

## Product information

# Hydraulic Vertical Two Column Testing Machines for Compression Testing LabTest 6.xxxH.4



### Machine use

Hydraulic two-column machines of the 6.xxx.4 series for compression testing are designed for mechanical testing and flexural strength of steel plates, concrete blocks, small bars and other components. The standard equipment includes a central-placed, quiet and economical hydraulic drive. Thanks to the wide variability and accessories, the H.4 machine series allows any material pressure testing to max. power capacity of 800 kN.

### Description of the machine and main advantages

- Open two-column frame with high stiffness, ergonomic design and safety shield.
- The machine and working area ergonomic with sufficient width allows easy manipulation with specimens and accessories.
- Robustness of the frame ensures high rigidity – The crosshead deformation at full load is 0.12 mm. Long service time of the machine and resistance against vibration, transferred into the floor.
- Quiet hydraulic drive with low noise <68 dB and power consumption, automatic check of hydraulic fluid level and temperature and air cooling allows continuous testing operation.
- Automatic check of the controlled loading in kN/sec or MPa/sec by proportional servo valve MOOG.
- The modular configuration of the machine with the option to add any accessories from LABORTECH company includes accessories for 3-point bending, special pressure plates, measuring probes, deformation sensors (extensometers), temperature chambers etc.

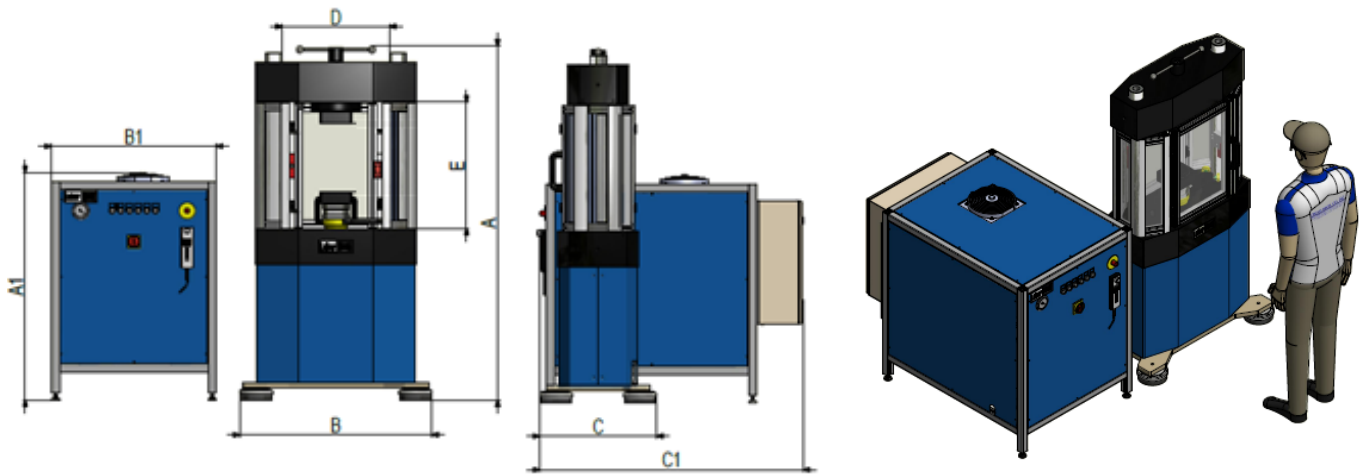
- Measuring and evaluation panel with LCD makes it easy to control and configure compression testing. The panel includes USB or LAN slot for communication with PC and a slot for connecting a printer (protocol printing).
- Due to high data acquisition **1kHz** and high resolution of AD converters **24 bit**, the measuring electronics allows very precise testing in a large range of a load cell from 0,4% to 100% in max. range of the machine according to EN ISO 7500-1.
- Machine extension possibility with a two-acting cylinder with the crosshead position measuring. Distance sensor in positional control loop etc.
- Support according standards EN, ISO, DIN, ASTM, GOST (EN 12390-4 / BS 1881:115 / DIN 51220, 51223, 51302), etc.

### The base machine includes:

- The machine frame includes an oil load sensor
- Protective safety shield
- Economical, silent hydraulic unit with cooling
- Measuring and control electronics EDC 222 with LCD display and STOP button
- Hydraulic connection between the HU and the frame
- Software integrated in EDC 222

### Supplements and Accessories

- Wide range of pressing tools
- Extensometers and track sensors for measuring the elasticity modulus
- Safety covers with electronic check
- Possibility of a weighing machine for measuring the weight of concrete
- Testing software T&M – BASIC
- A printer for protocols printing directly from the machine



| Technical data                          | Units  | 6.200H.4   | 6.400H.4 | 6.600H.4 | 6.800H.4 |
|---|--------|--|----------|----------|----------|
| Load capacity                           | kN     | 200  | 400      | 600      | 800      |
| Number of columns                       |        | 2  |          |          |          |
| Piston stroke                           | mm     | 100 – standard ( possibility of increasing the stroke up to 300 mm )       |          |          |          |
| Type of Cylinder <sup>1</sup>           |        | Single action cylinder standard ( possibility of a double action-cylinder) |          |          |          |
| Maximum testing speed                   | mm/min | 350  | 170      | 260      | 200      |
| Travel resolution <sup>2</sup>          |        | Accessories for Remainder - resolution up to 0,001 mm                      |          |          |          |
| Accuracy of speed control               | %      | 0,5  |          |          |          |
| Weight without accessories              | kg     | 1120   | 1210     | 1045     | 1360     |
| Weight with pressing tool               | kg     | 1160   | 1260     | 1100     | 1420     |
| Color finish                            |        | RAL 1015, RAL 5015 ( according to customer requirements )                  |          |          |          |
| <b>Dimensions</b>                       |        |  |          |          |          |
| Height of the Machine (A)               | mm     | 1830   | 1890     | 1715     | 1940     |
| Width of the Machine (B)                | mm     | 933  | 933      | 933      | 933      |
| Depth of the Machine (C)                | mm     | 568  | 568      | 568      | 568      |
| Width of test space (D)                 | mm     | 560  | 560      | 520      | 520      |
| Height of test space (E)                | mm     | 865  | 865      | 612      | 865      |
| Column diameter (H)                     | mm     | 60   | 60       | 80       | 80       |
| Height of Hydraulic unit (A1)           | mm     | 1102   |          | 1102     |          |
| Width of Hydraulic unit (B1)            | mm     | 380  |          | 800      |          |
| Depth of Hydraulic unit (C1)            | mm     | 1046   |          | 1246     |          |
| <b>Environmental conditions</b>         |        |  |          |          |          |
| Operating temperature                   | °C     | 10 to 35   |          |          |          |
| Storage temperature                     | °C     | -35 to 55  |          |          |          |
| Humidity range                          | %      | < 90   |          |          |          |
| Noise level <sup>3</sup>                | dB     | < 65   |          |          |          |
| <b>Electrical connection</b>            |        |  |          |          |          |
| Supply voltage                          | V      | 3Ph/N/PE/400/50-60Hz   |          |          |          |
| Fuse                                    | A      | 16   | 16       | 16       | 16       |
| Power requirement (without accessories) | kVA    | 2,5  | 2,5      | 4        | 4        |

<sup>1</sup>The standard version consists of a single-acting cylinder with 0,3 accuracy class oil sensor

Technical changes are reserved by manufacturer

<sup>2</sup>The length sensor is not in the standart version is only for an additional fee. You can use LVDT sensor type, IRC or SSI.

<sup>3</sup>If the HU is covered with original manufacturer cover. Measured at 1 m distance from HU without loading

## Manufacturer:

**LABORTECH s.r.o.**, Rolnická 130a, 747 05 Opava, Czech republic. Tel.: +420 553 731 956, +420 553 775 327  
Mob.: +420 602 527 646, +420 731 656 723, info@labortech.cz, www.labortech.cz, Czech republic

