



FL-12CE FL-10ACE

Auto Finger Jointing Line



Upgrade Finger Jointing Quality And Productivity at the Same Time.

CHENG KUANG WOOD MACHINERY WORKS CO., LTD.

CKM[®]
Quality & Service

Auto Finger Jointing Line

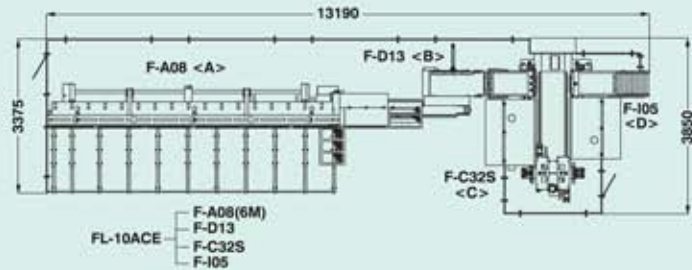
Upgrade Finger Jointing Quality And Productivity at the Same Time.

Learn how this new FL-10ACE and FL-12CE Auto Finger Jointing Line from CKM cuts production costs and boosts productivity.

Designed and built for extra high speed jointing job, this CKM FL-10ACE (FL-12CE) will help you to stay competitive. Enable you to turn wood waste into valuable material. Extra high feed speed up to 80M/min on the assemble press. Precisely constructed finger shapers assure high jointing accuracy. The entire production is also ruggedly constructed, ensuring maximum stability during high speed operation.

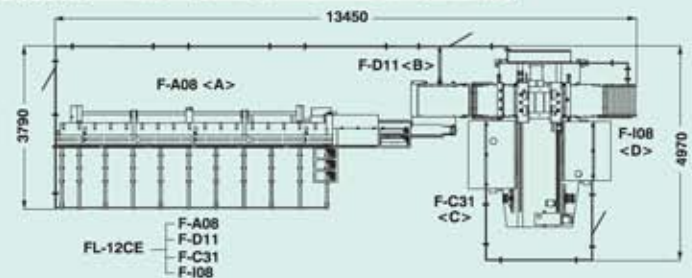
DIMENSIONAL DRAWING (FL-10ACE)

FL-10ACE — F-I05 → F-C32S → F-D13 → F-A08



DIMENSIONAL DRAWING (FL-12CE)

FL-12CE — F-I08 → F-C31 → F-D11 → F-A08



**Reduced Investment Cost !
Excellent for short Wood !
Save Installation Space !
Easy To Set Up !**

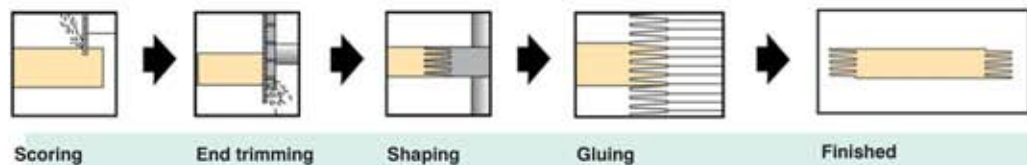


**FL-12CE
FL-10ACE**

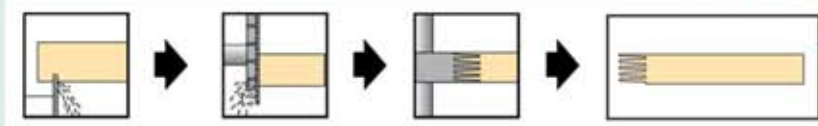
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Production Flow Chart

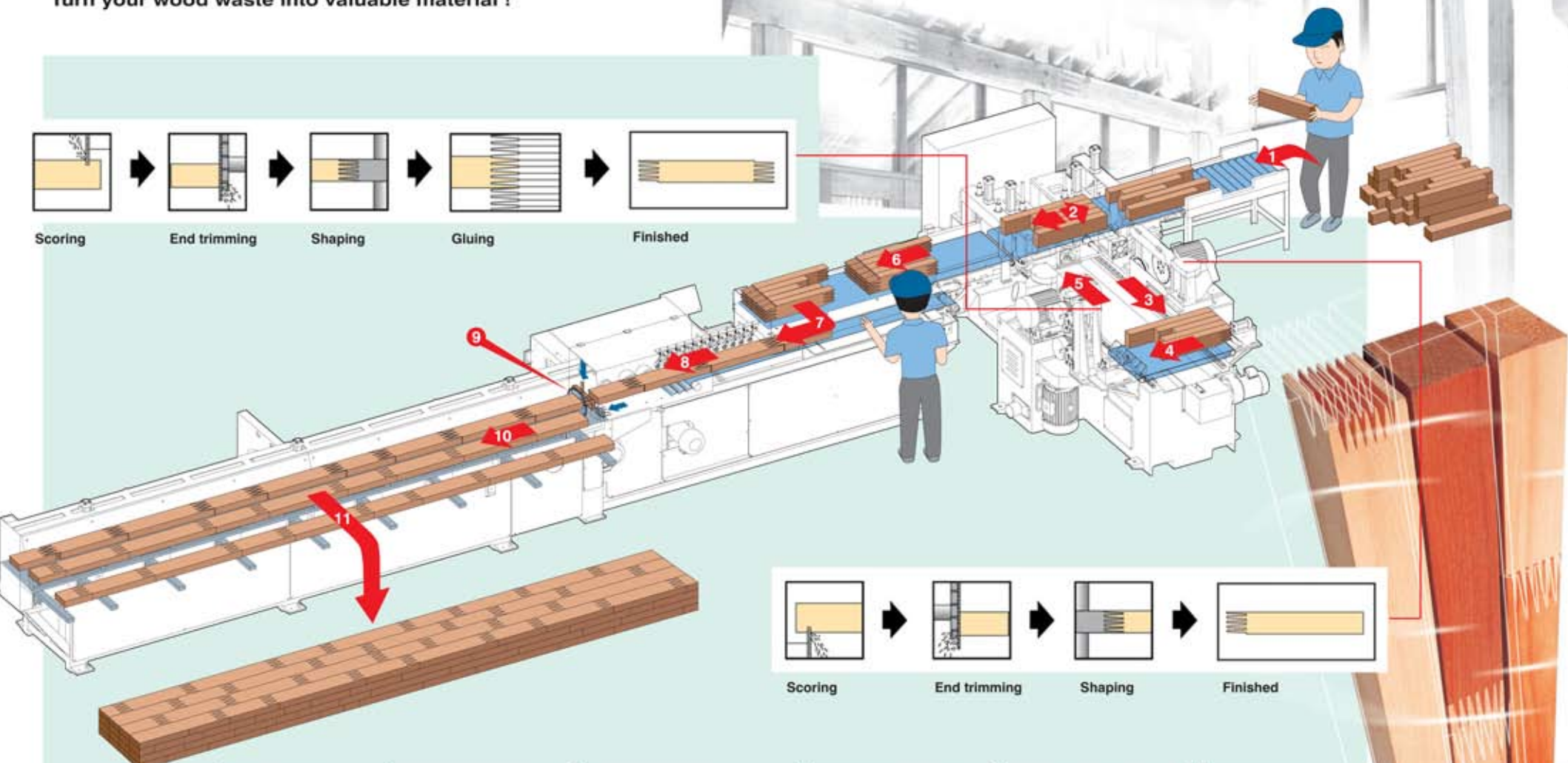
Turn your wood waste into valuable material !



Scoring End trimming Shaping Gluing Finished



Scoring End trimming Shaping Finished



1 Automatic initial infeeding of workpiece.

3 **Right Finger Shaper** performs scoring, trimming, and shaping on right end of workpiece.

5 **Left Finger Shaper** performs scoring, trimming, shaping and gluing on left end of workpiece.

7 Manually feed workpieces one by one.

9 Workpieces travel forward for multiple-step cutting-to-length.

11 Final product out-feed on staging platform.

2 Automatic feed table. Automatic alignment.

4 Workpieces automatically travel into left finger shaper. Automatic alignment.

6 Workpieces travel onto the standby conveyor, then feed forward onto automatic feeding table.

8 Work pieces automatically feed to pre-press assemble stand.

10 Finger assembly is performed by a powerful hydraulic system.

F-C31

Capacity 650mm(W)x1000mm(L)

F-C32S

Capacity 450mm(W)x700mm(L)

FINGER SHAPER WITH SCORING

- Auto series.
- Specially designed for short stock up to 120mm.
- With scoring saw on finger shaper.
- Synchronized motions for length cutting and jointing for higher efficiency.

• Finger shaper is equipped with front and back sheet metal guard.



• Front and back sheet metal guard and right and left screen guard are removed for demonstration purpose.

FINGER SHAPER (Left Hand)

It combines three functions-scoring, trimming, shaping in a unit on left end of the workpiece.

The mechanism performs scoring, trimming, shaping operations on left end of the workpiece. Scoring blade in front of trimming blade cut bottom edge giving tear-free. Finger cutters produce smooth finger shape, cutting capacity 160mm wide.

FINGER SHAPER (Right Hand)

It combines four functions-scoring, trimming, shaping and gluing on right end of the workpiece.

The mechanism performs scoring, trimming, shaping and gluing operations on right end of the workpiece. Scoring blade cut top and bottom edge giving tear-free.

F-D11

650mm width

F-D13

450mm width

PNEUMATIC FEEDING TABLE MANUAL WORKPIECE TURN-OVER

- The workpieces are turned-over before feeding to automatic feeding table.
- At this station, the operator may inspect cutting quality produced by finger shapers.



F-A08

FINGER ASSEMBLER CHOICE OF 4.5 OR 6 METERS

- For jointing two short sticks end to end to produce a longer one, up to 4.5 meters or 6 meters in length. Two-step sequence of finger assembler from feeding, multiple-step cut-off to pressing, outfeed is synchronized.
- Movable control box provides added convenience of operation.



F-I05

450mm width

F-I08

650mm width

ROLLER TYPE CONVEYOR TABLE (Standard)

F-I01

MULTI-STAGE INITIAL CONVEYOR TABLE (Optional)

- The three initial infeed tables allows for continuous infeed of workpiece.



SPECIFICATIONS

| AUTOMATIC FINGER SHAPER | F-C32S | F-C31 |
|---------------------------------------|--------------------------------|--------------------------------|
| Max. working width | 450mm | 650mm |
| Range of material length | 150~700mm | 150~1000mm |
| Range of material height | 30~160mm | 30~160mm |
| Trim saw speed | 2800 RPM(50HZ), 3400 RPM(60HZ) | 2800RPM(50HZ), 3400 RPM(60HZ) |
| Finger cutter speed | 5000RPM | 5000RPM |
| Scoring saw speed | 2800 RPM(50HZ), 3400 RPM(60HZ) | 2800 RPM(50HZ), 3400 RPM(60HZ) |
| Upper scoring saw speed | 2800 RPM(50HZ), 3400 RPM(60HZ) | 2800 RPM(50HZ), 3400 RPM(60HZ) |
| Lower scoring saw speed | 2800 RPM(50HZ), 3400 RPM(60HZ) | 2800 RPM(50HZ), 3400 RPM(60HZ) |
| MOTOR HORSEPOWER | | |
| Table drive motor | 2HPx1 | 2HP |
| For table drive | 1/2HPx3 | 1/2HPx3 |
| For scoring saw | 1HPx3 | 1HPx3 |
| For trim saw | 5HPx2 | 10HPx2 |
| For finger cutter spindle | 15HPx2 | 20HPx2 |
| Finger cutter specif. (I.D./Max.O.D.) | ø70/ø160mm | ø70/ø160mm |
| Dust outlet diameter | 6"x4 | 6"x4 |
| Machine dimension (LxWxH) | 3450x2130x1700mm | 3750x3070x1650mm |
| Noise level | 88.2Db | 88.2Db |
| Packing dimension (LxWxH) | 3550x2230x1800mm | 4850x2130x1750mm |

NOTE: ø50mm Clamping collars with various thickness for finger cutter are optional accessories to be ordered.

| ASSEMBLE PRESS | F-A08 (4.5M) | F-A08 (6M) |
|----------------------------|--------------------------|--------------------------|
| Max. product length | 4500mm | 6200mm |
| Range of material width | 15-160mm | 15-160mm |
| Range of material height | 15-60mm | 15-60mm |
| Feed speed | 80m/min | 80m/min |
| Range of pressing pressure | 0-150Kgs/cm ² | 0-150Kgs/cm ² |
| Production rate | 5pcs/min | 3-4pcs/min |
| MOTOR HORSEPOWER | | |
| For feedinf | 2HPx1, 5HPx1 | 2HPx1, 5HPx1 |
| For hydraulic pump | 5HP | 5HP |
| For sizing | 5HP | 5HP |
| Sawblade specif | 3Txø25.4xø355mm | 3Txø25.4xø355mm |
| Dust outlet diameter | 4" (101.6mm) | 4" (101.6mm) |
| Machine dimensions (LxHxW) | 7990x1380x1400mm | 9690x1380x1510mm |
| Noise level | 84Db | 84Db |
| Packing dimensions (LxHxW) | 6360x1050x1500mm | 8060x1050x1500mm |
| Packing dimensions (LxHxW) | 3210x610x1180mm | 3210x610x1180mm |

| PNEUMATIC FEEDINF TABLE | F-D13 | F-D11 |
|--------------------------------|--------------|--------------|
| Conveyor table width | 450mm | 650mm |
| Table height | 860mm | 860mm |
| Feed drive motor | 1HP | 1HP |
| Overall length | 1420mm | 1420mm |
| Overall width | 1390mm | 1790mm |
| Overall height | 975mm | 975mm |

| WORKPIECE REST TABLE | F-I05 | F-I08 |
|------------------------------|--------------|--------------|
| Table width | 450mm | 650mm |
| Table height | 970mm | 970mm |
| Overall length | 700mm | 700mm |
| Overall width | 560mm | 860mm |
| Overall height | 960mm | 960mm |
| Packing dimensions (LxHxW)mm | 800x1020x660 | 800x1020x960 |

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

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