# Product Information Electromechanical Testing Machines LabTest 6.10 - 6.20

## Machine use

Labor Tech

Electromechanical universal testing machines of the series 6.xx.1 with new design are intended for mechanical tests in tensile, compression and bending during loading of specimens and whole products. Double column bench top or floor top design, with capacity from 10 kN to 20 kN are produced with different heights of testing areas from 1100, 1700 to 2300 mm, and widths from 460 to 650 mm. The machine frame can be extended to several testing areas (3).

### 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 2000 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 6 with one button via PC or tablet.

#### The base machine includes:

- Machine frame including electronics EDC 220
- Bench top design for table version
- "S" series load cell for tension/pressure at full loading
- Remote control RMC 6 with LCD display
- Software integrated in the remote control

#### **Supplements and Accessories**

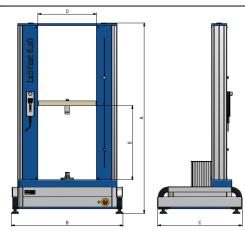
- Wide range of grips, compression and bending tools
- Extensometers (mechanical, contactless)
- Special temperature chambers high temperature furnaces
- Pneumatic aggregate for grips control
- Possibility of delivery with additional testing areas

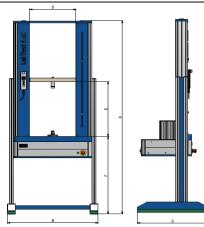


#### Software Test & Motion <sup>®</sup> Features

- 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 imaging 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, 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
- Installation on any computer without a licence

# Labor Tech





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Technical data	Units	6.10.1.10	6.10.1.20	6.10.1.30	6.10.1.11	6.10.1.21	6.10.1.31	6.20.1.10	6.20.1.20	6.20.1.30	6.20.1.11	6.20.1.21	6.20.1.31								
Load capacity	kN	10						20													
Number of columns		2																			
Number of ball lead screws		2																			
Number of linear guides		2+2																			
Minimum testing speed	mm/min	0,0005						0,0005													
Maximum testing speed	mm/min	2000						1500													
Travel resolution	μm	0,0651						0,0462													
Repeatability of X-head travel	μm	±1						±1													
Weight <sup>1</sup>	kg	180	205	229	210	236	273	200	220	249	230	256	293								
Dimensions <sup>2</sup>																					
Height of the Machine (A)	mm	1530	2340	2990	1530	2340	2990	1530	2340	2990	1530	2340	2990								
Width of the Machine (B)	mm	877	877	877	1067	1067	1067	877	877	877	1067	1067	1067								
Depth of the Machine (C)	mm	663	663	663	663	663	663	663	663	663	663	663	663								
Width of test space (D)	mm	460			650			460			650										
Height of test space (E)	mm	1100	1700	2300	1100	1700	2300	1100	1700	2300	1100	1700	2300								
Environmental conditions																					
Operating temperature	°C	10 to 35																			
Storage temperature	°C	-35 to 55																			
Humidity range	%	< 90																			
Noise level <sup>3</sup>	dB	< 65																			
Electrical connection																					
Supply voltage	V	230 240 / 50-60Hz						230 240 / 50-60Hz													
Fuse	А	16						16													
Power Rating	kVA	1,3						1,3													
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<sup>1</sup>Without accessories

<sup>2</sup>Changing parameters: extension dimension A in the range of +230 or +580 mm B +23 mm,

C +237 mm, F +500 mm or +850 mm. Stand weight 48 kg

<sup>3</sup>Measured at 1 m distance from testing machine without loading

#### Manufacturer:

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Technical changes are reserved by manufacturer