

## 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 clampers 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

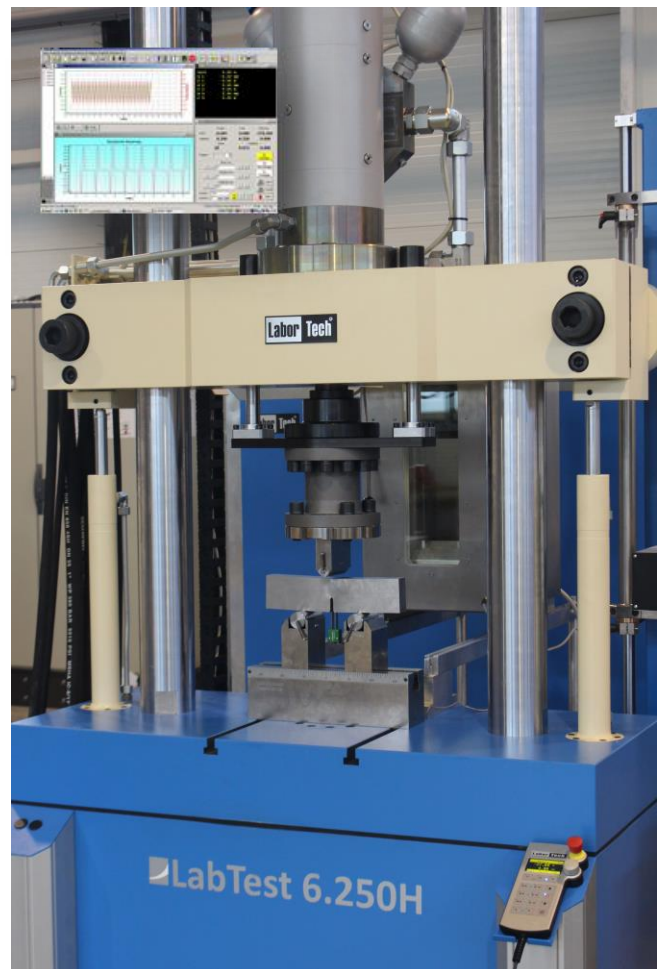
- Vertical two and four columns frame with high stiffness and ideal ergonomic design.
- Machine and working area ergonomic with sufficient width allows easy manipulation with specimens and accessories.
- Robustness of the frame ensures high rigidity, durability and resistance to vibration and mechanical 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

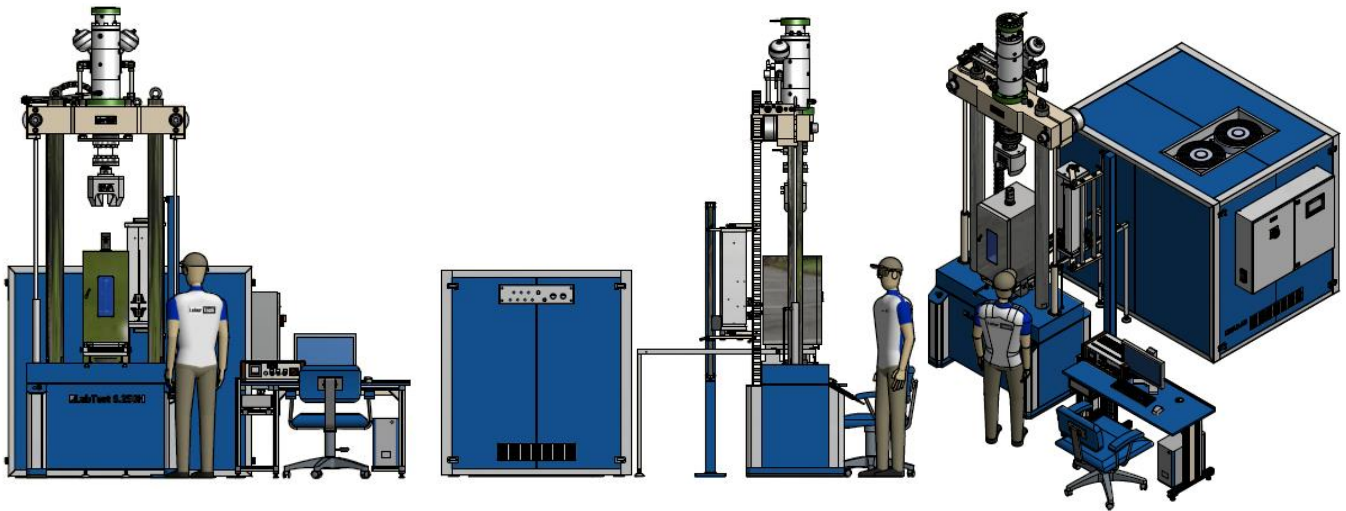
### Supplements and Accessories

- 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<sup>®</sup> - DYNPACK<sup>®</sup>

- 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	Units	6.25H.5	6.50H.5	6.125H.5	6.250H.5	6.500H.5
Load capacity	kN	25	50	125	250	500
Number of columns		2				
X-head shift		Hydraulic – by central remote control				
X-head clamping		Mechanically or hydraulically – by central remote control				
Height of the Machine (A)	mm	2690 (3190) <sup>1</sup>	2940 (3440) <sup>1</sup>	2940 (3440) <sup>1</sup>	2890 (3390) <sup>1</sup>	3480 (3980) <sup>1</sup>
Width of the Machine (B)	mm	1050	1050	1050	1250	1550
Depth of the Machine (C)	mm	680	680	680	790	1290
Width of test space (D)	mm	460	560	560	670	810
Diameter of column (E)	mm	80	100	100	120	120
Height of test space (F) <sup>2</sup>	mm	1100 (1600) <sup>1</sup>	1260(1760) <sup>1</sup>	1300(1800) <sup>1</sup>	1650(2150) <sup>1</sup>	1920(2420) <sup>1</sup>
Displacement of X-head (G)	mm	1150	1150	1150	1250	1250
Height of top edge of lower X-head (H) <sup>3</sup>	mm	900	900	900	900	900
Weight <sup>4</sup>	kg	840(915) <sup>1</sup>	990(1400) <sup>1</sup>	990(1400) <sup>1</sup>	1670(1740) <sup>1</sup>	3780(3900) <sup>1</sup>
Frame stiffness at 1000 mm – stress analysis	kN	880	910	910	1420	2280
Frame for pistons with a max. stroke <sup>5</sup>	mm	200	100	100	100	100
Height of Hydraulic unit (A1)	mm	According to the used type of the hydraulic unit. The size of the hydraulic unit (flow) is defined according to the frequency and amplitude.				
Width of Hydraulic unit (B1)	mm					
Depth of Hydraulic unit (C1)	mm					
<b>Environmental conditions</b>						
Operating temperature	°C	from 10 to 35				
Storage temperature	°C	from -35 to 55				
Humidity range	%	< 90				
Noise <sup>6</sup>	dB	< 68				
<b>Electrical connection</b>						
Supply voltage	V	3Ph/N/PE/400/50-60Hz				
Fuse	A	According to the used type of the hydraulic unit.				
Power range	kVA					

<sup>1</sup>Adjustable heights of test space up to + 500 mm – For models series 6.xxH.5.xx.1

Technical changes are reserved by the manufacturer

<sup>2</sup>The distance between the piston and the top flange beam with retracted piston

<sup>3</sup>Machine height including vibration dampers

<sup>4</sup>Weight without hydraulic unit, force transducers and all accessories

<sup>5</sup>Maximum test frequencies up to 50 Hz. Higher test frequencies up to 100Hz according to special offers.

<sup>6</sup>In case HU is covered by an original cover from the manufacturer. Measured 1 m from the HU, and provided that water cooling is used.

## Manufacturer:

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