Product Information
Servo-Hydraulic Vertical Dynamic Two Columns Testing Machines LabTest 6.xxxH.5

Machine use
Servo-hydraulic, vertical, dynamic two-column testing machines of the series H.5 with adjustable testing area with hydraulic clammers are designed for safe and effective testing of materials in tensile, pressure, torsion and bending in dynamic mode. This series of machines is characterized by high stiffness and mechanical resistance. A wide range of hydraulic units allows dynamic loading of specimens with force up to 500kN with frequency from 50 Hz to 100 Hz.

Machine description and the main advantages
- Vertical two and four columns frame with high stiffness and ideal ergonomic design.
- Machine and working area ergonomic with sufficient width allows easy manipulation with specimens and accessories.
- Robustness of the frame ensures high rigidity, durability and resistance to vibration and mechanical damage.
- Special vibration resistant leveling feet for absorbing transmitted vibrations to the floor.
- Wide range of hydraulic units according customer needs, automatic check of hydraulic unit parameters etc.
- Automatic check of controlled loading in kN/sec or MPa/sec by proportional servo valve
- A modular configuration of the machine with the ability to add any accessories from LABORTECH company that includes accessories for 3-point bending, special pressure plates, measuring probes etc.
- Due to high data acquisition rate 5kHz and high resolution of AD converters 24 bit, the measuring electronics allows very accurate testing in dynamic mode.
- High operator comfort and customization tools for specific customer requirements as special protective covers, different speeds, different types of special grips, etc.
- Possibility to control the machine with the remote control RMC 7.
- Support of standards: DIN, EN, ISO, ASTM, GOST, etc.

The base machine includes:
- Frame including load sensor
- Preparing for dynamic test cylinder
- Measuring and controlling electronic EDC 580
- HU according to customer specification, including frame and HU connections.
- Remote control RMC7 with LCD and STOP button
- Software integrated in the remote control

Supplements and Accessories
- Wide range of clamping grips, compression and bending tools
- Extensometers (mechanical, contactless)
- Safety covers of the whole machine
- Temperature chambers and furnaces

Software Features Test & Motion ® - DYNPACK ®
- Simple, intuitive and efficient
- Definable all kinds of protocols printing
- Individual files programming
- A set of programs for your own individual testing
- Available almost all standard methods of evaluation
- Special specific applications, programmable modules
- Digital display of all channels
- Extensive statistics of results
- Saving of results data in ASCII format, SQL and Excel file
- Transferring data from other devices like touch thickness gauge, weight, etc.
- Compatibility with every EDC box system by LABORTECH company
- Possibility to add more additional channels
- Quick and efficient testing
- 9 languages (En, Cz, Ge, Fr, Pl, It, Sp, Ru, Du)
- Protocol printing in various languages
- Installation on any computer without a licence
### Technical data

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Load capacity</td>
<td>kN</td>
<td>25</td>
<td>50</td>
<td>125</td>
<td>250</td>
</tr>
<tr>
<td>Number of columns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>X-head shift</td>
<td></td>
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<tr>
<td>X-head clamping</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height of the Machine (A)</td>
<td>mm</td>
<td>2690 (3190)³</td>
<td>2940 (3440)³</td>
<td>2940 (3440)³</td>
<td>3725 (4315, 4545)³</td>
</tr>
<tr>
<td>Width of the Machine (B)</td>
<td>mm</td>
<td>1050</td>
<td>1050</td>
<td>1050</td>
<td>1250</td>
</tr>
<tr>
<td>Depth of the Machine (C)</td>
<td>mm</td>
<td>680</td>
<td>680</td>
<td>680</td>
<td>790</td>
</tr>
<tr>
<td>Width of test space (D)</td>
<td>mm</td>
<td>460</td>
<td>560</td>
<td>560</td>
<td>670</td>
</tr>
<tr>
<td>Diameter of column (E)</td>
<td>mm</td>
<td>80</td>
<td>100</td>
<td>100</td>
<td>120</td>
</tr>
<tr>
<td>Height of test space (F)²</td>
<td>mm</td>
<td>1100 (1600)³</td>
<td>1260 (1760)³</td>
<td>1300 (1800)³</td>
<td>1760 (2170, 2580)</td>
</tr>
<tr>
<td>Displacement of X-head (G)</td>
<td>mm</td>
<td>1150</td>
<td>1150</td>
<td>1150</td>
<td>1250 (1455, 1660)</td>
</tr>
<tr>
<td>Height of top edge of lower X-head (H)³</td>
<td>mm</td>
<td>900</td>
<td>900</td>
<td>900</td>
<td>910</td>
</tr>
<tr>
<td>Weight⁴</td>
<td>kg</td>
<td>840 (915)³</td>
<td>990 (1400)³</td>
<td>990 (1400)³</td>
<td>2580 (2670, 2760)</td>
</tr>
<tr>
<td>Frame stiffness at 1000 mm – stress analysis</td>
<td>kN</td>
<td>880</td>
<td>910</td>
<td>910</td>
<td>1125</td>
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<tr>
<td>Frame for pistons with a max. stroke³</td>
<td>mm</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>3000 (3400, 3800)</td>
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<tr>
<td>Height of Hydraulic unit (A1)</td>
<td>mm</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Width of Hydraulic unit (B1)</td>
<td>mm</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Depth of Hydraulic unit (C1)</td>
<td>mm</td>
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</tbody>
</table>

### Environmental conditions

- **Operating temperature**: °C from 10 to 35
- **Storage temperature**: °C from -35 to 55
- **Humidity range**: % < 90
- **Noise⁶**: dB < 68

### Electrical connection

- **Supply voltage**: V 3Ph/N/PE/400/50-60Hz
- **Fuse**: A
- **Power range**: kVA

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³Adjustable heights of test space up to + 410 mm or + 820 mm – For models series 6.xxxH.5.xx.1

²The distance between the piston and the top flange beam with retracted piston

¹Machine height according to the type and stroke of the main hydraulic cylinder (height indicated for cylinders with a stroke of 120mm)

⁴If the HA is covered by the manufacturer’s original cover. Measured 1 m from HA and assuming water cooling is used.

Maximum test frequency up to 50 Hz. Higher test frequencies up to 100Hz according to special offer.

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**Manufacturer:**

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