from development to implementation

Product Information

Labor Tech

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 10 kHz 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
- 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

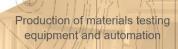


Software Features Test & Motion ®- DYNPACK ®

- 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

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Technical data	Units	6.25H.5	6.50H.5	6.125Н.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	2655 (2440) ⁷	2980	3390	3725(4135,4545)5	3965(4375,4785)5	
Width of the Machine (B)	mm	930 (780) ⁷	1050	1050	1250	1560	
Depth of the Machine (C)	mm	700	680	680	790	1040	
Width of test space (D)	mm	480	620	570	670	820	
Diameter of column (E)	mm	70	80	100	120	120	
Height of test space (F) ²	mm	1250	1300	1470	1760 (2170, 2580)	1760 (2170, 2580)	
Displacement of X-head (G)	mm	1000	1000	1100	1250 (1455, 1660)	1250 (1455, 1660)	
Height of top edge of lower X-head (H) ³	mm	530	870	900	910	920	
Weight⁴	kg	750(700) ⁷	1550	1850	2580 (2670, 2760	4160 (4250,4340)	
Frame stiffness at 1000 mm – stress analysis	kN	950	1000	1050	1125	1980	
Frame height for type with integrated piston ⁵	mm	2000	2420	2670	3000 (3400, 3800)	3100 (3500,3900)	
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						
Environmental conditions		1					
Operating temperature	°C	from 10 to 35					
Storage temperature	°C	from -35 to 55					
Humidity range	%	< 90					
Noise ⁶	dB	< 68					
Electrical connection	<u>\</u>						
Supply voltage	V	3Ph/N/PE/400/50-60Hz					
Fuse	A	According to the used type of the hydraulic unit.					
Power range ¹ Adjustable heights of test space up to + 410 mm or + 820 r	kVA	models series 6.xxxH.5.xx.1 Technical changes are reserved by the manufacturer					

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

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

³Machine height including vibration dampers

⁴Weight without hydraulic unit, force transducers and all accessories

⁵Machine height according to the type and stroke of the main hydraulic cylinder (for cylinders with a stroke up to 120mm)

⁶ If 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. ⁷ Machine width without hydraulic cvlinders

Manufacturer:

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