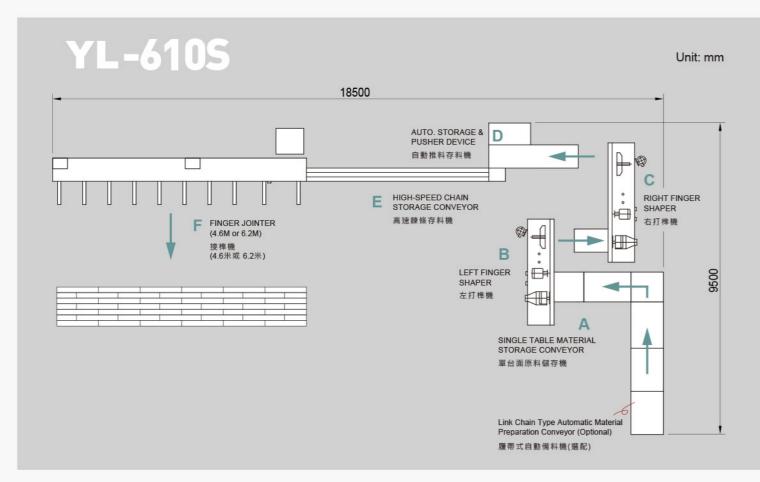
■ 自動備料機長度依打榫機之工作台寬度而定。

### **Motion Flow Chart** 動作流程圖









### Specification 規格表

<b>】</b> 單台面原料儲存機	SINGLE TABLE MATERIAL STORAGE	CONVEYOR		
儲料輸送皮帶	Material preparation conveyor belt	1/2HP x 1PC		
裝箱尺寸(長x寬x高)	Packing dimensions (L x W x H)	1980 x 910 x 1100mm		
<b>3</b> 左打榫機	LEFT FINGER SHAPER	YL-530S3	<b>Y</b> L-530A3	
工作台面(寬x長)	Table area (W x L)	610 x 8	300mm	
加工範圍(長x寬x高)	Working capacity (L x W x H)	180~800 x 610 x 150mm		
進料馬達	Infeed motor	1/2HP x 1PC		
修邊鋸片馬達	Trimming sawblade motor	7-1/2HP x 1PC		
打溝鋸片馬達	Scoring sawblade motor	2HP	2HP x 1PC	
打榫刀軸馬達	Shaping spindle motor	30HP x 1PC		
伺服馬達	Servo motor	5HP x 1PC	-	
油壓泵浦馬達	Hydraulic pump motor	5.	2HP x 1PC	
機械重量(淨重/毛重)	Machine weight (NW / GW)	2100 / 2300 kgs		
機械尺寸(長x寬x高)	Machine dimensions (L x W x H)	2780 x 1580 x 1550mm		
裝箱尺寸(長x寬x高)	Packing dimensions (L x W x H)	2880 x 1880 x 1600mm		
 ▶右打榫機	RIGHT FINGER SHAPER	<b>YL</b> -530S4	<b>YL</b> -530A4	
工作台面(寬x長)	Table area (W x L)	610 x 8	300mm	
加工範圍(長x寬x高)	Working capacity (L x W x H)	180~800 x 610 x 150mm		
進料馬達	Infeed motor	1/2HP x 1PC		
修邊鋸片馬達	Trimming sawblade motor	7-1/2HP x 1PC		
打溝鋸片馬達	Scoring sawblade motor	2HP x 2PCS		
打榫刀軸馬達	Shaping spindle motor	30HP x 1PC		
伺服馬達	Servo motor	5HP x 1PC	-	
油壓泵浦馬達	Hydraulic pump motor	-	2HP x 1PC	
佈膠馬達	Gluing motor	1/2HP	x 1PC	
機械重量(淨重/毛重)	Machine weight (NW / GW)	2250 / 2450 kgs		
機械尺寸(長x寬x高)	Machine dimensions (L x W x H)	3450 x 1580 x 1650mm		
裝箱尺寸(長x寬x高)	Packing dimensions (L x W x H)	3550 x 1880 x 1700mm		
<b>)</b> 自動推料存料機	AUTO. STORAGE & PUSHER DEVICE			
木材退料馬達	Wood retract motor	1/2HP x 1PC		
出料輪	Outfeed roller	1/2HP x 1PC		
裝箱尺寸(長x寬x高)	Packing dimensions (L x W x H)	2880 x 1880 x 1750mm		
	HIGH SPEED CHAIN STORAGE CON	VFYOR		
備料輸送皮帶	Material preparation conveyor belt	1/2HP x 1PC		
備料輸送鍊條	Material preparation feed chain	1HP x 2PCS		
裝箱尺寸(長x寬x高)	Packing dimensions (L x W x H)	5760 x 1040 x 1100mm		
: : 接榫機	FINGER JOINTER	YL-45CAP		
接木長度(標準)	Jointing length (Standard)	Standard 6.2M		
接木長度(選配)	Jointing length (Optional)	Optional 4.6M		
加工範圍(長x寬x高)(6.2M)	Working capacity (L x W x H)(6.2M)	4700~6200 x 22~150 x 18~75mm		
鋸切馬達	Cut off motor	3HP x 1PC		
油壓泵浦馬達	Hydraulic pump motor	7-1/2HP x 1PC		
機械重量(淨重/毛重)	Machine weight (NW / GW)	2400 / 2700 kgs		
機械尺寸(長x寬x高)(6.2M)	Machine dimensions (L x W x H)(6.2M)	7630 x 900 x 1700mm		
裝箱尺寸(長x寬x高)(6.2M)	Packing dimensions (L x W x H)(6.2M)	7730 x 1000 x 1780mm		

<sup>■</sup> 本公司保留產品規格,尺寸,設計特性變更之權利,恕不另行通知。

<sup>■</sup> The specifications, dimensions and design characteristics shown in this catalogue are subject to change without prior notice.