

# CAM-WOOD



## **HIGH SPEED SERVO DRIVE TYPE AUTO FINGER JOINT SYSTEM**

Model: *IAT-620-150HX* (6" Vertical Shaper) 3" H x 6" W x 20 ft

### Optional:

- 24 ft Finished Length
- 8" Finished Width
- UHJ-600 Infinite Finished Length
- Model: PC-62 Auto Feed Magazine

## TECHNICAL SPECIFICATIONS

### Incoming Block Requirements:

- Incoming block lengths from 6" to 31.5"
- Blocks must be at least 50% longer than their width.
- Block thickness from 1/2" to 3"
- Block width from 1" to 6"
- Assembled lengths from 10' to 20' or 24' (Options)
- For use with PVAC adhesives
- Works equally well with soft & hardwoods.
- Moisture content from 8 to 12%
- Blocks to be surfaced (4) sides thru a Moulder or 4-sided Planer to  $\pm 0.2\text{mm}$  with 90° right angle corners.

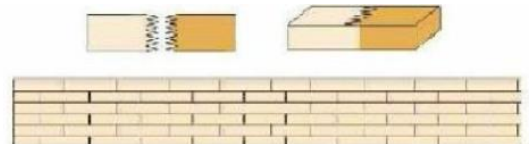
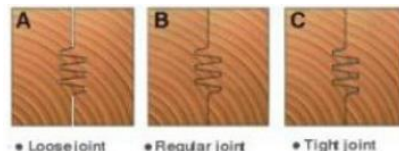
## TO BE SUPPLIED BY CUSTOMER

- Electric power supply to electrical cabinet
- Constant voltage with deviations of 5% or less
- Temperature range for computer control should not exceed 95°F.
- Maximum humidity for computer control system under 65%
- Hydraulic oil
- Skilled operating and maintenance personnel
- Total electricity demand: 63.75 KW, 85 HP
- 30 HP Compressor with a 50-to-60-gallon Air Receiver

## CAPACITY

### Shaper Capacity:

- Shift = 480 minutes Finger length to buyer's requirement
- Example: 12" Average block length at the Shapers
- 1" x 2" Average block cross section
- Shaper max speed of (5) table strokes per minute
- Table speed will change as block widths become "wider" (or "taller" at the Shapers)
- Table accepts up to (24) blocks when vertical finger jointing 1" W x 2" H blocks.
- Table accepts up to (12) blocks when horizontal finger jointing 2" W x 1" H blocks.
- Number of timber pieces per shaper table (horizontal finger jointing 2" x 1")
- Capacity of the press is (5) table cycles per minute.
- **NOTE:**
- 20' or 24' Press length (Options)
- 80% Rate of utilization



## TOTAL CAPACITIES OF THE LINE

### Capacity:

- **VERTICAL Finger Jointing:**
  - Capacity of the shaper when finger jointing 1" x 2" x 12" long blocks: (5) tables stroke per minute X 24-blocks per table load X 1' average infeed block length x 480 Minutes per shift X 0.8 rate of utilization = **46,080 lineal feet per shift**
- **HORIZONTAL Finger Jointing w/2 operators:**
  - Capacity of the shaper when finger jointing 2" x 1" x 12" long blocks: (5) table strokes per minute X 12 blocks per table load x 1' average infeed block length x 480 Minutes per shift X 0.8 rate of utilization = **23,040 lineal feet per shift**
- **Capacity of the Press w/2 operators:** (4) pcs Loads per Min x 20' min x 480 Min per shift x 0.8 rate of utilization = **30,720 lineal feet per shift (24' Model = 36,864 lineal feet per shift)**

\*The Capacity data is the max. of assembler, but the real capacity is depending on the timber amount of shaper\*\*

#### **Hold Down Press:**

1. The Side Press will come in first to align the material first then backward.
2. The Top Press come down to hold the material.
3. The Side Press coming again to firmly hold the material

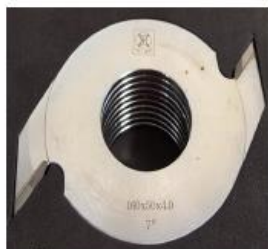


#### **Saw & Hogging Station:**

- Saw blade to cut off the material:  
(10" Dia x 100T x 50 mm Arbor)
- Hogging Cutter to chipping the extra material:  
(10" x 12T x 1" Arbor)



Finger Shaper Cutter to make finger at end of the material.



## Optional: PC-62 Auto Storage-feeding Magazine Conveyor



- Operator fills the width of the magazine with blocks placed on the slot. Synchronized with the finger shaper station. Conveyor will continually feed in, keeping the system none stop, full and productive.
- Working Timber dimension Length 32" x Width 24.4"
- Feeding conveyor motor power 1/2HP
- Feeding chain motor power 2HP
- Feeding speed 115 FPM

### **A. Belt Infeed Conveyor 2 Units: (DTC-62A)**



- Operator fills the width of the 1st conveyor with blocks placed on edge. 1st Conveyor is controlled by the operator, feeding the 2nd buffer conveyor. Combined, the (2) conveyors facilitate keeping the system full and productive.
- Each Conveyor is 24" wide x 31.5" long.
- Powered with 1/2 HP motors.
- Controlled by the system.
- Feeding at a constant rate of 180 FPM



## B. Right-Hand Finger Jointer Shape (FSR-62S)



- Feed table is 24" wide and accepts blocks from 6" to 31.5" long x 1/2" to 6" wide.
- Working Thickness: 1/2" to 6" (Vertical)
- Scoring saw 2 HP - 2,850 RPM , accepts 7" dia. x 50 tooth x 5 mm blade.
- Trim & Hogging saw; 10 HP - 4,800 RPM accepts 10" dia. x 100 tooth x 5 mm blade.
- Shaper spindle is driven by a 25 HP motor.
- Spindle diameter is 50 mm and runs at 6,600 RPM.
- Maximum shaper cutterhead diameter 6.3" (160mm)
- Conveyor powered by 1/2 HP motor.
- Table movement is Inverter driven; powered by a 3.87 HP Servo motor with cycle speeds from 1 to 5 cycles per minute. Motor senses load and varies travel as needed.

## C. Belt Infeed Conveyor: (TC-62A)



- Transfer the timber between the 1<sup>st</sup> and 2<sup>nd</sup> shaper.
- Conveyor size is 24" wide x 31.5" long.
- Powered with 1/2 HP motors.
- Controlled by the system.
- Feeding at a constant rate of 180 FPM

## D. Left-Hand Finger Shaper with Glue Spreader (FSL-62S)



- Feed table is 24" wide and accepts blocks from 6" to 31.5" long x 1/2" to 6" wide.
  - Working Thickness: 1/2" to 6"
  - Scoring saw 2 HP - 2,850 RPM , accepts 7" dia. x 50 tooth x 5 mm blade.
  - Trim / Hogging saw; 10 HP - 4,800 RPM accepts 10" dia. x 100 tooth x 5 mm blade.
  - Shaper spindle is driven by a 25 HP motor.
  - Spindle diameter is 50mm and runs at 6,600 RPM.
  - 6.3" Maximum shaper cutterhead diameter
  - Conveyor powered by 1/2 HP motor.
  - Table movement is Inverter driven; powered by a 2.9 KW servo motor and cycle speeds from 1 to 5 cycles/Min. Motor senses load and varies travel as needed.
  - **Includes Injection type Glue Applicator:**
  - Extrudes adhesive into the fingers without messy runoff.
  - 6" Comb height is standard.
  - Finger pitch 4 mm
  - 10 - 12 mm finger length is.
- Standard equipment  
(special sizes made as options)



## E. Belt Infeed Conveyor: (STC-62B)



- Transfer the timber between the 2<sup>nd</sup> shaper and Assembly Press.
- Conveyor size is 24" wide x 31.5" long.
- Powered with 1/2 HP motor.
- [Conveyor Bush Cleaner with 1/2 HP motor](#)
- Controlled by the system.

## F. Steel Roller Conveyor: RO-62



- Transfer the timber between the 2<sup>nd</sup> shaper and Assembly Press.
- Conveyor size is 24" wide x 31.5" long.

## Narrow Board Feeding Conveyor: SCC-20



- Transfer the timber between the 2<sup>nd</sup> shaper and Assembly Press.
- Conveyor size is 24" wide x 31.5" long.
- Powered with 1/2 HP motor.
- Controlled by the system.

## H. Hydraulic Finger Jointer Assembler (NFJ-600)



- Capacity is from 1" to 6" wide x 1/2" to 3" high x up to 20' to 24' long (Options).
- Upper and lower pre-assembly rolls driving motor 2 HP each.
- 7.5 HP infeed conveyor inverter drive
- In-feed conveyor speed from 30 to 230 FPM (Variable Speed by Inverter)
- Cutoff saw 5 HP - 2,850 RPM accepts 14" dia. x 120 tooth x 4 mm kerf blade.
- 5 HP Hydraulic power pack for final squeeze assembly.
- Capacity from 1 - 4 table loads per minute.
- Feeding at a constant rate of 180 FPM
- Standard Stops Block  $\frac{3}{4}$ ' x 1" (1pcs) and  $\frac{3}{4}$ " x 3" (1pcs) (Special size by Custom order)

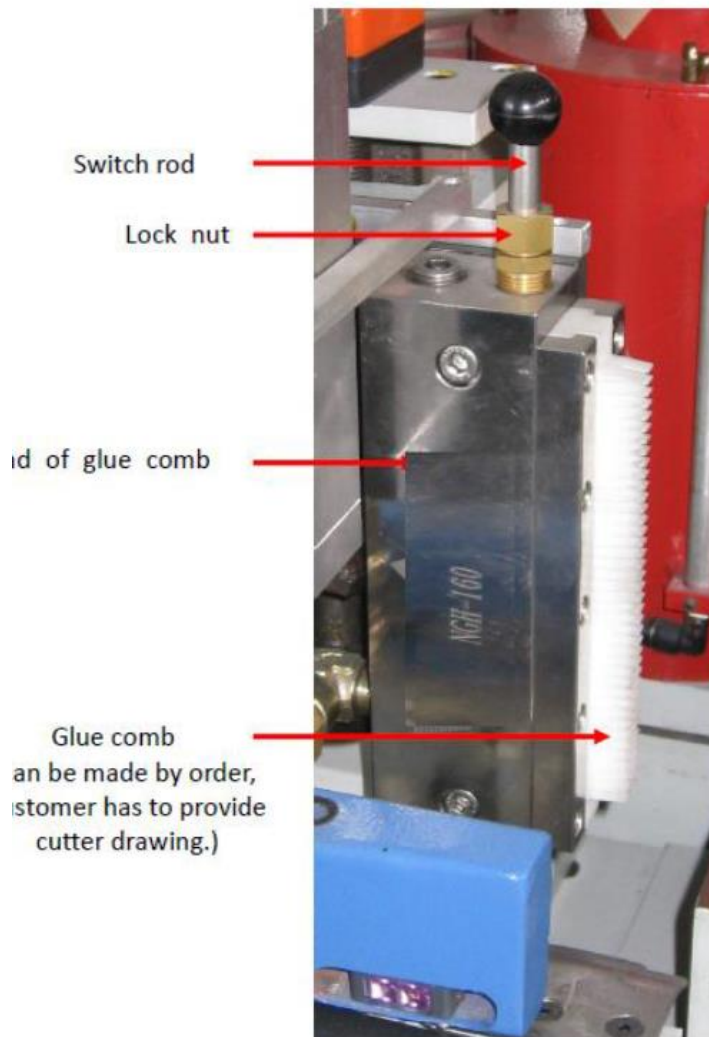
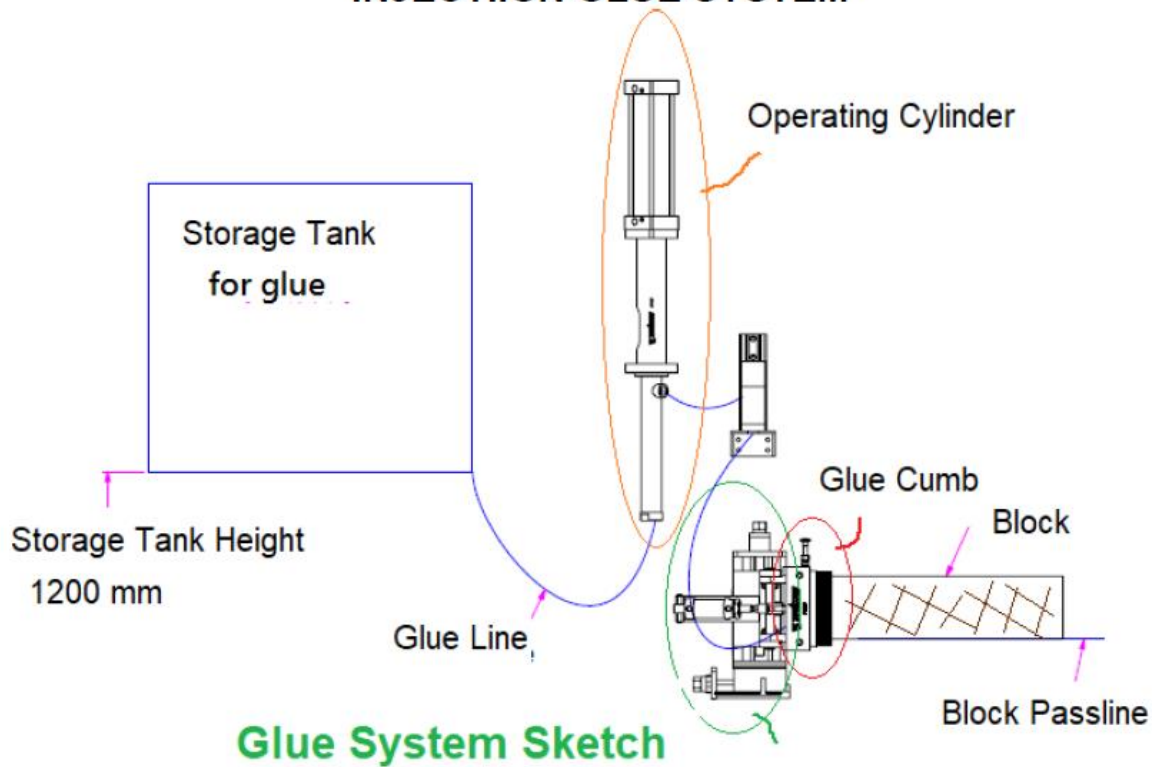
## H. Optional Infinite Length Jointer Assembler (UFJ-600)



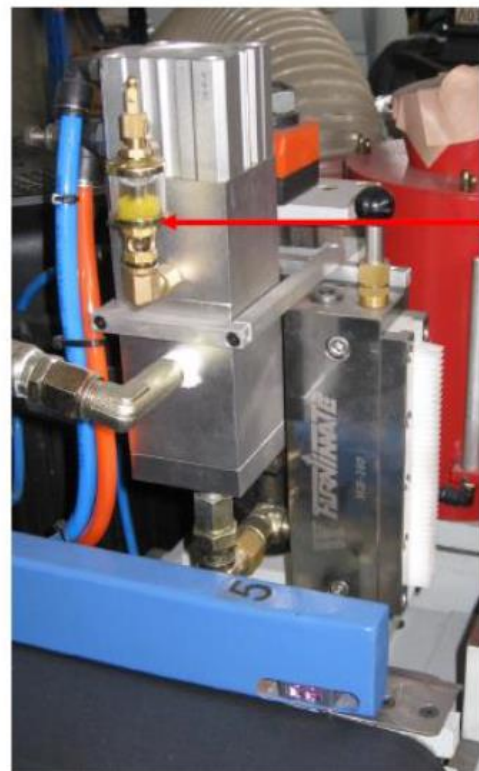
- Capacity is from 1" to 8" or 10" (Options) wide x 1" to 4" high, Infinite Finish Length.
- Upper pre-assembly rolls driving motor 2 HP x 1 unit.
- Lower pre-assembly rolls driving motor 3 HP x 1 unit.
- 10 HP infeed conveyor inverter drive
- In-feed conveyor speed from 30 to 170 FPM (Variable Speed by Inverter)
- Cutoff saw 7.5 HP - 2,850 RPM accepts 14" dia. x 120 tooth x 4 mm kerf blade.
- 10 HP Hydraulic power pack for final squeeze assembly.
- Feeding at a constant rate of 180 FPM

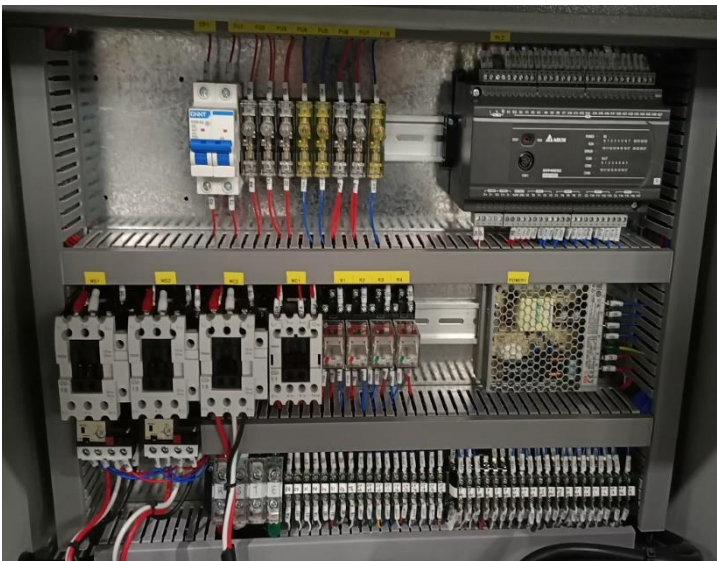
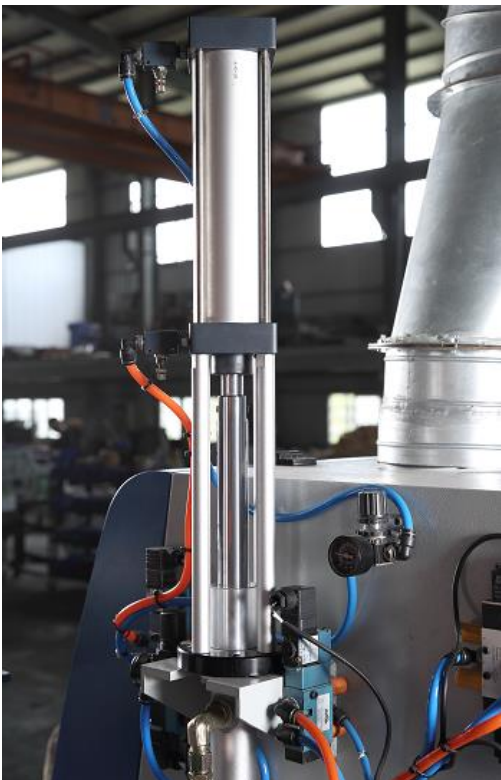
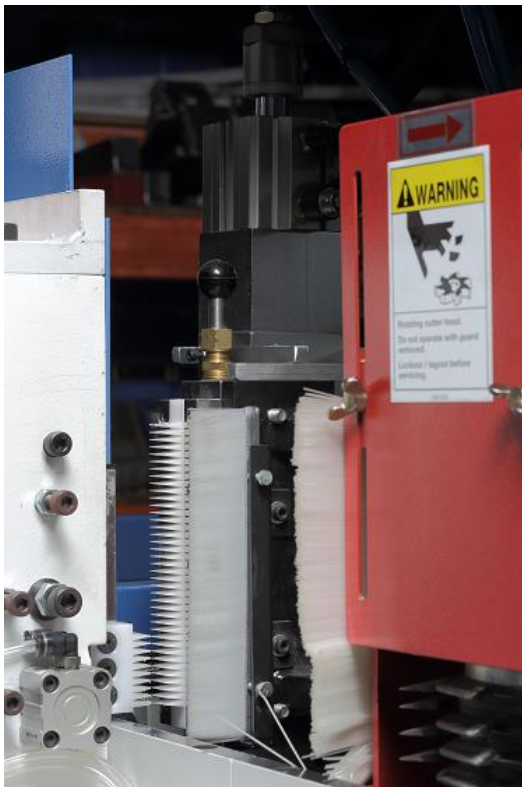
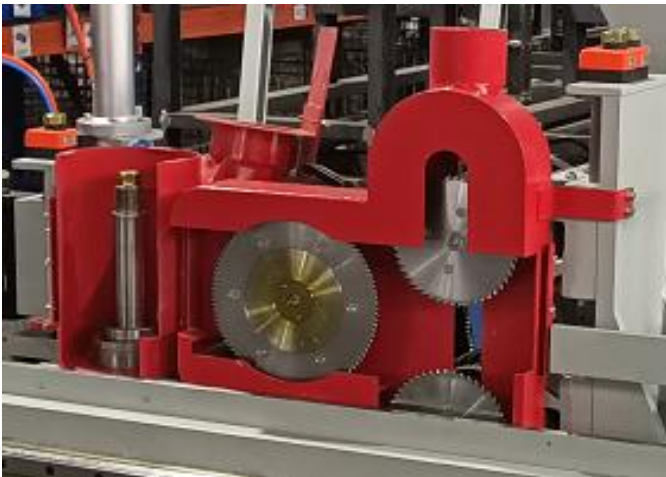


## INJECTION GLUE SYSTEM

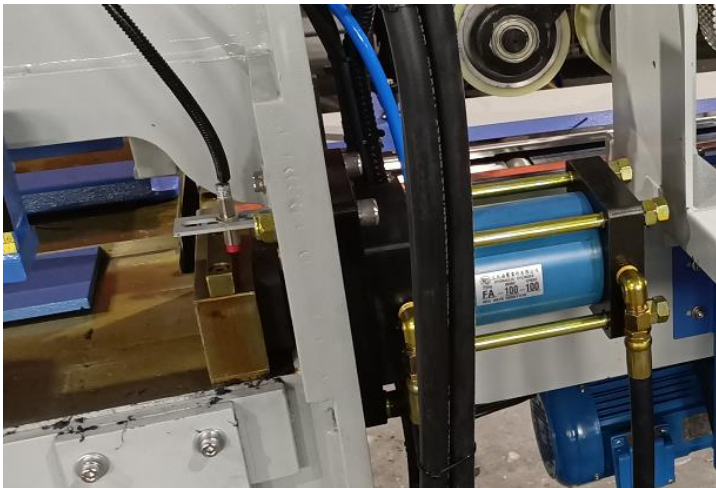
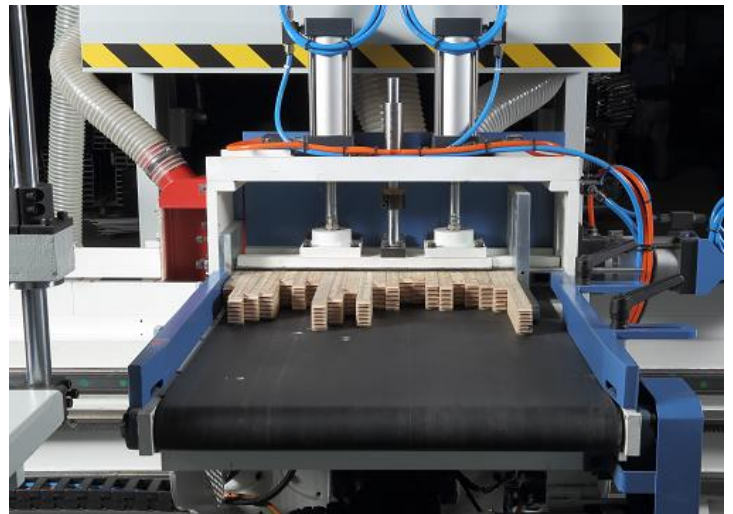
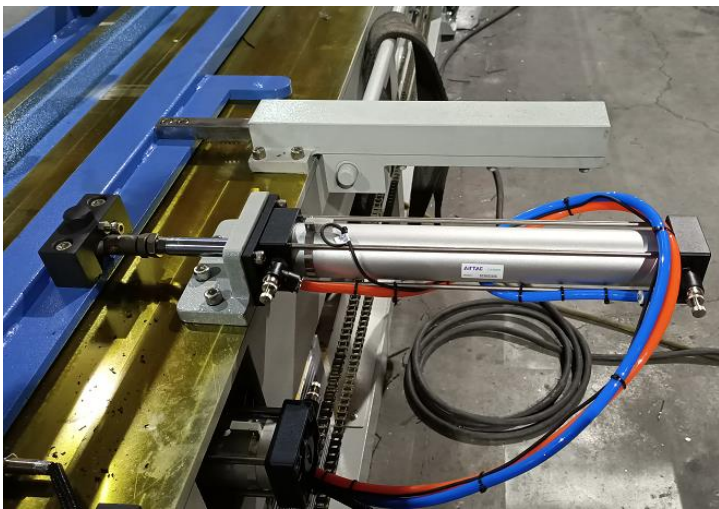


Oil indicator  
(Add oil regularly, recommend to use WD-40)

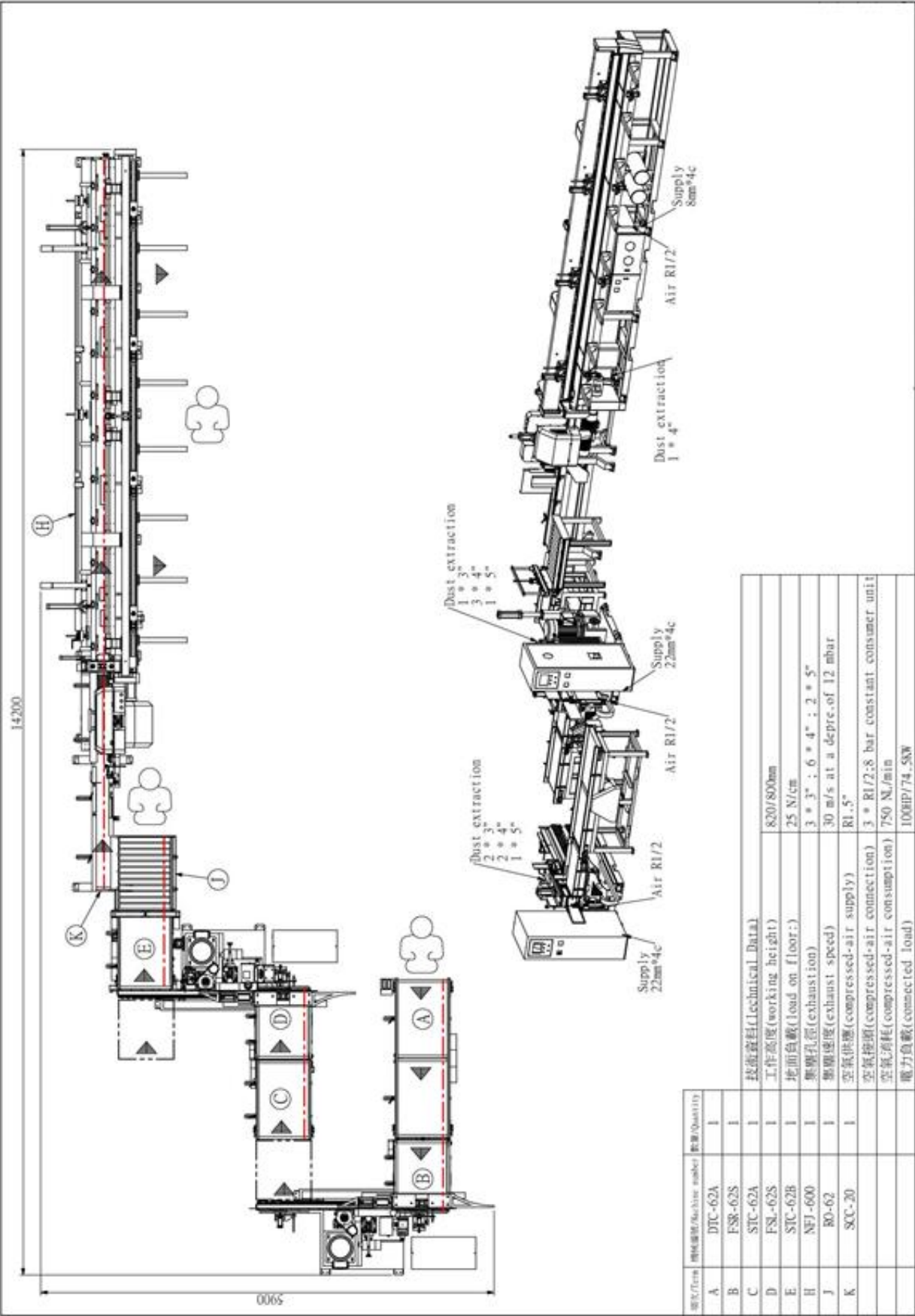








# Model: IAT Type: 620 6" x 20 ft





# Model: IAT-AM Type: with Auto Feed Magaz

