

SOLITAIRE SERIES

ALL NEW FINGER JOINT LINE for EXTRA SHORT WOOD

FL-24NF / FL-24NA / FJ-24N



No.6-10, Shenqing Rd., Qingshui Dist., Taichung City 436, Taiwan

www.ckmtw.com.tw

DEDICATED TO PURSUE HIGH LEVEL OF WOODWORKING TECHNOLOGY

Tel: +886-4-26201763 Fax: +886-4-26203763

CHENG KUANG WOOD MACHINERY WORKS CO., LTD.

E-mail: ckmmail@ckmtw.com.tw

A WORLD-CLASS WOODWORKING MACHINERY MANUFACTURER
Precision / Quality Proven / Ruggedly Constructed





FULLY AUTO FINGER JOINTING LINE

ONE MODEL, DIFFERENT ACCOMMODATIONS, AND ENDLESS POSSIBLE CREATIONS

Now, you can turn extra short wood waste into valuable material with the CKM FL-24N series Auto Finger Jointing Line! It's specially designed and integrated with user-friendly features, such as a single shaper configuration combined with rotary table.

The FL-24N series is your ultimate choice for increasing wood utilization and lowering production cost.

5 HIGHLIGHTS OF FL-24N

- BETTER EFFICIENCY WITH AUTOMATED PRODUCTION WHILE OCCUPYING LESS SPACE.
- ONE MAN OPERATION.
- ONE SHAPER CONDUCTS FINGER SHAPING ON BOTH SIDES.
- CAPABLE OF PROCESSING EXTRA SHORT WOOD TO 100 MM.
- **EASY SET-UP THROUGH** TOUCH SCREEN PANEL.



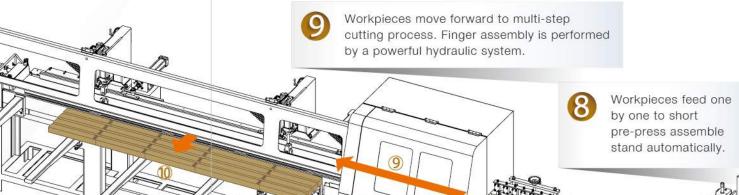
FL-24NF

LOOK INTO CKM FL-24N SERIES FOR BETTER IDEAS IN FINGER SHAPING AND JOINTING.

- Applicable for machining extra short wood waste of 100 mm.
- Single shaper cuts both ends of wood.
- Rotary table swivels 180°
- 0-2 mm cutting length tolerance.
- Higher shaping accuracy.
- Reduced cutting costs.
- Automatic spindle elevation.
- Automatic scoring saw movement. (opt.)
- Automatic rotary table.

PRODUCTION FLOW CHART

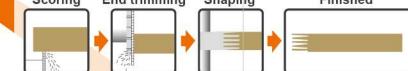






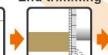
Automatic initial infeeding of workpiece.

FIRST CUT



SECOND CUT



















Work Piece Rotation:

Workpieces automatically rotated to the left finger

shaper. Automatic alignment

MAXIMIZE PROFIT, MINIMIZE WASTE 3

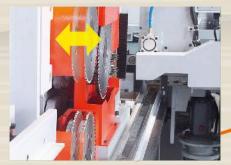




FEATURES

AUTOMATIC SCORING SAWBLADE MOVEMENT (Opt.)

The scoring sawblade movement is automatically controlled for increased convenience in positioning adjustment.

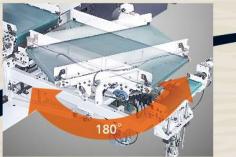


Scoring saw with auto switching device (Left & right)

Automatic Scoring Saw Movement

ROTARY TABLE

The table swivels 180°, allowing one shaper to cut the other end of wood.



Left & right auto switching finger shaper

PLC TOUCH SCREEN PANEL

Length of cut is calculated by an encoder and input on touch screen for increased accuracy.

- Touch screen for easier data input and operation control.
- Error indicator function provides quick troubleshooting.

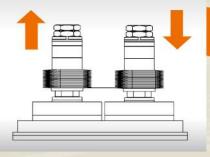


AUTOMATIC SHAPER SPINDLE ELEVATION

The shaper spindle elevation is driven by a servo motor, providinghigh positioning accuracy. (See (**) as indicated in production flow chart on p.3.)



Finger shaper with auto switching device (Left & right)



Automatic Shaper Spindle Elevation

ALLOW WORKPIECE DOWN TO 100 MM

FL-24 series turns short wood waste into useful workpiece.





PROFILE CUTTER (Opt.)

Profile cutter is available for producing a state-of-the-art



AUTO FINGER JOINTING LINE

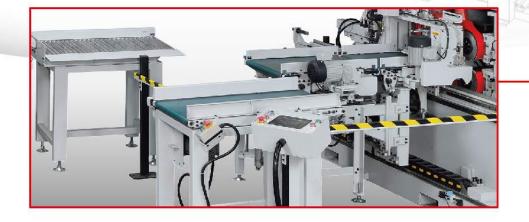
The hopper loader is mounted before the assembly press. After shaping, the operator may stack the workpieces in the hopper loader for automatic feed into the assembly press.

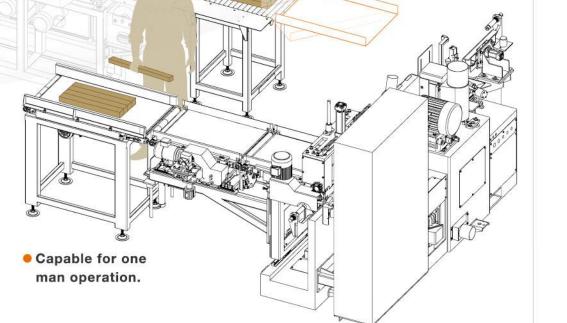


HOPPER LOADER

Automatic rotary table.

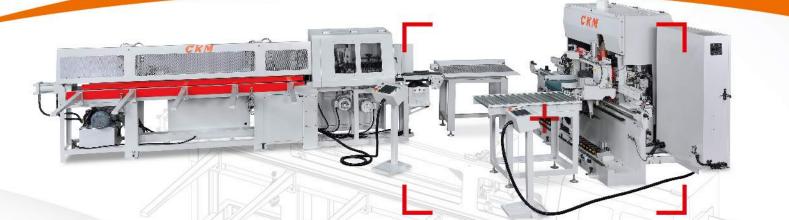
FL-24NA





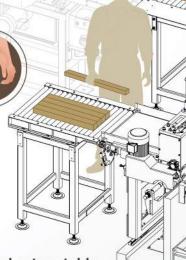
SEMI-AUTO FINGER JOINTING LINE





FJ-24N



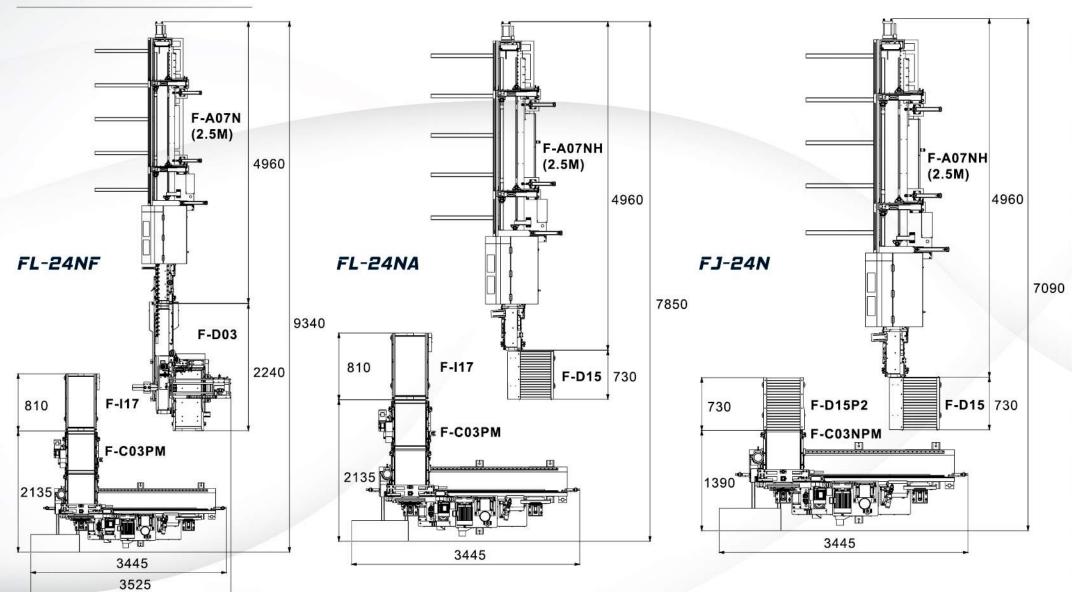


Manual rotary table

Capable for one man operation.

MAXIMIZE PROFIT, MINIMIZE WASTE 6

DIMENSIONS



FULLY AUTO FINGER JOINTING LINE (FL-24NF) AUTO FINGER JOINTING LINE (FL-24NA) SEMI-AUTO FINGER JOINTING LINE (FJ	-24N)
--	-------

F-A07	H(2.5M) ASSEMBLE PRESS	
F-D03 AUTOMATIC FEEDING TABLE	F-D15 MANUAL FEEDING TABLE	
F-C03PM FINGER SHAPER	F-C03NPM FINGER SHAPER	
F-I17 INITIAL AUTOMATIC FEEDIN	TABLE F-D15P2 MANUAL FEEDING TABLE	

MACHINE SPECIFICATIONS



MODEL	F-C03PM	F-C03NPM
Max. Width for Working Table	450 mm	450 mm
Range of Material Length	100~700 mm	100~700 mm
Range of Material Width	30~160 mm	30~160 mm
Scoring Saw Speed (opt.)	2800 / 3400 rpm (50/60HZ)	2800 / 3400 rpm (50/60HZ
Trimming Saw Speed	2800 / 3400 rpm (50/60HZ)	2800 / 3400 rpm (50/60HZ
Finger Cutter Speed	7000 rpm	7000 rpm
Finger Cutter diameter	Ø70 (I.D.) / Ø160 (O.D.)	Ø70 (I.D.) / Ø160 (O.D.)
Dust Outlet Diameter	6" x 2	6" x 2
Machine Dimension (LxWxH)	3220 x 2600 x 1920 mm	3220 x 1760 x 1920 mm
MOTOR HORSEPOWER		
Working Table Servo Motor	1 KW	1 KW
Spindle Switching Servo Motor	0.4 KW	0.4 KW
Table Turning Servo Motor	0.4 KW	
Conveyor Belt Motor	1/2 HP x 2	1/2 HP
Scoring Saw Motor	1 HP x 2	1 HP x 2
Trimming Saw Motor	5 HP	5 HP
Finger Cutter Motor	15 HP	15 HP

	F-CO3 FINGER SHAPER		
	F-C03PM	F-C03NPM	I
Table	450 mm	450 mm	N
th	100~700 mm	100~700 mm	N
า	30~160 mm	30~160 mm	N
ot.)	2800 / 3400 rpm (50/60HZ)	2800 / 3400 rpm (50/60HZ)	N
	2800 / 3400 rpm (50/60HZ)	2800 / 3400 rpm (50/60HZ)	C
	7000 rpm	7000 rpm	
	Ø70 (I.D.) / Ø160 (O.D.)	Ø70 (I.D.) / Ø160 (O.D.)	
	6" x 2	6" x 2	
WxH)	3220 x 2600 x 1920 mm	3220 x 1760 x 1920 mm	
WER			I
otor	1 KW	1 KW	Δ
o Motor	0.4 KW	0.4 KW	F
otor	0.4 KW	5.	F
	1/2 HP x 2	1/2 HP	N
	1 HP x 2	1 HP x 2	С
	5 HP	5 HP	N
	15 HP	15 HP	N

Roller type gluing system can be installed upon request.

F-I17 INITIAL AUTOMATIC FEEDING TABLE		
MODEL		
Max. Width for Working Table	450 mm	
Max. Material Length	700 mm	
Machine Dimension (LxWxH)	1000 x 610 x 970 mm	
MOTOR HORSEPOWER		
Conveyor Table Motor	1/2 HP	

F-RO7N/NH RSSEMBLE PRESS			
MODEL	2.5 M	5.0 M	
Available Length of Product	2500 mm	5000 mm	
Range of Material Thickness	20~60 mm	20~60 mm	
Range of Material Width	30~160 mm	30~160 mm	
Max. Assembly Press	0~100 kg/cm ²	0~100 kg/cm ²	
Dust Outlet Diameter	5"	5"	
Machine Dimensions (LxWxH)	5000 x 1160 x 1500 mm	7500 x 1160 x 1500 mm	
MOTOR HORSEPOWER			
Material Feeding Motor	1 HP x 2	1 HP x 2	
Sizing Saw Motor	5 HP	5 HP	
Hydraulic Pump Motor	3 HP	3 HP	

F-DO3 AUTOMATIC FEEDING TABLE		
MODEL		
Conveyor Table Width	450 mm	
Range of Material Length	100~700 mm	
Range of Material Width	30~160 mm	
Machine Dimension (LxWxH)	2750 x 1750 x 1600 mm	
MOTOR HORSEPOWER		
Infeed/Outfeed Motor	1 HP / 2 HP	
Feeding Drive Servo Motor	0.4 KW	
Brush Wheel Drive Motor	1/8 HP	

F-D15 MANUAL FEEDING TABLE			
MODEL	F-D15	F-D15P2	
Max. Width for Working Table	450 mm	450 mm	
Range of Material Length	100~700 mm	100~700 mm	
Machine Dimension (LxWxH)	750 x 700 x 1000 mm	750 x 600 x 900 mm	

All specifications, dimensions and design characteristics are subject to change without notice.