from development to implementation

Production of materials testing equipment and automation

Product Information

Labor Tech

Electromechanical Testing Machines LabTest 6.300 – 6.400

Machine use

Electromechanical universal testing machines of the series 6.300 and 6.400 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 and 400 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



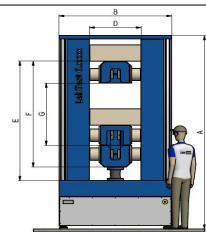
Software Features Test & Motion ®

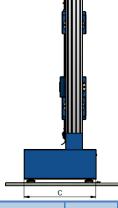
- Simple, intuitive and efficient
- Definable all kinds of protocols printing
- Programming of individual files
- A set of programs for your own individual testing
- Available almost all standard methods of evaluation
- Special specific applications, programmable modules
- Digital display of all channels
- 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

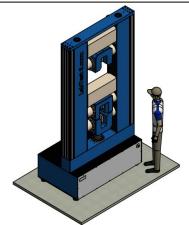
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Technical data	Units	6.300.1.00	6.300.1.10	6.300.1.20	6.400.1.00	6.400.1.10	6.400.1.20	
Load capacity	kN	300			400			
Number of columns		2						
Number of ball lead screws		2						
Number of linear guides		2+2						
The stiffness of the frame without load cell	kN/mm	520				520		
The stiffness of the frame with accessories	kN/mm	260			260			
Minimum testing speed	mm/min	0,0001			0,0001			
Maximum testing speed	mm/min	250			250			
Travel resolution	μm	0,0033 0,0033						
Repeatability of X-head travel	μm	0,5						
Weight without accessories	kg		2100					
Weight with accessories	kg		2580					
Specific load of the floor	kg/cm²		4					
Color finish		RAL 1015, RAL 5015, eloxal coated aluminium						
Dimensions								
Height of the Machine (A)	mm	2350	2850	3350	2350	2850	3350	
Width of the Machine (B)	mm	1225						
Depth of the Machine (C)	mm	860						
Width of test space (D)	mm	635						
Height of test space (E)	mm	1330	1830	2330	1280	1780	2280	
Height of the test space with load cell (F)	mm	1170	1670	2170	1120	1620	2120	
Max. test space with jaws and load cell (G)	mm	620	1120	1620	570	1070	1570	
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	А	16 16						
Power rating	kVA	4 4						

 $^{1}\,\text{Measured}$ at 1 m distance from testing machine without loading

Technical changes are reserved by the manufacturer

Manufacturer:

