## **ROSS & MOUNT**

### ACCURACY & RELIABILITY IN POWER

CURE MAX

RUBBER CURING PRESS

RCP-4C-400-2400-2-6-H



Column Hydraulic Presses: Ross & Mount Column presses provide precise, durable and cost effective performance. The presses consist of Cardened rods made out of ST-52.3 carbon steel. Press is designed for Rubber Curing - Mat Pressing lines to incorporate in automatic production lines.

- Provided with a double acting cylinder (including anti-turning) with a chrome plunger and a removable and interchangeable holddown plate to avoid deterioration of the piston. The cylinder is machined at the end for adapting tools or moulds.
- Hydraulic Over Load protection

This hydraulic four column press from Ross has a force of 400 ton—2400 tonnes with centre mounted single Ram of 350 mm Dia. guarantee The Bolster sizes ranges from  $500 \times 700$  to  $1900 \times 2500$  mm, it has a vertical day light of 800 mm and a piston stroke of 600 mm.

All four column presses from Ross comply with the latest CE-regulations, are made in Europe / India will have a warranty of one year. These hydraulic presses can be delivered with several options, so please do contact us when you need some more information.



Clamping force KN	Rubber volume cc	Opening stroke mm	Day light mm (inch)	Hot Platen standard (wx D)
1000 (100)	500 / 1000cc	350 (13.5)	350-450 (13.5" - 17.5")	405 X 460 (1.3' x 1.5')
2000 (200)	1000 / 1500cc	450 (17.5)	400-550 (15.7" - 21.5")	500 X 610 (1.6' x2')
2500 (250)	2000 / 2500cc	450 (17.5)	400-550 (15.7" -21.5")	610 X 610 (2'x 2')
3000 (300)	2000 / 2500cc	450 (17.5)	400-550 (15.7" -21.5")	620 x 920 (2' x 3')
4000 (400)	2500/3000cc	450 (17.5)	400-550 (15.7" -21.5")	760 X 1100 (2.5' x 3.5')
5000 (500)	3000 / 3500cc	450 (17.5)	400-550 (15.7" -21.5")	1100X 1250 (3.5'x 4')
7000 (700)	3000 / 3500cc	500 (19.5)	450-600 (17.5" -24")	1250 x 1550 (4' x 5')
10000 (1000)	4000cc	600 (24)	450-600 (17.5" - 24")	1850 x 1550 (6' x 5')
15000 (1500)	5500cc	600 (24)	450-600 (17.5" - 24")	2450x 1850 (8' x 6')
25000 (2500)	6500cc	600 (24)	450-600 (17.5" - 24")	3360 x 2450 (11' x 8')

#### Patented Digital Hydraulic System

The intelligent servo-hydraulic power drive system automatically adjusts the press speed during the production cycle to the optimum power requirement. Ross & Mount , Demand flow module controls the flow rate and intelligent controlling behaviour, resulting in significantly lower power consumption than conventional hydraulic units.

- Up to 50 per cent less energy consumption
- Control accuracy significantly improved
- Drastic noise reduction less tha 90 Db
- No consumption in standby mode
- No external oil cooling necessary
- Extremely dynamic movements
- Low maintenance
- Long service life





#### **Press Hydraulic System**

- Press Counter balance valve in built, to avoid any free fall in case of power failure / control failures
- Modular Function Based hydraulic modules for ease of maintenance
- Block/Cartridge design to reduce piping interchangeable cartridge valves
- Additional 3 micron filter on high pressure side to ensure a clean hydraulic system
- Custom mounted manifold blocks to minimize hydraulic tubing
- Leak free hydraulics for maintenance friendly and clean environment



Digital Tonnage Control—Closed loop load control module for precision cure cycle of the Material



By displaying all press settings on a single screen, the touch screen control makes it easy to establish change, or verify set points. The Press Monitor screen lets you review actual stroke parameters and press performance while the press is in operation.

An auto set point feature lest you establish set points visually. Just jog the press to the desired position, touch the auto set point indicator, and the control automatically stores the actual press position as the new set point, eliminating the need to take measure-

#### **Precise Control**

The touch screen control provides exceptionally precise control. Ram position is track by an absolute zero linear transducer, which never needs calibrating(optional) The control can be easily integrated with a precision digital control system, which enables actual position accuracies of  $\pm .02$ " and reversal at  $\pm 4\%$  or specified tonnage. (optional)

- Equipment operating parameter settings
- Production data acquisition and process monitoring
- Part and batch counters
- Extensive fault diagnostics capabilities
- Tooling data and set-up storage capability
- Preventative and routine maintenance screens
- NC functionality
- Integration with ancillary sub systems
- Integration of safety sub systems
- Data acquisition package
- Remote diagnostics



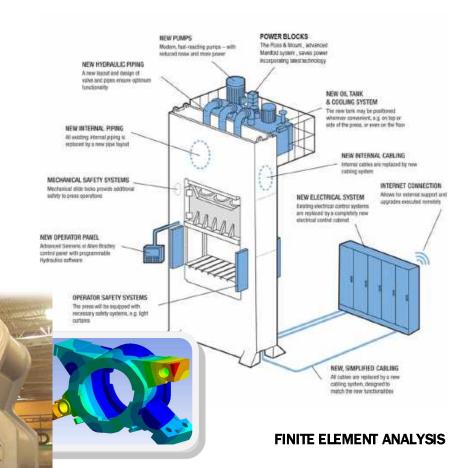




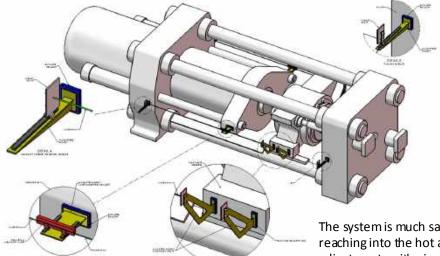
#### **Press Modernization System**

- » plate repair
- » closing cylinder renovation
- » repair of ram guidance
- » new electrical wiring
- » New hydraulic System
- » Latest control system

Upgraded presses are equipped with hydraulic Euro Lock system to prevent ram lowering, new covers, and an optical barrier or movable barrier. This conforms latest safety norms.



- Ross & Mount replacement components are designed and engineered utilizing finite element analysis (FEA).
- Loading stresses, fatigue rates, and deflection are addressed in the engineering determinations to design and manufacture replacement components.
- We designs replacement components to perform for greater that one million cycles, or by analysis standards, infinite life.
- We specializes in replacing original cast steel press and machine components with engineered steel fabrications and/or forgings.



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#### Laser Alignment System

Our Press Laser Alignment System makes, maintaining proper press alignment. Our system can align the press components to the press center line, not just the main ram. This will improve press performance and increase tooling life..

The system is much safer to use. Instead of taper gauges and reaching into the hot areas of the press, We make the necessary adjustments with visual laser reference targets

#### **Press Maintenance**

Electrical/Control Upgrades
Hydraulic System Upgrades
Mechanical Upgrades
Improve Performance
Improve Efficiency
Reduce Downtime
Improve Safety

Highly qualified field service personal to achieve your presses optimum performance Troubleshoot machine issues and resolve Hydraulic cylinder maintenance and repair Procedure review and suggestions













#### Press-Accessories

Our Hot Platens are widely used from decorative laminating to the manufacturing of plywood, hard board, and particle board.

We provide Platens as small as 12" square for use in laboratory presses and as large as 15' x 52' for the manufacturing of board and panel products. In the Hot Platens are channels drilled for Hot Oil, Hot Water or Thermal Fluid to heat up the Hot Platen. The outlet channel from one Hot Platen in a Multi Daylight Press is connected with our Hot Oil Hoses to the inlet of the next one.

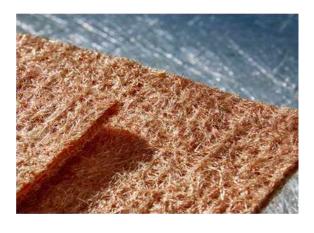




Our Hot Oil Hoses are annularly corrugated stainless steel hoses made of 1.4571 for water or thermo oil, 10 bar, 220 C, R-650 mm, Type RS331L121 with single or double ply stainless steel wire braiding, 1.4301, with friction lining and separate welded braiding with both end with shoulder sockets with loose rectangular Flanges. Other Flanges are available upon request. We supply hoses for major industries in following diameters DN65, DN80 DN100 and DN32 for return hoses. Other diameters are available upon request. Hoses with external heat protecting insulation are also available.

The compensation inlay is used to compensate for uneven surfaces and plane parallelism defects in heated presses caused by wear and tear and corrosion. It is mounted at the rear side of the heating platens, above or beneath the insulation layer, depending on the thickness of the insulation and the temperature of the heating platens.

It cures in the press after installation. The use of this compensation inlay can delay a complete overhaul or replacement of press platens by many years.





The molding industries work with heated tooling when material is pressed directly between hot platens. If a platen is mounted to the press table without a layer of protective insulation, a considerable amount of heat is transferred to the press and the press heats up. In hydraulic presses, not only do the tables, beams and frames heat up, but so do the pistons and hydraulic fluid. This causes premature wear to packings in the entire system. Insulation is a very effective method to precisely control and manage heat in the cycle process to improve the performance and longevity of the press.



## **ROSS & MOUNT**



INNOVATION POWERED BY TECHNOLOGY...

# ROSS & MOUNT TECHNOLOGY CENTER

At the technology center of Ross & Mount, Cologne, Germany. We blooms the innovation powered by cutting edge technology. The engineering system follows the standards in all their designs to ensure reliability at all levels of product designs.

The Ross & Mount products pass through all the extreme testing environments before reaching the equipment's and plants of the customer. Our set of proud customers prefers our products as their first choice for sub assemblies , proves our products reliability and integrity in all our relations .

Our technology team supports our valuable customers in selection of right assemblies, integration supports and Engineering to deliver our customer with engineered Reliability.

