BLS Press Specifications

Specifications below for the 2.4m press:

Automatic compression molding machine for composite materials.

- Control Unit (PLC) with Touch Screen to control / store working parameters.
- Hydraulic Unit "Energy Saving"
- Vertical closing force 4000 KN
- Press structures includes a central frame with approximate dimensions 3000x3000 mm h = 4000 mm made by 4 columns with 5 hydraulic cylinders, and 2 shuttles with in/out movements driven by electrical motors; Min (max) day-light = 0 mm (1000mm), closing / opening speed 100 mm / sec
- Molding speed 10 mm/sec (Programmable by PLC) - N. 2+1 steel plates with working area 2400x2400 mm (h=1000mm)
- N. 3 heating plates 2400x2400 mm (h=50mm) with 1+1 circuit for oil heating (unit excluded); lower / side thermal insulation sheets are included. - The heating plates will have 3 x 3 thermocouples to allow the PLC of the press to control and pilot the molding temperatures.
- Shuttle centering system designed by INTEC with springs, allows a position precision of about +/- 0.5 mm, suitable for tools with & without long centering pins
- Automatic lubricant circuit.

Safety devices make the Press CE-conform:

- Machine Directive 2006/42/CE compliant
- When the machine stops in the open (top) position, the upper frame is blocked by 2 steel cylinders
- The Machine is protected by programmable safety scanner sensors all around the press
- Acoustic alarm in case of mis-functioning
- CE declaration of conformity / CE User Manual

PLC unit

- Allows to use the machine in two basic modes

a) AUTOMATIC Molding PLC mode Molding cycles are fully programmable and storable by PLC (Touch Screen type); PLC controls pressure / speed / temperature / timing during the typical molding cycles
b) MANUAL PLC mode low-speed movements controlled by the operator this mode is used during machine set-up by maintenance operators

The PLC interface consists of a TOUCH MONITOR for programming, storing and fetching in/from memory the machine cycles

- Electrical supply Machine circuit: AC 400V50Hz 3 phases; control circuit DC24V
- Hydraulic circuit Working pressure 160 bar; 1000 litres oil tank

Specifications below for the 3.6m press:

3.600 x 2.400mm – 400 Ton 1 station

- Hydraulic Unit with "Energy Saving" system which will turn the hydraulic/electric motor off when it is inactive (it depends on your software and electric cabinet)
- Vertical closing force 4000 KN. It can work up to 300 bars. The size of the main ram with 350 bar of pressure delivers up to 500 kN
- Press structures includes a central frame with approximate dimensions 3000x4000 mm h = 1000 mm made by 4 columns with 5 hydraulic cylinders, and 1 shuttle with in/out movements driven by electrical motors
- Min (max) day-light = 0 mm (1000mm), closing / opening speed 100 mm / sec
- Molding speed 10 mm/sec (Programmable by Your PLC)
- N. 1+1 steel plates with working area of approx. 2400x3600 mm (h=1000mm)
- 1+1 circuit for oil heating (unit excluded); lower / side thermal insulation sheets are included
- Insulated rigid fittings
- The 2 heating plates will have 4 thermocouples - 2 thermocouples each plate - in order to allow your PLC to control and pilot the molding temperatures
- Load cells fitted to all 5 hydraulic ram piston ends and wired back to local panel (cells will be quoted a part
- Shuttle centering system designed by INTEC with springs, allows a position precision of about +/- 0.1 mm, suitable for tools with & without long centering pins
- Automatic lubricant circuit (24V) that lubricates the sliding track of the mould carrier

Hydraulic Unit

- Energy Saving System with variable pumps for the control of all hydraulic movements, highly efficient system with low energy consumption
- Fluid control (filtration – temperature – level)
- Tank with inside decant walls and inspection covers
- Heat exchanger

Safety Devices

- Machine Directive 2006/42/CE compliant
- When the machine stops in the open (top) position, the upper frame is blocked by 2 steel cylinders
- User Manual