# HOT PRESS MODEL PL 90s 3000x1300 mm PS VBO + 2 IP





TECHNICAL CHARACTERISTICS	
Platens dimensions	3000x1300 mm
Stroke	400 mm
Type of stroke	Upstroke design (from bottom to top)
Type of platen	Assembled platens with coil and aluminum covering
Intermediate platen	N. 2 intermediate platen
Daylights	N. 3 daylights 107 mm
Total thrust	90 ton
Pressing Cylinders	N° 6 cylinders ø70 mm
Specific Pressure	2.30 kg/cm <sup>2</sup> on 100% of the surface 2.88 kg/cm <sup>2</sup> on 80% of the surface
Loading and Unloading Side	3000 mm side
Type of Heating system	Heating with oil boiler - max temperature = 120°C
Heating system specifications	Electric boiler 24 kW
Opening	Automatic by timer
Control Board	Standard
Power supply	400V, 50Hz, 3ph
Security device	Safety cable all around the press Red emergency Button Two Hand control
Normative	CE norms

## **Press Structure**

The press structure is made of fe 430 beams assembled and welded together.

The structure of both the fixed and movable platen is made of fe 430 beams assembled and welded together. The press is equipped with rack and pinion guide system to ensure a perfectly parallel movement during the closing/opening of the platens.

## Assembled platens with coil and aluminium covering

Maximum temperature of the heating fluid 120°C

Maximum specific working thrust 3-5 kg/cm<sup>2</sup>

Maximum thrust of heating Fluid: 2 bar

Our fabricated steel platens with coil are completely built in our carpentry workshop. Each coil, before being mounted on the press, is submitted to a strict leak test.

A 3 mm calibrated sheet is place on top of the coil.

The platen is covered with aluminum sheet, that gives the platens an excellent surface finish and optimal heat propagation.



### **Hydraulic system**

- the hydraulic system consists of a double stage unit with submerged pump to reduce the noise and lubricate the rotating parts.
- quick closing/opening pump (high delivery-low pressure **38 L/min**), pressing pump (low delivery-high pressure **2.4 L/min**).
- 3 hp electric engine
- the hydraulic unit is equipped with the following control/safety valves, installed on the tank:
  - safety valve for the pressure of the closing pump to set the stand-by status of the pump. This valve allows for power saving and prevents oil heating.
  - maximum pressure valve. this valve prevents to have too high pressure in the hydraulic system in case of electric or electronic control fault
  - pressure holding valve (retaining valve)
  - low releasing pressure valve (pre-releasing valve). It avoids dangerous ram hits inside the system
  - oil release control magnet

### Control panel and Electrical system

The pressing parameters can be managed from the control board that is equipped with the following switches/gauges:

- temperature gauge to control platens temperature
- Pressure regulating gauges and automatic pressure recovery system
- general on/off switch
- general on/off light switch
- two hand safety switches to close the press
- Timer for automatic opening with its own switch activates the automatic or manual opening of the platens after the work cycle.
- off/on switch for heating resistance that switches the boiler off when the set temperature is reached to restore the temperature, if there is any temperature decrease, in order to save power consumption.
- heating pump on/off switch



#### Optional Control panel and Electrical system

**Touch screen display - Programmable Logic Controller** Colour full <u>touch screen</u> 7" display specifically designed to set the following:

- temperatures
- pressing time
- daily setting of the heating system
- automatic switching off of the heating system once the set temperature is reached and automatic recovery of the temperature
- new system for the automatic setting of the pressure
- option to save historical data/parameters
- diagnostic system

