

Product Information

Electromechanical Testing Machines LabTest 6.300 – 6.600

Machine use

Electromechanical universal testing machines of the series 6.300 to 600 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: 300, 500 and 600 kN.

Machine description and the 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 250 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

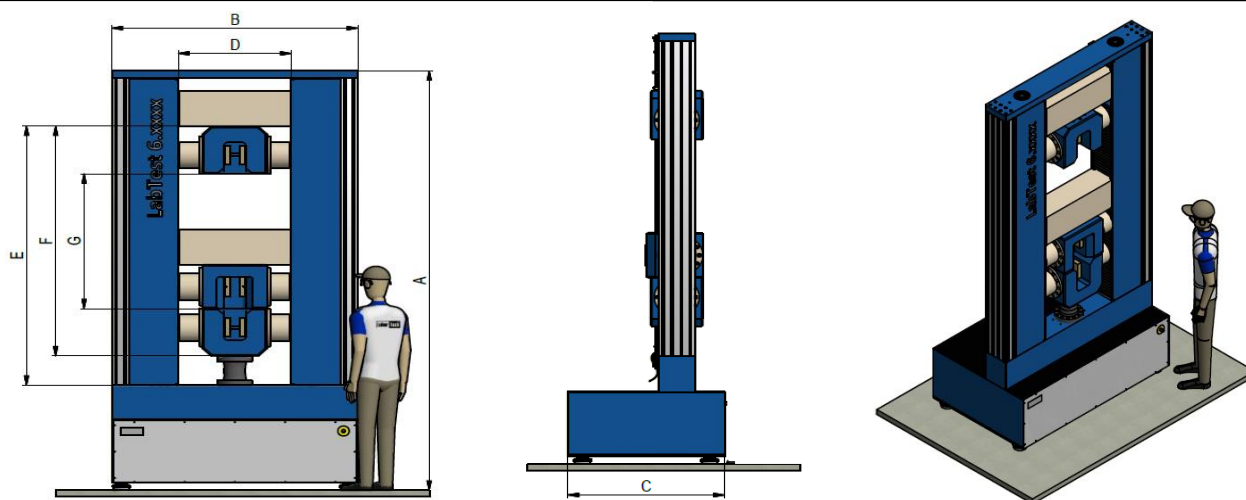
Supplements and Accessories

- 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
- Programming of individual files
- 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, scales, 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



Technical data	Units	6.300	6.500	6.600
Load capacity	kN	300	500	600
Number of columns		2		
Number of ball lead screws		2		
Number of linear guides		2+2		
The stiffness of the frame without load cell	kN/mm	520	760	800
The stiffness of the frame with accessories	kN/mm	260	380	420
Minimum testing speed	mm/min	0,0001	0,0001	0,0001
Maximum testing speed	mm/min	250	250	200
Travel resolution	μm	0,0033	0,0017	0,0017
Repeatability of X-head travel	μm	0,5		
Weight without accessories	kg	2100	2980	3300
Weight with accessories	kg	2580	3340	3890
Specific load of the floor	kg/cm²	4	5,3	5,8
Color finish		RAL 1015, RAL 5015, Eloxal coated aluminium		
Dimensions				
Height of the Machine (A)	mm	2850	3335	3395
Width of the Machine (B)	mm	1225	1713	1713
Depth of the Machine (C)	mm	860	1050	1050
Width of test space (D)	mm	635	785	785
Height of test space (E)	mm	1830	2062	1980
Height of the test space with load cell (F)	mm	1670	1829	1769
Max. test space with jaws and load cell (G)	mm	1120	1180	1210
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	16	32	32
Power rating	kVA	4	5,9	6,1

¹Measured at 1 m distance from testing machine without loading

Technical changes are reserved by manufacturer

Manufacturer:

LABORTECH s.r.o., Rolnická 130a, 747 05 Opava, Czech republic. Tel.: +420 553 731 956, +420 553 775 327
Mob.: +420 602 527 646, +420 731 656 723, info@labortech.cz, www.labortech.cz, Czech republic

