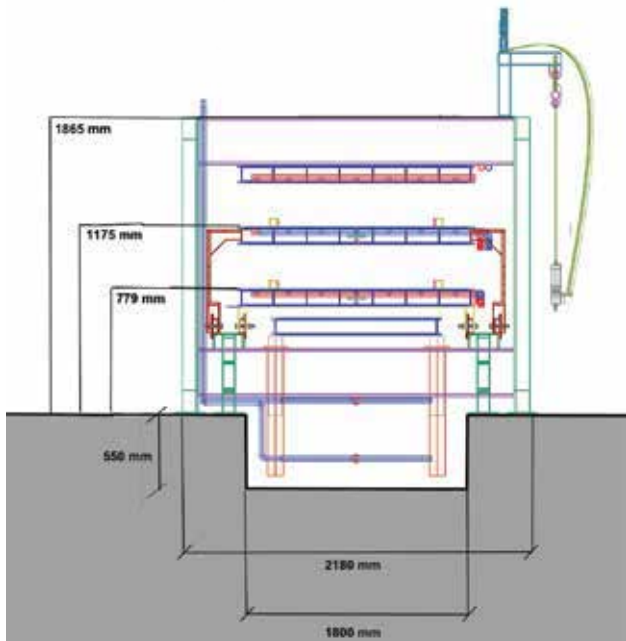
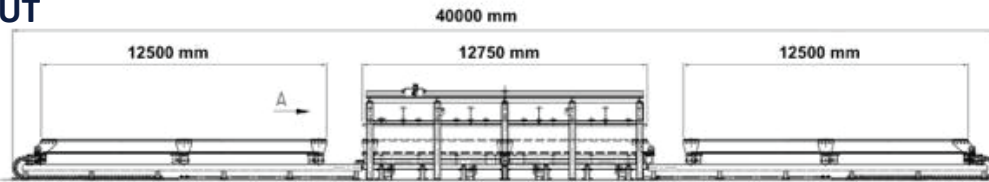




**HYDRAULIC HOT PRESS BOTTOM MOVABLE PLATEN WITH AUTOMATIC LOADING/UNLOADING SYSTEM (2+2)
MODEL : PU PRESS 12.5/1.5U (2+2) H**



MACHINE LAY OUT



Line consists of:

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

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TECHNICAL DATA : PU PRESS 12.5/1.5U (2+2) H

Press platens' sizes	12500 x 1500 mm
Type of stroke	Upstroke design
Pressing cylinders	14 Nos.
Piston diameter	140 m m
Piston stroke	650 m m
Clearance between platens	275+275 m m
Max total thrust	420 tons
Specific pressure over 1250 cm x 150 cm panel	2 Kg/ cm ²
Side loading (FRONT & BACK)	1500
Platen type: assembled solid steel	
Platen's roughness	3,2 Ra
Number of heating platens	4 Nos.
Top fix one	1 No
Movable ones (loading / unloading function)	4 Nos.

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 one piece , thickness 12 mm and length 12000 mm		
Heating fluid	Oil	
Heating fluid max temperature	50	°C
Heating fluid max pressure	2	Bar
Max allowable pressure before sagging	10	Kg/cm ²

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The assembled platen is composed by tube 200 x100 mm and thickness 4 mm cover by steel plate 12 mm thickness with length of 12000 mm as a single piece .

Between the two steel plates there are drawn steel pipes 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.



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HYDRAULIC SYSTEM

Hydraulic power pack is composed by two stage pumps and motor 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 reduce oil heating. Temperature gauges for monitoring temperature of the hydraulic oil. Pressure gauges for pressure monitoring. Solenoid valves integrated into the system to electrically operate the system. Oil filters for unwanted particles scrutiny and maintain efficiency and consistency of the hydraulic oil. The Power Pack also consists of a sophisticated custom made manifold block to reduce the size and efficiently assemble all the hydraulic valves.

TECHNICAL DETAILS

Hydraulic Power Unit (for 14 cylinders, 420 tons)
Tank- 400 ltr
Pump- 150 lpm Double pump (Yuken, designed in Japan and Manufactured in India)
Electric Motor- 15 KW 50 H.P (WEG Germany)
Pressure Control Module (Yuken, designed in Japan and Manufactured in India)
Solenoid Valves (Yuken, designed in Japan and Manufactured in India)
Accessories (Hydro line)
Electrical Control Valve (Custom made)



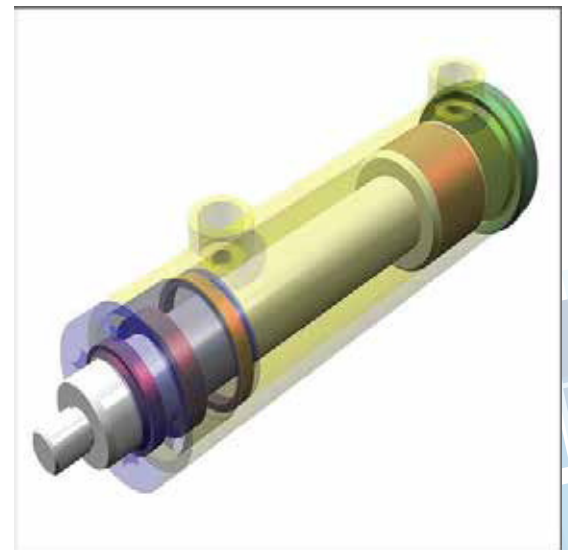
HYDRAULIC CYLINDERS

Main body made out of high grade alloy steel to with-stand the pressure rating, and the shaft is hardened and chrome plated to avoid bends and friction.

Seals are high anti friction grade international quality imported from Italy.

Assembled by experts and 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)



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LOADING UNLOADING SYSTEM

N° 5 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.2 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.2 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



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