

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.
- Ability 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

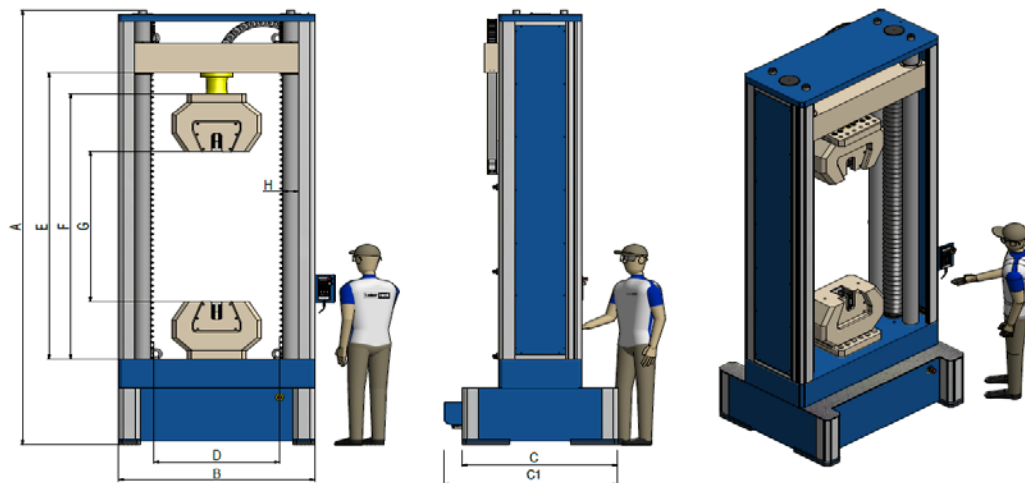
Supplements and Accessories

- 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	6.1200	6.1600
Load capacity	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	300
Travel resolution	μm	0,0028	0,0046	0,0045
Repeatability of X-head travel	μm	0,5		
Weight without accessories	kg	4750	5820	6880
Weight with accessories	kg	6200	7160	8990
Specific load of the floor	kg/cm ²	3,2	3,7	2,8
Color finish		RAL 1015, RAL 5015, Eloxal coated aluminium		
Dimensions				
Height of the Machine (A)	mm	3890	3890	4120
Width of the Machine (B)	mm	1450	1450	1540
Depth of the Machine (C)	mm	1150	1150	1150
Depth of the Machine (C1)	mm	1282	1282	1282
Width of test space (D)	mm	820	820	960
Height of test space (E)	mm	2320	2280	2485
Height of the test space with load cell (F)	mm	1769	1729	1738
Max. test space with jaws and load cell (G)	mm	1050	1020	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 manufacturer

Manufacturer:

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