# **Product Information**

# Electromechanical Testing Machines LabTest 6.100 - 6.250

#### Machine use

New electromechanical universal testing machines of the series 6.xxx.1 with new design, new more accurate and more efficient drives and control are intended for mechanical testing in tension, compression, bending, torsion and shear during loading of specimens and whole products. Double column floor top design with load capacity from 100 kN to 250 kN with linear accessory guiding and high durability and stiffness provides high off-axis loading toughness.

## Machine description and the main advantages

- The testing machine is equipped with ball screws with preload and a linear guide, which allows partial 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 1000 mm/min, short term load cells overload acc. standard EN ISO 7500-1.
- 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 the 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 crossheads travel for custom tools etc.
- Possibility of control of the machine with a remote control RMC 6 with one button or a PC and software T&M

# The base machine includes:

- Machine frame including electronics EDC 220
- Underlying fundament with springing
- Load cell range "LC.6" for tension/pressure at full load
- Remote control RMC with LCD display
- Software integrated in the remote control
- Preparation for HU connection, external STOP button etc.

#### **Supplements and Accessories:**

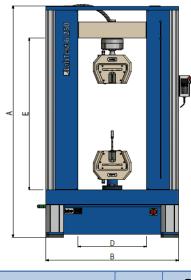
- Wide range of grips, compression and bending tools
- Extensometers (mechanical, contactless)
- Special temperature chambers and furnaces



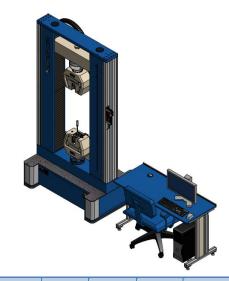
### Software Features of Test & Motion ®

- Simple, inductive and efficient
- Fast and rational testing
- Individual files programming
- Digital displaying of all channels
- Extensive statistics of results
- A set of programs for your own individual testing
- Available almost all standard methods of evaluation
- Special specific applications, programmable modules
- Saving of results data in ASCII format, SQL and Excel file
- Possibility to add more additional channels
- 9 languages (En, Cz, Ge, Fr, Pol, It, Sp, Ru, Du)
- Definable all kinds of protocols printing
- Protocol printing in various languages
- Installation on any computer without a licence
- Compatibility with every EDC box system by LABORTECH company
- Transferring data from other devices like touch thickness gauge, scales, etc.









Technical data	Units	6.100.1.10	6.100.1.20	6.100.1.30	6.200.1.10	6.200.1.20	6.200.1.30	6.200.1.40	6.250.1.10	6.250.1.20	6.250.1.30
Load capacity	kN	100			200				250		
Number of columns		2									
Number of ball lead screws		2									
Number of linear guides		2+2									
Minimum testing speed	mm/min		0.00005		0.00005				0.00005		
Maximum testing speed	mm/min		1000		1000				700		
Travel resolution	μт	0,0148 0,0122						0,0105			
Repeatability of X-head travel	μт	±1			±2				±2		
Weight <sup>1</sup>	kg	890	917	950	1190	1220	1255	1550	1215	1245	1280
Dimensions											
Height of the machine (A)	mm	1750	2150	2970	1960	2360	3370	5010	1960	2360	3370
Width of the machine (B)	mm	1040			1220				1220		
Depth of the machine (C)	mm	840			840				840		
Width of test space (D)	mm	600 (700) <sup>3</sup>			630 (720)³						
Height of test space (E)	mm	1045	1445	2265	1150	1550	2560	4200	1150	1550	2560
Environmental conditions											
Operating temperature	°C	od 10 do 35									
Storage temperature	°C	od -35 do 55									
Humidity range	%	< 90									
Noise level <sup>2</sup>	dB	< 70									
Electrical connection											
Supply voltage	V	230 .	240V / 50	-60Hz	3x230V/400V 50/60Hz						
Fuse	Α		16		16						
Power Rating (w/o accessories)	kVA		2,1		3						

<sup>1</sup>Without accessories, <sup>2</sup> Measured at 1m distance from the machine without loading, <sup>3</sup>Width of test space without covers

Technical changes are reserved by manufacturer

# Manufacturer:

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