

**HYDRAULIC HOT PRESS BOTTOM MOVABLE PLATEN WITH AUTOMATIC TYPE
LOADING/UNLOADING SYSTEM (2+2)
MODEL : PU PRESS 12.5/1.5U (2+2)H**



Line components:

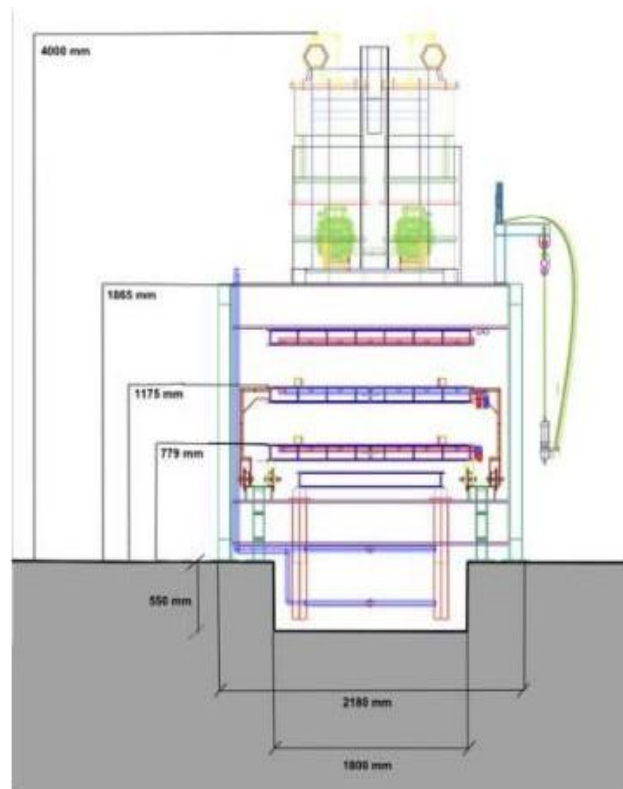
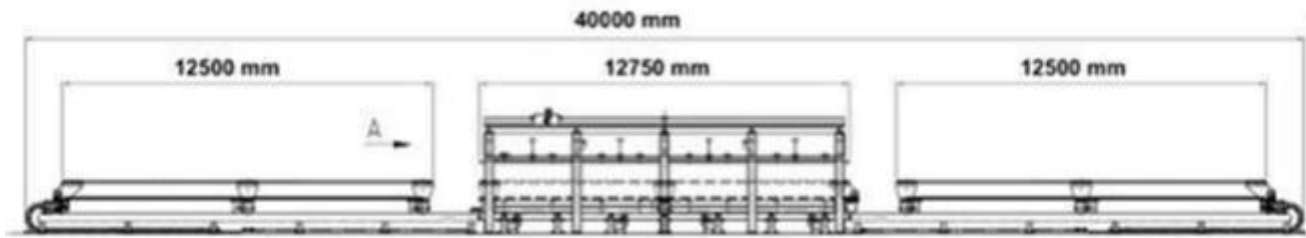
- A. Hot Hydraulic Press, Fixed Tray Plate. (1 No.)
- B. Heating water System
- C. 2 Nos. Movable Tray Plates right side
- D. 2 Nos. Movable Tray Plates left side
- E. Carriage for injection machine mixing head

OPTIONS:

ALUMINIUM MOULDS FOR SANDWICH PANEL AS CUSTOMER REQUIREMENT.

Machine Layout:

High Pressure Foam Injection Machine



TECHNICAL PARAMETERS:

Press platens' sizes	12500 1500 mm
Type of stroke	Upstroke design
Pressing cylinders	14 Nr
Piston diameter	140 mm
Piston stroke	650 mm
Clearance between platens	275+275 mm
Max total thrust	420 tons
Specific pressure over 12500 x 1500 Pane	2 Kg/cm ²

Side loading (FRONT & BACK)	1500
Platen type: assembled solid steel	3,2 Ra
Platen's roughness	
Number of heating platens	5 Nr
Top fix one	1 Nr
Movable ones (loading/ unloading function)	4 Nr

The movable platens are supplied with side frame 50 x 50
 For fixing the mould of the panels.
 Moulds are at buyer's charge.

MAIN FEATURES:

• STRUCTURE

- Fe 430 steel beams welded together;
- Locating surfaces are CNC tool machined
- Pressure control module to grant a perfect platens' parallelism when the mobile one is moving up/downward.

• HEATING PLATENS

- ✓ Made of assembled solid steel in two pieces
 - ✓ Heating fluid: Water
 - ✓ Heating fluid max temperature: 50 °C
 - ✓ Heating fluid max pressure: 2 Bar
 - ✓ Max allowable pressure before sagging: 10 Kg/cm²
- The assembled solid steel platen is composed by two Fe 430 steel plates welded together. The welding is realized on assembling templates with presses to grant the platen flatness already in this assembling phase.
 - Between the two steel plates there are drawn steel pieces inserted and welded to make the circuit which the heating medium flows in. At the end of the working, the tight joint is tested by a 5 bar pressure.
 - To avoid residual stresses due to the welding, the platen is treated with a stretching process.
 - The last phase before the final check is the treatment of the surfaces of the platen in two different operations:
 - ✓ the rough-shaping to eliminate the last differences on the platen flatness
 - ✓ working surface finishing with special scraping millers for a good roughness; millers mounted on CNC tool-machines to grant the precision of the flatness necessary for the best working quality
 - Between the press structure and the heating platen is positioned a thermal insulating sheet.

- The platens are complete with hoses and manifold suitable to the used heating fluid and supplied also in the case the press is provided without the heating plant.

• HYDRAULIC SYSTEM

Hydraulic power pack is composed by double stage pumps and motors which are noise free and self-lubricating type for rotational parts. These pumps are designed to get high delivery and low pressure at closing stage and low delivery and high pressure at opening stage. The unit is fitted with following control and safety valves. Relief valve for the closing, which will cut off the oil delivery after closing. This will reduce the power consumption and less oil heating. Relief valve for opening. Temperature gauges for monitoring press plate temperature. Pressure valve for pressure release. Pressure gauges for pressure monitoring. Solenoid valves for quick oil discharge. Oil filters for unwanted particles scrutiny.

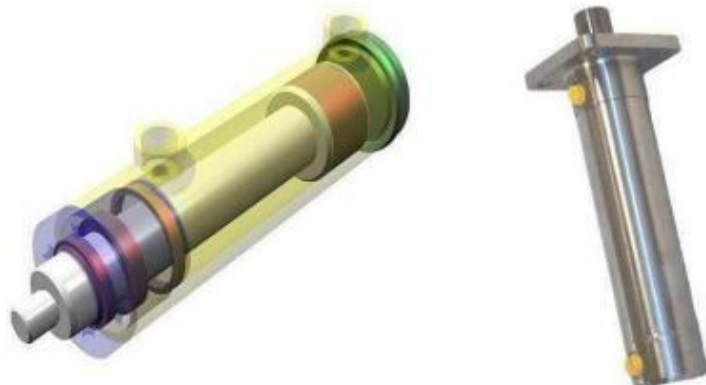
HYDRAULIC SYSTEM TECHNICAL DETAILS

Tank	400 ltr
Pump	150 lpm Double pump (Yuken)
Electric Motor	15 KW 50 H.P (WEG Germany)
Pressure Control Module (Yuken)	
Solenoid Valves (Yuken)	
Accessories (Hydro line)	
Electrical Control Valve (Custom made)	

HYDRAULIC CYLINDERS

Main body made out of high-grade steel to with stand the pressure rating. Seals are high anti friction grade international quality imported. Rams are hard chrome plated. All hydraulic components are tested according to the pressure rating.

Hydraulic Cylinders (Stroke 650mm)
Hydraulic tube: 140-160 (Cromsteel Romania)
Chrome Shaft: 101.6 (Cromsteel Romania)
Cylinder Accessories (Eurosnodi Italy)
Seals (Eurosnodi Italy)



- **LOADING UNLOADING SYSTEM**

N° 5 heating platens of which 1 fix top platen and 2 movable platens also for simultaneous and alternating loading/unloading.

N° 2 platens translating by wheels on rails with n.1 moto-reducer positioned in front of the platen (possibility to regulate the speed).

N° 2 platens positioned higher and translating by wheels on rails with n.1 moto-reducers (possibility to regulate the speed).

While two platens are inside the press, the other two are outside to be loaded.

- **ELECTRIC SYSTEM**

The main control panel includes:

- ✓ Tele-thermometer to set the working temperature.
- ✓ Pressure gauge to set the working pressure; the unit foresees the possible pressure recovery in automatic mode.
- ✓ Dual timed press closing push buttons; press opening push button.
- ✓ Main on/off switch.
- ✓ - Tension lamp.

- **PLC :** hardware from SIEMENS – Software developed according to the ISC standard or, upon request, in conformity with Customer needs.
- The operating software runs (among many others) the following functions:
 - ✓ Self test when starting
 - ✓ Self test in parallel development of the user program
 - ✓ Error control
 - ✓ Short circuit control