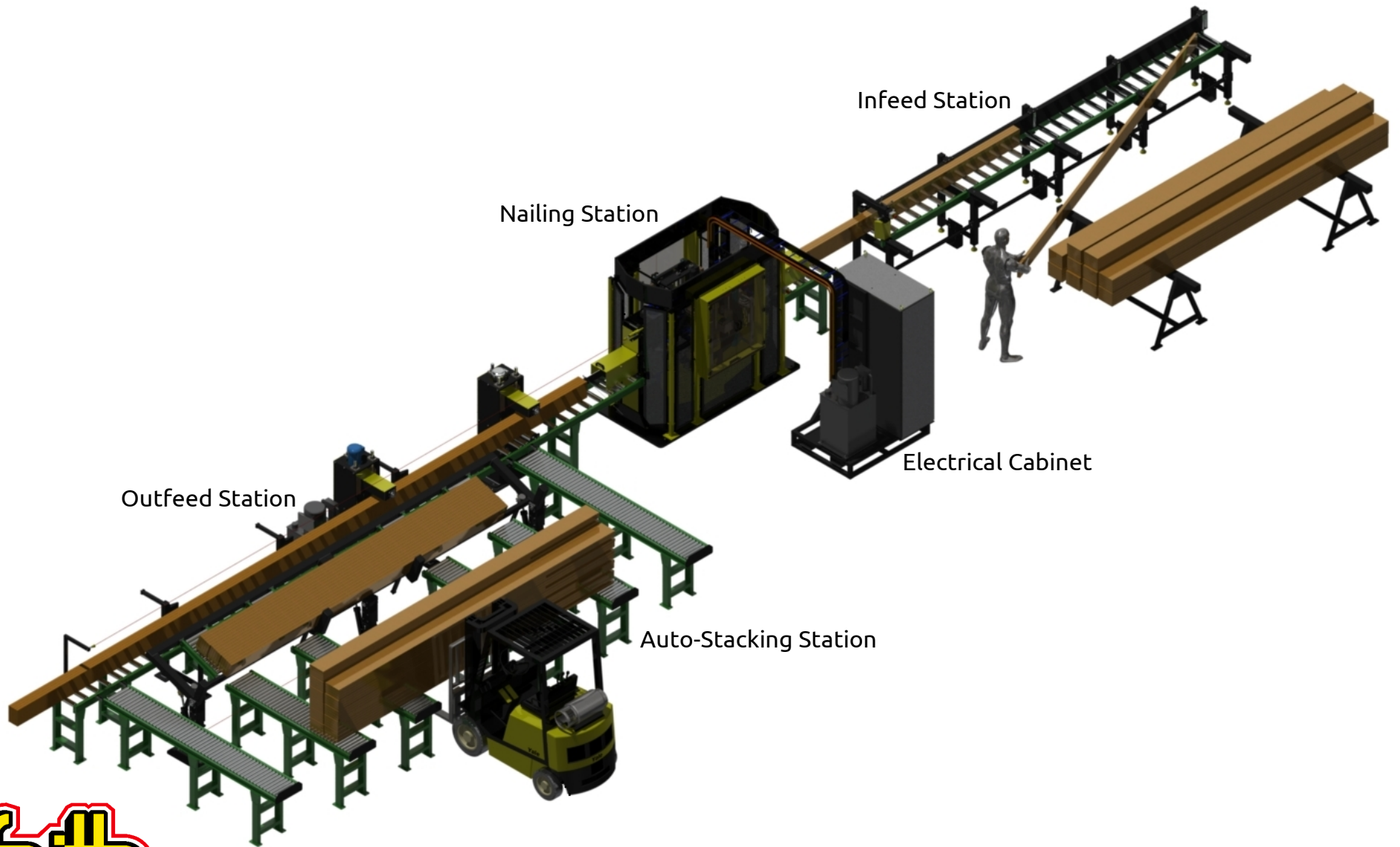


# Column Laminating Machine

*FEI-6000 CM*



# Column Laminating Machine

## FEI-6000 CM

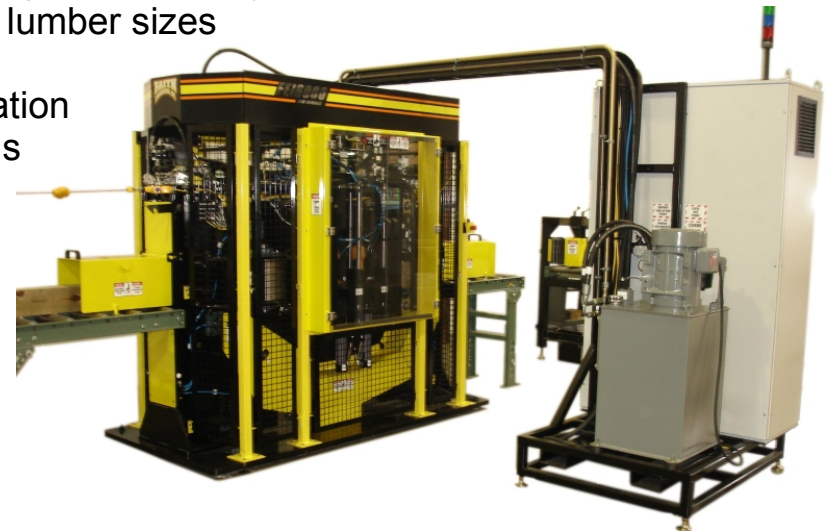


### Issues Associated with the Manufacturing of Buildings

- Availability and cost of large dimensionally-sized building lumber
- Labor costs related to manual construction even with the use of jigs and fixtures
- Quality from manufactured columns using commercially available lumber relating to straightness
- Inadequate load tolerances caused by inconsistencies from manual manufacturing processes

### How To Solve These Issues

- Increase supply by assembling (or laminating) columns using commercially available lumber
- Reduce costs by stocking commercially available standard lumber sizes
- Reduce labor costs by;
  - Increasing operator throughput by use of more automation
  - Eliminating rework of incorrectly manufactured columns
- Increase quality with precise and repeatable nail patterns



# Column Laminating Machine

## *FEI-6000 CM*

### Machine Features & Benefits

- Intuitive Operator Interface (HMI)  
Reduces operator training labor costs
- Dynamically adjustable nailing pattern  
Reduces nail consumption while achieving engineered load specifications
- Hydraulically actuated lumber compression rollers  
Improves the straightness resulting in a higher quality of finished columns
- Servo controlled linear feed  
Provides flexible and accurate nailing patterns, increasing quality
- Fully enclosed machine safety guarding  
Inhibits work-related accidents and injuries
- Finished column auto stack and bundling  
Reduces labor and increases machine throughput
- Rigid, heavy-duty mild steel construction  
Increase machine longevity while reducing the overall cost
- Remote connectivity for machine diagnostic support  
Allows for quick, responsive service – keeping your machine running
- Quick and easy column size change-over  
Increases operator efficiency resulting in greater machine throughput



# Column Laminating Machine

## *FEI-6000 CM*

### Machine Capabilities

#### *Infeed Capacities*

2" x 6", 8" or 10" pressure-treated commercially available lumber

#### *Outfeed Capacities*

Minimum 8 foot laminated column

Maximum laminated column length is limited only by building size constraints

Columns can be laminated between 3 to 5 layers thick

Processing speed of 11 feet per minute on average (with 9" nailing pattern)

#### *Nailing Station*

Utilizes four independently adjustable pneumatic nailing guns

Adjustable across board width (up/down) and distance from board (in/out)

High-powered clamping rollers correcting lumber inconsistencies

Lumber absence error detection

Optionally; low nail conditions can be detected by manually loaded guns

#### *Auto-Stacking Station*

Fully automatic stacking of up to 6 columns

Maximum bundle width of 8 stacks

Safety strobe light and audible alarm while in motion



# Column Laminating Machine

## FEI-6000 CM



### Machine Specifications

Machine Footprint; 14 ft x 67 ft

- Infeed Station; 13 ft x 24 ft
- Nailing Station; 5 ft x 11 ft
- Outfeed Station; 14 ft x 33 ft
- Electrical Cabinet; 4 ft x 6 ft

Power Requirements

- 460v AC 3-phase @ 100 Amps

Pneumatic Requirements

- 90 PSI @ 25 CFM
- \* Depends on nail gun usage*



# Column Laminating Machine

## FEI-6000 CM



### Machine Components

*Controls, Safety Devices, Interface*  
Allen-Bradley

*Conveyors*  
Hytrol



*Hydraulics*  
Parker

*Nail Guns*  
Bostitch



*Pneumatics*  
Festo



*Servos*  
Exlar

