

Product Information

Robotic Testing System 'roboTest A' (Compact)



Robotic testing system 'roboTest A' with testing machine 20 kN



Pincer gripper removes a specimen from the magazine

Applications

The robotic testing system is used for the fully automatic performance of tensile tests on:

- Metallic specimens (e.g. according to DIN EN 10002-1, ISO 6892, JIS Z 2201, ASTM E8)
- Plastics specimens (e.g. according to ISO527-2, ASTM D790)
- Dimensionally stable specimens of other materials (e.g. wood)

System Configuration

- Materials testing machine 5 kN up to 250 kN with symmetrically closing, pneumatic or hydraulic specimen grips and an optional extensometer
- Robotic feeding system 'roboTest A' with integrated magazine for 20 specimens
- Industry Controller with test software *testXpert*® and automation software *autoEdition2*

Advantages of the Robotic Testing System 'roboTest A'

- A high reproducibility of the test results is obtained because operator influences are excluded (hand temperature, moist hands, eccentric or inclined insertion of specimens etc.).
- Qualified laboratory staff is relieved of routine jobs and is thus available for more complex activities.
- The machine can be used during idle times (break, night shift) thus increasing the rate of utilization and allowing „quicker“ results.
- The system reduces the testing costs per specimen and usually pays off within one to two years.
- Manual tests are still possible by simply pushing the robotic feeding system aside.
- The automatic data logging system ensures secure documentation and enables statistical long-term monitoring (Statistical Process Control).

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Working area of the robotic testing system 'roboTest A'

Test Sequence

- The user fills the specimen magazine directly on the robotic testing system. A refilling of specimens in magazine places that were not yet worked off is possible at any time.
- The specimen data (ident number, width, thickness,...) are entered on the PC. In barcode operation this step can be omitted.
- After the startup of the system on the PC, specimen feed, tensile test and removal of the specimen fragments are carried out automatically.

Technical Data

Mechanics

Mounting	Swivellable at the load frame
Capacity	20 specimens
Dimensions (H x W x D)	1500 x 690 ¹⁾ / 840 ²⁾ x 600 mm
Weight	Approx. 85 kg (without specimen)

¹⁾ Load frame in profile design

²⁾ Load frame in column design

Connected values

Electrical connection	230/115 V
Output	200 VA
Mains frequency	50/60 Hz
Compressed air	6 bar
Required compressed air	2 lpm

Control

Automation software	autoEdition2
Peripheral connection	PROFIBUS

Specimens

• Specimen type	dumbbells, stripes, tubes, round or profile specimens
• Material	dimensionally stable
• Weight	max. 300 g
• Length	max. 300 mm
• Width (flat)	max. 33 mm
• Diameter (round)	max. 20 mm
• Thickness (incl. bending)	max. 20 mm

Options

• Specimen identification by barcode
• Data exchange with superior processor systems (e.g. LIMS) via upload/download of ASCII-files or ODBC
• Optical status indicator by threefold „traffic light“ (running, refill specimens/finished, error)