



Specific Engineering Corporation Pvt Ltd













1

Range of SEC SBV Bladder Moulding Presses

SEC- SBV - 300

SEC - SBV - 400

SEC - SBV - 600

SEC - SBV - 1100

Content

Contents	1
Product Pictures	2
echnical Description	3
Machine Features	3
ncluded Items	4
echnical Data Sheet	5



<u>Bladder Mouldina Press</u>

Pictures





2



<u>Bladder Mouldina Press</u>

lechnical Description

The SBV Bladder presses are designed especially for manufacturing and curing the bladders used in the AUBO, BOM &AUTOFORM presses.

The control of hydraulic system included in the equipment is designed such that the lower mould half carrying the uncured rubber approaches the upper mould half with high velocity during the first closing stage, reducing the total closing period to minimum.

In the beginning of the pressing operation, the closing speed is slackened automatically in order to obtain slow and uniform compression of uncured material.

After laps of the curing time, the press opens up automatically and the bladders for AUBO and BOM presses are removed from the lower core plate. the bladders for AUTOFORM presses are detached by a pneumatic device which is included in the delivery on request.

The moulds which are generally executed according to customer's drawings are made of high grade steel. The two external mould portions and the core are cured by a direct steam connection.

The presses and hydraulic power unit are delivered, complete and ready for connection, excluding curing platens. A timer for automatic press opening after termination of the curing period as well as steam and condensate pipings are normal features of supply. supervision of erection, installation and commissioning.

The press is complete with all ancillaries necessary for the proper function of the bladder moulding operation and provided with terminations for appropriate connection by others to the battery limits of site services

The press is equipped with a mould lifting fixture and removable mould roll-in, roll-out table to facilitate mould changing.

All components of the press structure, hydraulic system and associated items of the plant are designed so as to safely carry all loads imposed by the use of the press moulding Tyre press bladders and rated for the maximum design press closing force.

The press structure is designed to safely carry a normally imposed load of at least 15% excess of the designed maximum closing force.

The hydraulic system is designed so as to deliver a maximum of 5% excess of closing force above the design maximum closing force.

All electrical equipment is suitable for connection to the site electricity supply at 440 volts, 3 phase & neutral 50 Hz, control voltage to be 110 volts, 50 Hz single phase from panel transformer.



<u>Bladder Mouldina Press</u>

Included Items

One hydraulically operated Bladder Moulding Press complete with main RAM for applying varying press closing forces & auxiliary RAM systems for mould core and ring movements together with means of locating and retaining mould cores, upper & lower mould halves in the press and suitable for a range of Tyre press bladder mould sizes up to the maximum sizes and rated for the maximum design press closing force.

One electric motor driven hydraulic power unit continuously rated to provide varying press closing forces for moulding.

One complete press control system complete with all valves, controls, instruments, gauges and actuators necessary for the safe operation of the press and the control of the moulding operation including recording of cure cycle time, temperature & operating parameters recording when moulding a range of tire press bladders.

One Electrical control cabinet to house all items associated with electrical control system complete.

One set of compressed air pipe work and fittings for supply of air requirements which is to include air rectification units to remove fine entrained contaminants and droplets, an air receiver to continue the operation in the event of a compressed air supply failure & for removal of cured bladder at the end of cure, pressure regulation to the requirements of recorder / controller is to be provided together, the site battery compressed air limit at $(7) \, \text{kg} \, / \, \text{cm}^2$.

All necessary drawings, details and general assistance to enable others to prepare foundations & other installation requirements will be provided with the machine.

Additionally

Spare parts list for normal two years operation.

Training of three engineers (operation, maintenance, quality control).

The supervision of erection, installation and commissioning will be provided at an additional cost.

We guarantee that the equipment when correctly mounted properly operated and maintained, shall give satisfactory performance for a period of 12 months from the date of start-up.



SEC SBV-1100 Specification SEC SBV-300 SEC SBV-400 SEC SBV-600 Press Closing Force 300 tonns 400 tonns 600 tonns 1100 tonns Cycle & 11"-20" / 12"-24" *18"-24" / 25" 14"-34" Mould Range from 12" - 20" Motor-cycle bladders Diameter of main RAM 350 mm 450 mm 640 mm 865 mm Hydraulic oil pressure 250 kg/cm² 250 kg/cm² 180 kg/cm² 180 kg/cm² Stroke of main RAM 670(std) / 1000 (sp.)mm 1000(std) / 1250(sp.) mm 2500 mm 3300 mm 180 kg/cm² Core cylinder force at: 180 kg/cm² 180 kg/cm² 180 kg/cm² - Raising force 20 tonns 30 tonns 40 tonns 40 tonns - Downward force 10 tonns 15 tonns 20 tonns 20 tonns Ejector cylinder force at: 180 kg/cm² 180 kg/cm² 180 kg/cm² 180 kg/cm² - push-up force 10 tonns 15 tonns 20 tonns 20 tonns - pull down force 9 tonns 12 tonns 15 tonns 15 tonns Stroke of core cylinder 150 mm 520 mm 850 mm 1220 mm Stroke of core ring 230 mm 680 mm 850 mm 1250 mm Distance between side links 820 mm 960 mm 1450 mm 1500 mm 850 / 550** mm 1900 / 508 mm Thickness of mould (max./min.) ht 250 / 100 mm 1300 / 500 mm Platen Dimensions 750 mm 1350 mm 1400 mm - Bottom (w & I) 850 mm - Top (w & I) 750 mm 850 mm 1350 mm 1400mm Maximum press opening 670 mm 1800 mm 3000 mm 3800 mm 8 KW Electric Power (KW) 8 KW 80 KW 80 KW 7000 50000 Approx weight press and pump (Kgs) 10500 35000 Approx closing speed 100/1000 66/1000 36 - 336/1400 - 1700 60-400 / 1700-2000 H. P. / L.P. (mm/ min)

Internal & external curing Electric Power Accessories upto 16 atm. steam 220/415 V 50 cycles Bladder Moulding



5

