

## Product Information

# Electromechanical Testing Machines LabTest 6.0051 - 6.051

### Machine use

Electromechanical universal testing machines of the series 6.xxx.1 with new design are intended for mechanical tests in tensile, compression and bending during loading of specimens or whole products. One-column bench top design with maximum capacity 5 kN is produced with different test area heights from 650 to 1500 mm.

### 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 ergonomic design and 3 sides open test space allow 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 3000 mm/min, short-term overload of load cell much as 100%.
- 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.
- Connection to PC via ETHERNET or USB port.



### Software Test & Motion ® 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



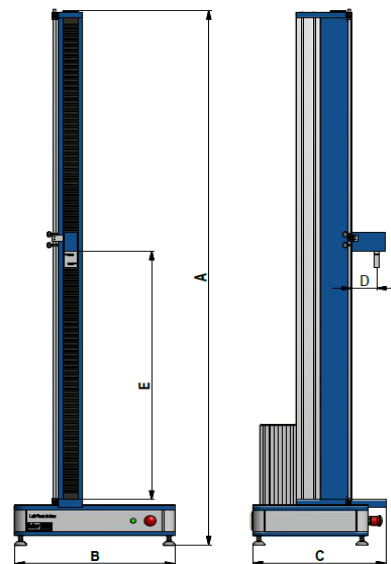
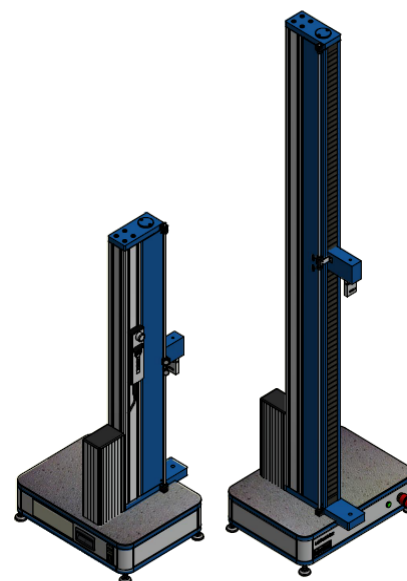
### The base machine includes:

- A machine frame including electronics EDC 220
- Bench top design
- "S" series load cell for tension/pressure at full loading EN ISO 7500-1, ASTM E4
- Preparation for remote control RMC6 holder

### Supplements and Accessories

- Wide range of grips, compression and bending tools
- Extensometers (mechanical, contactless)
- Special temperature chambers
- Pneumatic aggregate for grips control

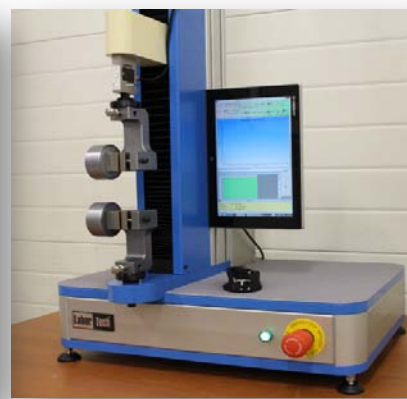
Technical data	Units	6.0051.1.1			6.031.1.1			6.051.1.1	
		6.0051.1.1	6.0051.1.2	6.0051.1.3	6.031.1.1	6.031.1.2	6.031.1.3	6.051.1.1	
Load capacity	kN	0,5			3			5	
Number of columns		1							
Number of ball lead screws		1							
Number of linear guides		1+2							
Minimum testing speed	mm/min	0,0005			0,0005			0,0005	
Maximum testing speed	mm/min	3000			1200			600	
Travel resolution	μm	0,142			0,066			0,026	
Repeatability of X-head travel	μm	±2			±1			±1	
Weight <sup>1</sup>	kg	60	65	70	62	68	74	68	
<b>Dimensions</b>									
Height of the Machine (A)	mm	1084	1484	1984	1174	1524	2024	1224	
Width of the Machine (B)	mm	531	531	531	531	531	531	540	
Depth of the Machine (C)	mm	442	442	442	442	442	442	580	
Width of test space (D)	mm	83			83			83	
Height of test space (E)	mm	650	1100	1500	650	1110	1500	650	
<b>Environmental conditions</b>									
Operating temperature	°C	10 to 35							
Storage temperature	°C	-35 to 55							
Humidity range	%	< 90							
Noise level <sup>2</sup>	dB	< 58							
<b>Electrical connection</b>									
Supply voltage	V	230 ... 240 / 50-60Hz							
Fuse	A	16							
Power Rating	kVA	0,370							



<sup>1</sup>Without accessories

Technical changes are reserved by manufacturer

<sup>2</sup>Measured at 1 m distance from testing machine without loading



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