

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

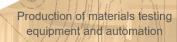


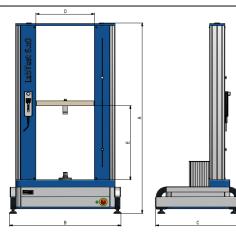
Software Test & Motion [®] Features

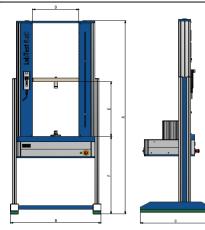
- Simple, intuitive and efficient
- Definable all kinds of protocols printing
- Individual files programming
- A set of programs for your own individual testing
- Available almost all standard methods of evaluation
- Special specific applications, programmable modules
- Digital imaging of all channels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



from development to implementation







| 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 ¹ | kg | 180 | 205 | 229 | 210 | 236 | 273 | 200 | 225 | 249 | 230 | 256 | 293 |
| Dimensions ² | | | | | | | | | | | | | |
| Height of the Machine (A) | тт | 1530 | 2130 | 2730 | 1530 | 2130 | 2730 | 1530 | 2130 | 2730 | 1530 | 2130 | 2730 |
| Width of the Machine (B) | тт | 877 | 877 | 877 | 1067 | 1067 | 1067 | 877 | 877 | 877 | 1067 | 1067 | 1067 |
| Depth of the Machine (C) | тт | 663 | 663 | 663 | 663 | 663 | 663 | 663 | 663 | 663 | 663 | 663 | 663 |
| Width of test space (D) | тт | 460 | | | 650 | | | 460 | | | 650 | | |
| Height of test space (E) | тт | 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 ³ | 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 | | | | | |

¹Without accessories

²Changing 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

³Measured at 1 m distance from testing machine without loading

Manufacturer:

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Technical changes are reserved by the manufacturer