

Product Information

Electromechanical Testing Machines **LabTest 6.1000 - 6.1600**

Machine use

Electromechanical universal testing machines of the series 6.1000 to 6.1600 with new design are intended for mechanical tests in tensile, compression and bending during loading of specimens and whole products. This series is characterized by high durability and mechanical resistance. LABORTECH company offers this series with following capacities: 1000, 1200 and 1600 kN.

Machine description and main advantages

- The testing machine is equipped with a ball screw with preload and a linear guide, which allows partial out off-axis loading of specimens.
- Robustness of the frame ensures high rigidity, durability and resistance against vibration and mechanical damage.
- Machine and working area ergonomic allows easy manipulation with specimens and accessories.
- AC servo drive and belt drive with low noise level ensures low maintenance claims of the machine during tensile and compression testing.
- Ability to manage the machine speed in the range of 0.0005 to 400 mm/min.
- A modular configuration of the machine with the ability to add any accessories from LABORTECH company, including extensometers, temperature chambers, probes, tools, protection covers etc.
- Due to high data acquisition rate **1 kHz** and high resolution of AD converters **24 bit**, the measuring electronics allows very accurate testing in a large measuring range of the loading cell without any retrofitting of the machine with another sensor.
- High operator comfort and customization tools for specific customer requirements, such as special protective covers, different speeds, different types of special grips, adjustments of X-head travel for custom tools etc.
- Option to control the machine with a remote control RMC 7 with one button without PC.
- Centrally located control units which provide easy control of hydraulic grips and the machine.

The base machine includes:

- Machine frame including electronics EDC 220
- Load cell "GTM" series for tension/pressure at full load
- Remote control RMC7 with LCD display and STOP button
- Software integrated in the remote control

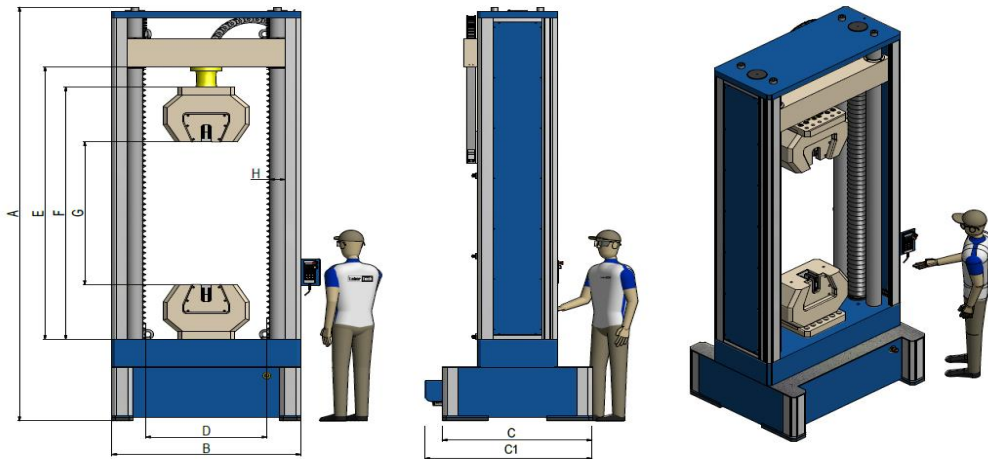
Supplements and Accessories

- Wide range of grips, compression and bending tools
- Variable T-slotted boards
- Extensometers (mechanical, contactless)
- Pneumatic aggregate for grips control
- Special working tables
- Special temperature chambers and furnaces
- Robotic arm Blue Runner
- Punching and cutting tools for test specimens



Software Features Test & Motion[®]

- 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 results
- Saving the resulting data in ASCII format, SQL and Excel file
- Transferring data from other devices like touch thickness gauge, weight, etc.
- Compatibility with each EDC box system by Labortech company
- Possibility to add more additional channels
- Quick and efficient testing
- 9 languages (En, Cz, Ge, Fr, Pol, It, Sp, Ru, Du)
- Protocol printing in various languages
- Installation on any computer without a licence



Technical data	Units	6.1000.1.00	6.1000.1.10	6.1000.1.20	6.1000.1.90	6.1200.1.00	6.1200.1.10	6.1200.1.20	6.1200.1.90	6.1600.1.10
		Load capacity tension/pressure	kN	1000			1200			1600
Number of columns		4								
Number of ball lead screws		2								
The stiffness of the frame without load cell	kN/mm	1430			1400			1800		
The stiffness of the frame with accessories	kN/mm	250			460			250		
Minimum testing speed	mm/min	0,0001			0,0001			0,0001		
Maximum testing speed	mm/min	400			400			250		
Travel resolution	μm	0,0028			0,0046			0,0045		
Repeatability of X-head travel	μm	0,5								
Weight without accessories	kg	4445	4750	5155	4163	4710	5120	5620	4412	6880
Weight with accessories	kg	According used fixtures			According used fixtures			8990		
Specific load of the floor	kg/cm ²	3,2			3,7			2,8		
Colour finish		RAL 1015, RAL 5015, anodized aluminium								
Dimensions										
Height of the Machine (A)	mm	3356	3856	4356	2856	3356	3856	4356	2856	3950
Width of the Machine (B)	mm	1450			1450			1650		
Depth of the Machine (C)	mm	1150			1150			1150		
Depth of the Machine (C1)	mm	1282			1282			1282		
Width of test space (D)	mm	975								
Height of test space (E)	mm	2040	2540	3040	1540	2000	2500	3000	1500	2550
Height of the test space with load cell (F)	mm	1810	2310	2810	1310	1770	2270	2770	1270	2224
Max. test space with grips and load cell (G)	mm	According used fixtures			According used fixtures			1020		
Environmental conditions										
Operating temperature	°C	10 to 35								
Storage temperature	°C	-35 to 55								
Humidity range	%	< 90								
Noise level ¹	dB	< 65								
Electrical connection										
Supply voltage	V	3Ph/N/PE/400/50/60Hz								
Fuse	A	32			50			50		
Power rating	kVA	14			16			18		

¹Measured at 1 m distance from testing machine without loading

Technical changes are reserved by the manufacturer

Manufacturer:

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