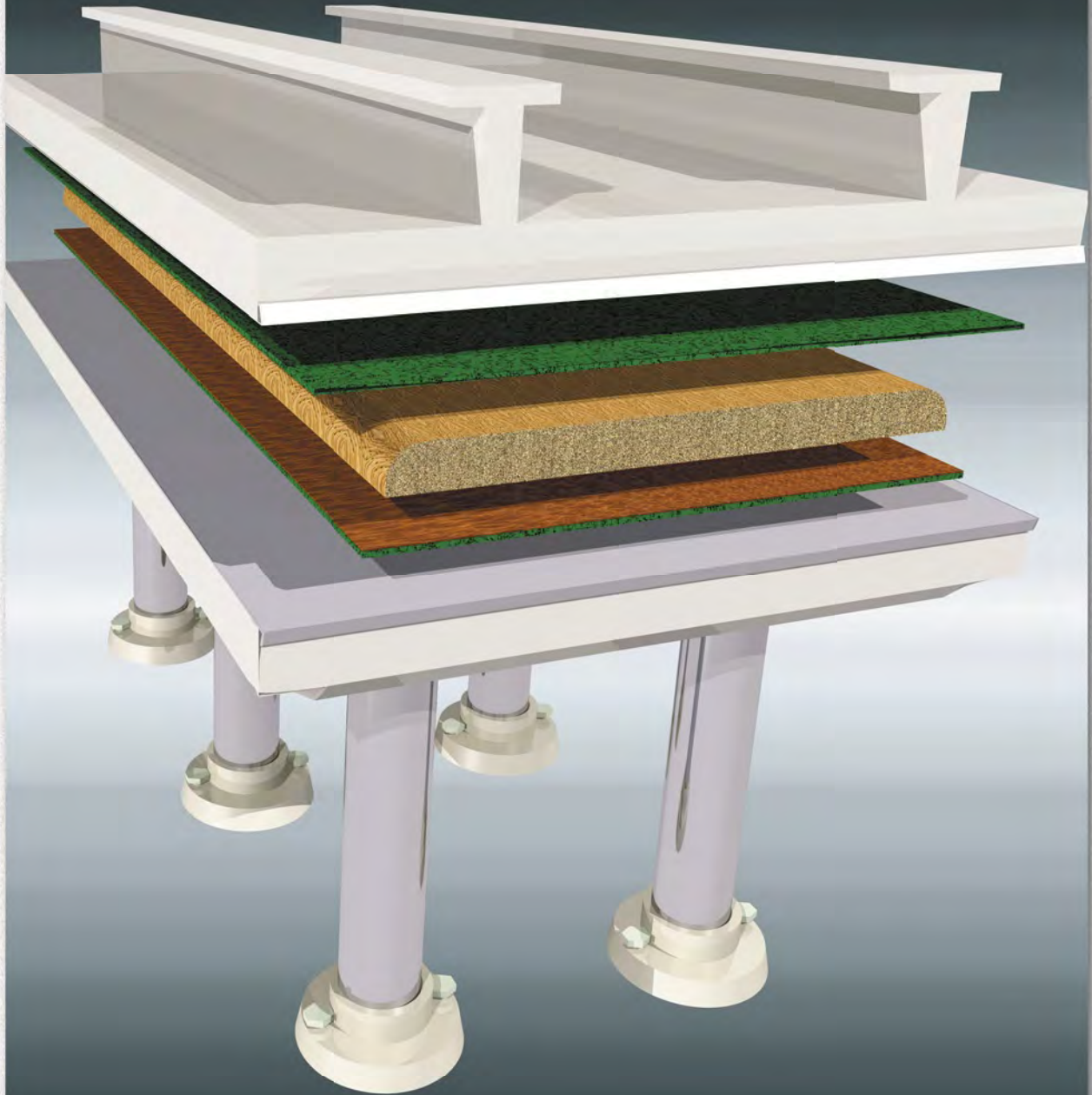


PRESSING SYSTEMS



MA MIDWEST
AUTOMATION

Simply a better idea!



PC 140/160 PANEL CLEANER

FEATURES:

- Top and bottom nylon brushes
- Top and bottom dust extraction hoods
- Infeed/outfeed drive rollers
- Variable speeds from 24 - 120 fpm (8-40 mpm)
- Handwheel operated panel thickness control with pointer and scale
- Slip clutch feeding system
- Optional side brush kit
- Optional pivoting conveyor system
- Optional riser kit
- Standard 53 inch (1400 mm) and 65 inch (1700 mm) wide models

The PC 140/160 is ideal for cleaning sawdust from panels prior to adhesive application. Cleans top and bottom surfaces simultaneously with two brushes and vacuum.

GS 200 GLUE SPREADER

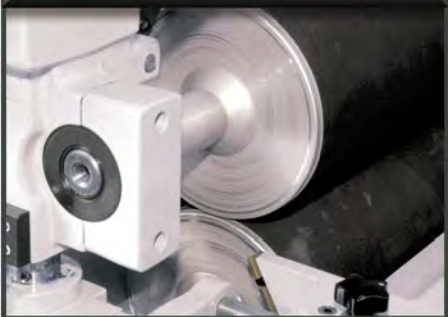
FEATURES:

- Cast iron roller supports
- Spreading rollers are corrosion resistant
- Doctor blades are precision ground
- Handwheel operated panel thickness with pointer and scale
- Bronze end plates and water tight bearings
- 36 fpm (12 mpm) feed speed
- Galvanized collection tank
- Optional cleaning system
- Optional variable speed controls
- Optional caster kit
- Standard 53 inch (1360 mm) and 65 inch (1660 mm) wide models



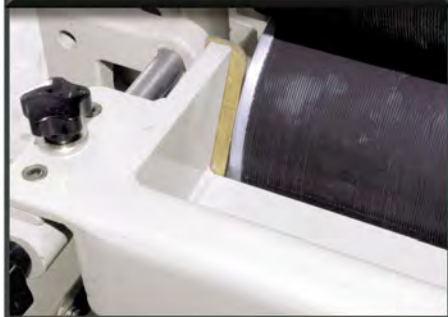
The GS 200 is ideal for applying PVA glue or other waterbase adhesives to panels where an economical means of application is required. Two roller design allows application to top and bottom surfaces either simultaneously or individually.

END VIEW



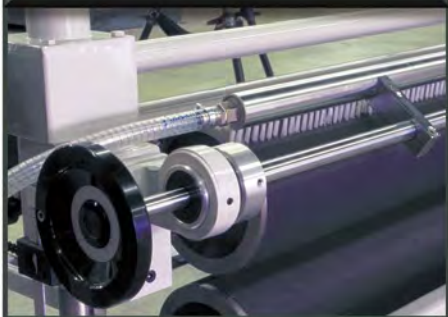
Top and bottom spreading rollers with water tight bearings. Cast iron roller supports with panel thickness pointer and scale.

DOCTOR BLADE



Glue dam with doctor blade and bronze end plate.

*** CLEANING SYSTEM**



Cleaning system mounted on slides with nylon brushes and water spray nozzles.

* Optional accessories



GS 300/400-2 GLUE SPREADER

FEATURES:

- Cast iron roller supports
- Rollers are corrosion resistant
- Separate top and bottom drive motors
- Pressure-free end plates are anti-friction and heat-resistant
- Handwheel operated panel and glue thickness control with dial indicators
- 54 fpm (18 mpm) feed speed
- Galvanized collection tank
- Optional cleaning systems
- Optional glue feeding systems
- Optional variable speed controls
- Optional electronic panel control
- Optional caster kit
- Standard 53 inch (1360 mm) and 65 inch (1660 mm) wide models

The GS 300/400 Glue Spreader is designed for years of dependable service. Large diameter rollers are ideal for precision application of PVA glues, waterbase and 2-component adhesives. Three and four roller models allow application to top and bottom surfaces either simultaneously or individually.

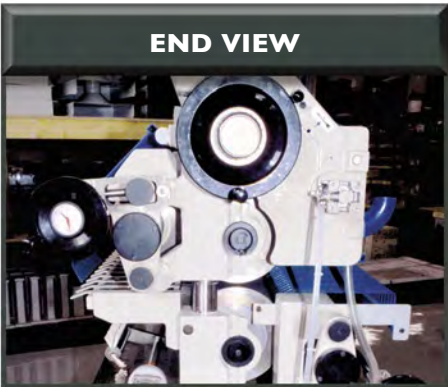
GS 300/400-2M GLUE SPREADER

FEATURES:

- Cast iron roller supports
- Rollers are corrosion resistant
- Four independent motors for each roller
- Pressure-free end plates are anti-friction and heat-resistant
- Handwheel operated panel and glue thickness control with dial indicator
- 54 fpm (18 mpm) feed speed
- Stainless steel collection tank
- Power outfeed rollers
- Optional cleaning systems
- Optional glue feeding systems
- Optional variable speed controls
- Optional electronic panel and glue thickness control
- Optional SS or chrome rollers
- Optional caster kit
- Standard 53 inch (1360 mm) and 65 inch (1660 mm) wide models



The GS 300/400-2M Series Glue Spreaders give you the rugged machine required for years of dependable service. The large diameter roller design is ideal for precision application of PVA glues, waterbase and two component adhesives. Three and four roller models allow application to top and bottom surfaces simultaneously or individually.



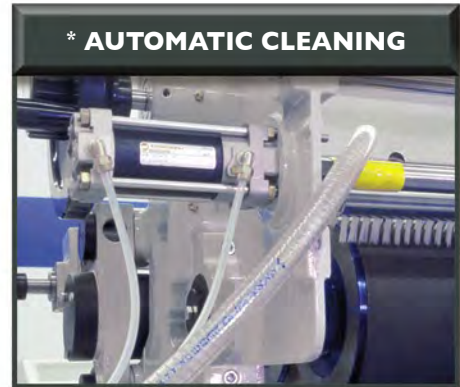
END VIEW

Cast iron roller supports for vibration free operation. Panel and glue thickness controls with dial indicators.



APPLICATION ROLLERS

Large diameter, corrosion resistant rollers with pressure free end plate.



* AUTOMATIC CLEANING

Automatic cleaning system with reciprocating brushes and water spray nozzles.

CP 400/500L COLD PRESS

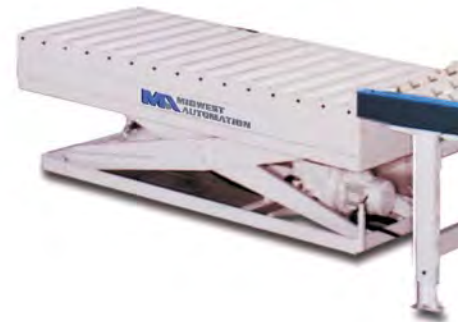
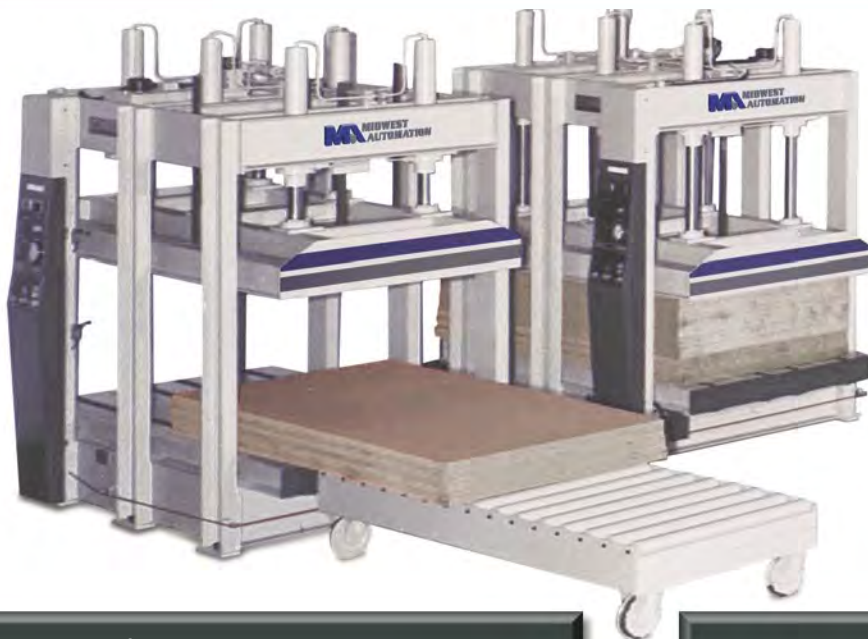
FEATURES:

- Downstroke design
- Hydraulically operated top platen(s) with self-contained, single stage hydraulic pump
- Rack and Pinion Guiding System to insure parallel operation
- Pressing cylinders are hardened, ground and chrome plated
- Individual pressure gauge(s) with manual adjustment
- Optional pressure recovery system
- Optional automatic opening timer
- Single and split platens available
- Side and end loading configurations
- Platen(s) sized for customer requirements

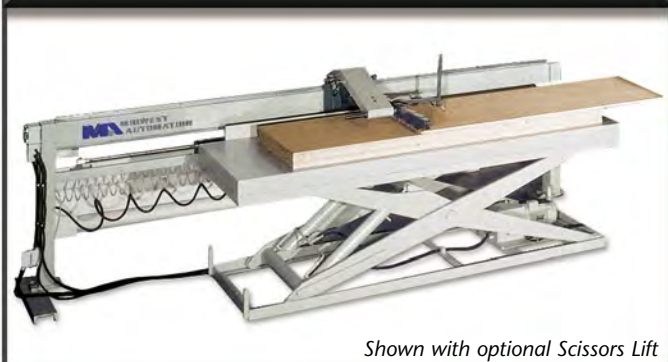


The CP 400/500 L Cold Press is ideal for small shops where light duty laminating is required at an economical price. Hydraulically operated platens increase the flexibility of the press and eliminate the need for a special air compressor typically required with an air pod press.

PRESS LINE WITH END LOADING CP 400 HD COLD PRESS



* PANEL FEEDER

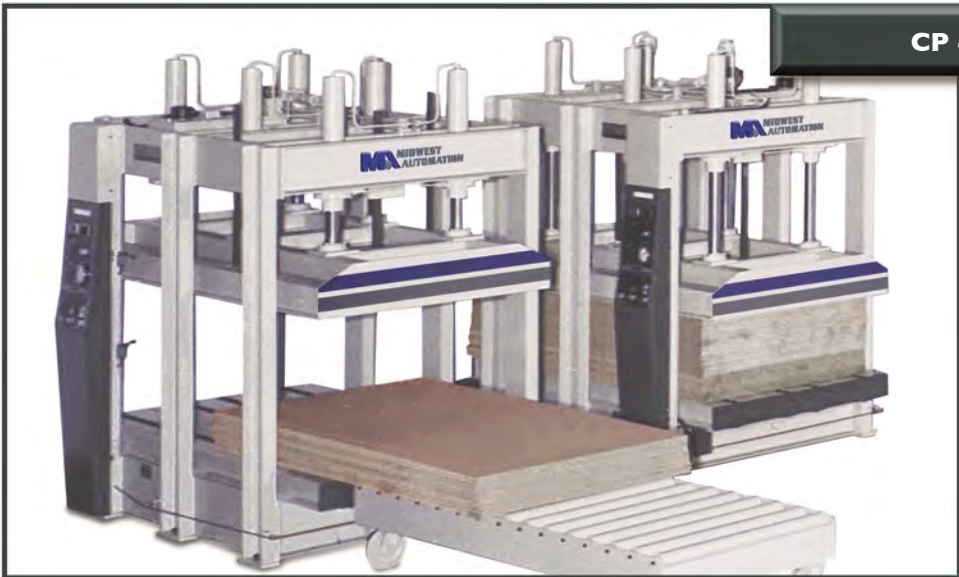


Shown with optional Scissors Lift

* SCISSOR LIFT



The SL 400/500 hydraulic Scissors Lift is designed to meet or exceed ANSI MH 29.1 requirements for industrial scissor lifts and are ideal for handling large, heavy panels with minimum deflection.



CP 400/500HD COLD PRESS

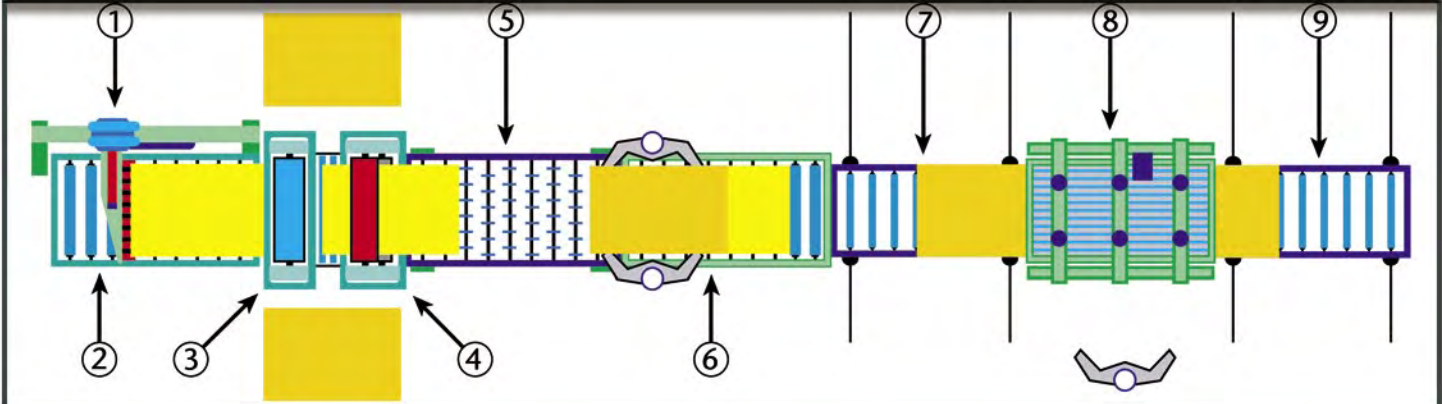
FEATURES:

- Downstroke design
- Platens are planed to insure flatness of pressing surface
- Hydraulically operated top platen(s) with self-contained two-stage hydraulic pump
- Automatic pressure recovery system
- Pressing cylinders are hardened, ground and chrome plated
- Rack & Pinion Guiding System to insure parallel operation
- Bottom platen includes spring loaded rollers for ease of loading
- Individual pressure gauge(s) with manual adjustment
- Single and split platen models available
- Side and end loading configurations
- Optional automatic opening timer
- Optional cylinder isolation kit
- Optional cylinder extension kit for increased stack height
- Optional powered loading/unloading conveyors
- Platen(s) sized for customer requirements

The CP 400/500 HD Cold Press is designed for high volume applications where panels of similar sizes are laminated in a batch environment. Hydraulically operated platens increase flexibility of the press and eliminate the need for a special air compressor typically required with an air pod press.



TYPICAL LINE LAYOUT



1. PF 400/500 Panel Feeding System 2. SL 400/500 Hydraulic Scissor Lift 3. PC 140/160 Panel Cleaner 4. GS 400-2 Glue Spreader 5. DC 400/500 Disc Conveyor 6. LS 500 Layup Station with Hydraulic Scissor Lift 7. Loading Conveyor Mounted on Casters 8. CP 400/500 HD End Loading Cold Press 9. Unloading Conveyor

HP 400/500 HOT PRESS

FEATURES:

- Upstroke design
- Hydraulically operated platen with self-contained two-stage hydraulic pump
- Automatic pressure recovering system
- Rack and Pinion Guiding System
- Pressing cylinders are hardened, ground and chrome plated
- Pressure and temperature gauges
- Automatic opening timer
- Optional platen types available
- Optional heating systems
- Optional parallel sensor
- Optional intermediate platens
- Optional cylinder isolation kits
- Optional cylinder extension kit
- Side and end loading configurations
- Maximum total pressure from 60 to 400 tons
- Platens sized for customer requirements



The HP 400/500 Hot Press is ideal for small to medium size shops where greater flexibility is required when laminating high pressure laminates, backer sheets and/or wood veneers to a wide variety of panel sizes and shapes. The press can be operated hot or cold and expanded at a later date by adding intermediate platens if greater production is required.

PRESS LINE WITH END LOADING HP400A HOT PRESS



* CYLINDER ISOLATION VALVE



Manual and electrically operated valves to turn off pairs of cylinders when pressing smaller panels.

* PARALLEL SENSOR



Protects platens from accidental damage through improper loading.

* INTERMEDIATE PLATEN



Intermediate platens can be added for increased production.

* Optional accessories

HP 400/500A AUTOMATIC PRESS

ADDED FEATURES:

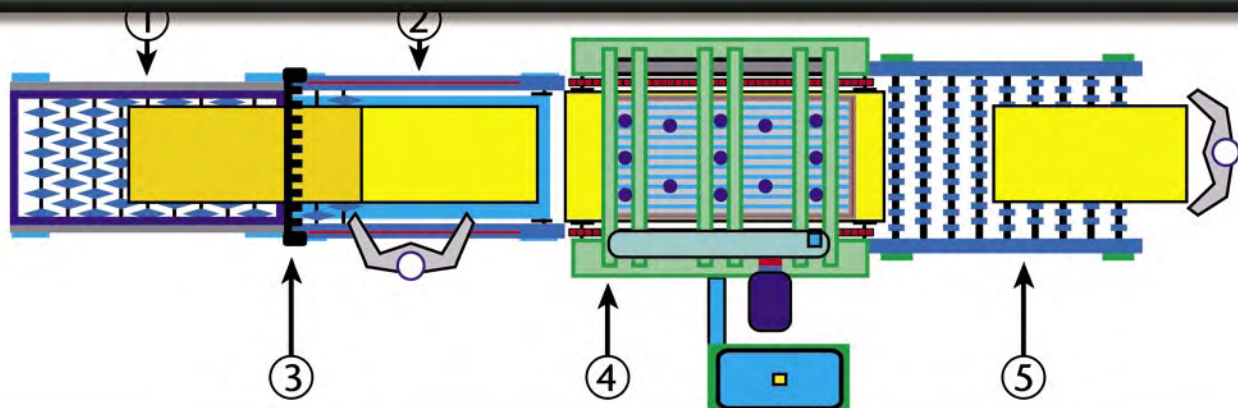
- Upstroke design
- Infeed layup conveyor with poweredized belt
- Automatic loading conveyor with mylar belt in press
- Gravity outfeed conveyor
- Manual, semi-automatic and fully automatic modes of operation
- Optional automatic panel positioning system
- Optional semi-automatic stacking system
- Side and end loading configurations
- Maximum total pressure from 90 to 400 tons
- Platens sized for customer requirements



The HP 400/500A Hot Press offers the same features as the HP 400/500 with the addition of an automatic loading system for increased production. The HP 400/500A is ideal for companies who requires maximum flexibility in a just-in-time production environment.

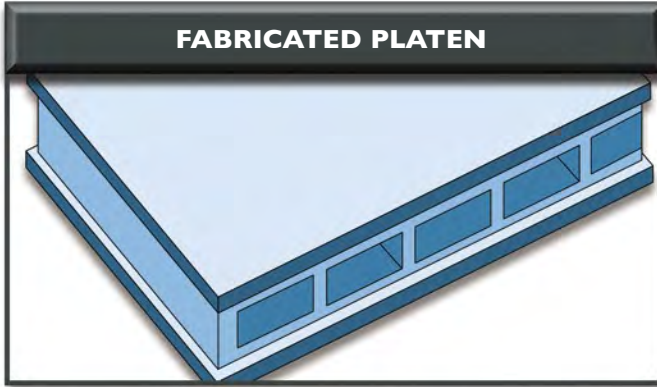


TYPICAL LINE LAYOUT



1. DC 400/500 Disc Conveyor
2. Layup Table/Infeed Conveyor
3. PP 400/500 Panel Positioning System
4. HP 400/500A Hot Press with Automatic Loading System
5. Gravity Outfeed Conveyor

OPTIONAL PLATENS AND HEATING SYSTEMS



FABRICATED PLATEN

Maximum Temperature: 230° F (110° C)
 Maximum Working Pressure: 50 PSI (3.5 kg/cm²)
 Maximum Heating Medium Pressure: 7 PSI (0.5 ATE)

Platens are made from 3 mm thick steel plates welded to steel tubes for heating medium circulation. Aluminum cover insures uniform heat distribution.



ASSEMBLED SOLID STEEL

Maximum Temperature: 300° F (150° C)
 Maximum Working Pressure: 115 PSI (8 kg/cm²)
 Maximum Heating Medium Pressure: 28 PSI (2 ATE)

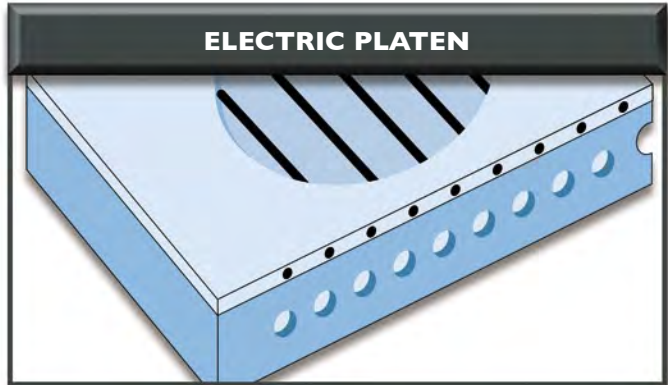
Platens are made from 10 mm thick steel plates and welded to steel tubes for heating medium circulation. Platens are planed to 9 mm thick to insure flatness and can be covered with aluminum or mylar, or ground and polished, if required.



DRILLED SOLID STEEL

Maximum Temperature: 480° F (250° C)
 Maximum Working Pressure: 425 PSI (30 kg/cm²)
 Maximum Heating Medium Pressure: 142 PSI (10 ATE)

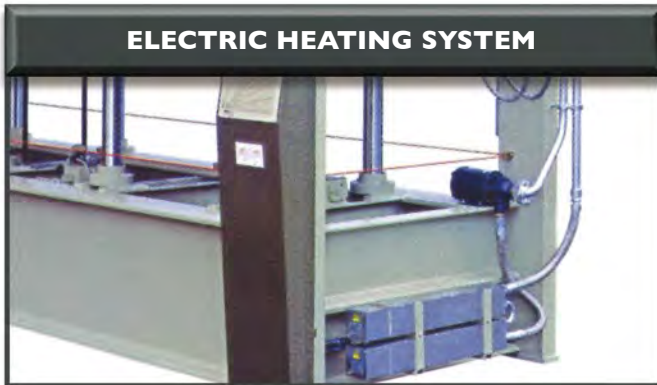
Platens are made from 40 mm thick solid steel plates and drilled for heating medium circulation. Platens are planed to 35 mm thick to insure flatness. Ground and polished surfaces are available if application requires. Platens up to 150 mm thick also available.



ELECTRIC PLATEN

Maximum Temperature: 248° F (120° C)
 Maximum Working Pressure: 70 PSI (5 kg/cm²)

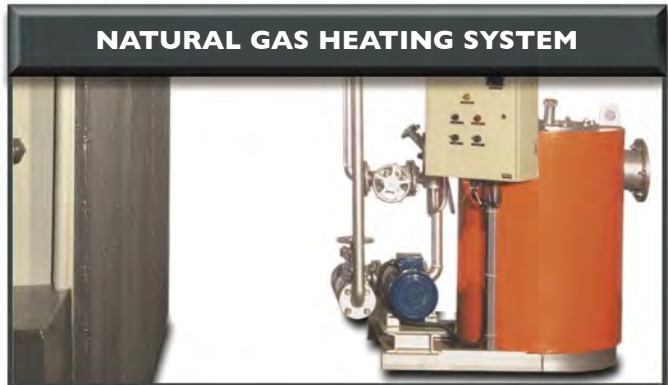
Platens are made from 9 mm thick aluminum plates with electrical heating elements inserted. Platens are assembled to special chip board for support and insulation.



ELECTRIC HEATING SYSTEM

Heating system with electric boiler, circulation pump, expansion tank, hoses, electrical circuit board and safety interlock.

Maximum temperature at platen inlet is 195° F (90° C) for water and 248° F (120° C) for thermal oil. Heater capacity from 13.5 to 60 kW depending on platen type, size and application.



NATURAL GAS HEATING SYSTEM

Heating system with natural gas fixed boiler, circulation pump, expansion tank, hoses and safety interlock.

Maximum temperature at platen inlet is 195° F (90° C) for water and 480° F (250° C) for thermal oil limited by type of platen.



LT 400/500 LAYUP TABLES

FEATURES:

- Welded steel frame construction
- Surfaces are melamine faced particle board
- Removable table sections for narrow panels
- PVC coated transport rollers
- Minimum contact disc conveyor with stainless steel discs
- Galvanized water tray
- Six infeed guides with laminate offset
- Adjustable panel fence with laminate offset
- Traversing arm is cantilevered and guided on a twin rail
- Seven guides mounted on traversing arm
- Emergency stop cable
- Optional postforming fence
- Optional pneumatic anti-deflection device
- Standard 5 x 8 ft (1.6 x 2.5 m) and 5 x 12 ft (1.6 x 3.7 m) sizes

The LT 500 Layup Table is a simple, non-powered design which is ideal for top and/or bottom surface laminating. The LT 500 utilizes a traversing arm that transports the panel from the glue spreader over the top of the layup table and gently places it onto the backer sheet.

LS 400/500 LAYUP STATIONS

FEATURES:

- Welded steel frame construction
- Minimum contact disc conveyor with stainless steel discs
- Galvanized water tray
- Six infeed guides with laminate offset
- Traversing arm is cantilevered and guided on a twin rail
- Seven guides mounted on traversing arm
- Emergency stop cable
- Optional SL 400/500 Scissors Lift
- Optional LR 500 Laminate Rack
- Optional postforming fence
- Optional pneumatic anti-deflection device
- Standard 5 x 8 ft (1.6 x 2.5 m) and 5 x 12 ft (1.6 x 3.7 m) sizes



The LS 500 Layup Station is a simple, non-powered design for top and/or bottom laminating in a cold press application. The LS 500 utilizes a traversing arm that transports the panel from the glue spreader over the top of a scissors lift and gently places it onto the backer sheet, making a stack of panels.

PP 400/500 PANEL POSITIONING SYSTEMS



FEATURES:

- Welded steel frame construction
- Layup conveyor with powered belt
- Conveyor belt is double braided & rubber coated
- Mechanical variable speed control
- Powered stainless steel disc conveyor
- Rear pivoting stops
- Electrical controls interfaced to press
- Separate foot pedal controls for remote operation
- Emergency stop
- Adjustable working heights
- Optional independent electrical controls
- Optional LR 500 Laminate Rack
- Standard 4 x 8 ft (1.2 x 2.4 m), 5 x 10 ft (1.5 x 3.1 m) and 5 x 12 ft (1.5 x 3.7 m)

The PP 400/500 Panel Positioning System is designed as an integral part of the infeed layup conveyor used in loading a hydraulic or roller press. The PP 400/500 utilizes a minimum contact disc conveyor that extends and retracts over the layup table allowing the panel to be placed over a backer sheet with minimum handling.



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