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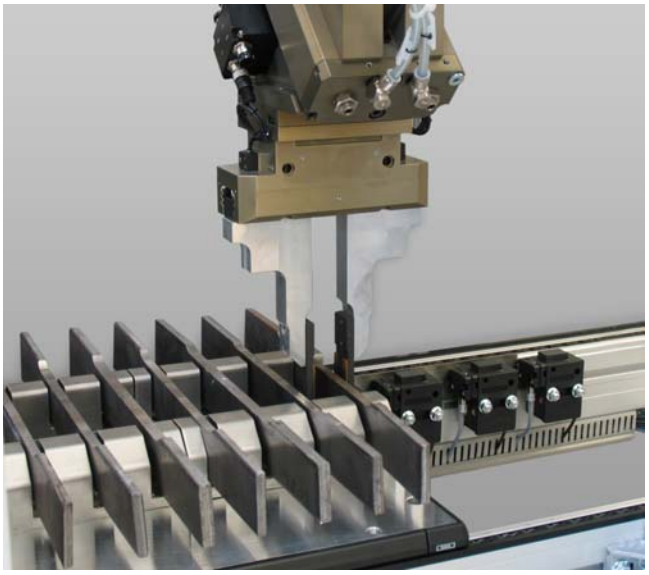
Materials Testing

Product Information

Robotic Testing System ‘roboTest C’ (Compact)

Robotic testing system ‘roboTest C’ with testing machine 600 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:

- Metal specimens
  (e.g. according to DIN EN10002-1, JIS Z2201, ASTM E8)
- Dimensionally stable specimens of other materials

System Configuration

- Materials testing machine 300 kN up to 600 kN with symmetrically closing hydraulic specimen grips and an optional extensometer
- Robotic feeding system ‘roboTest C’ with magazine for 24 or 40 specimens
- Industry Controller with test software *testXpert*® and automation software autoEdition2

Advantages of the Robotic Testing System ‘roboTest C’

- 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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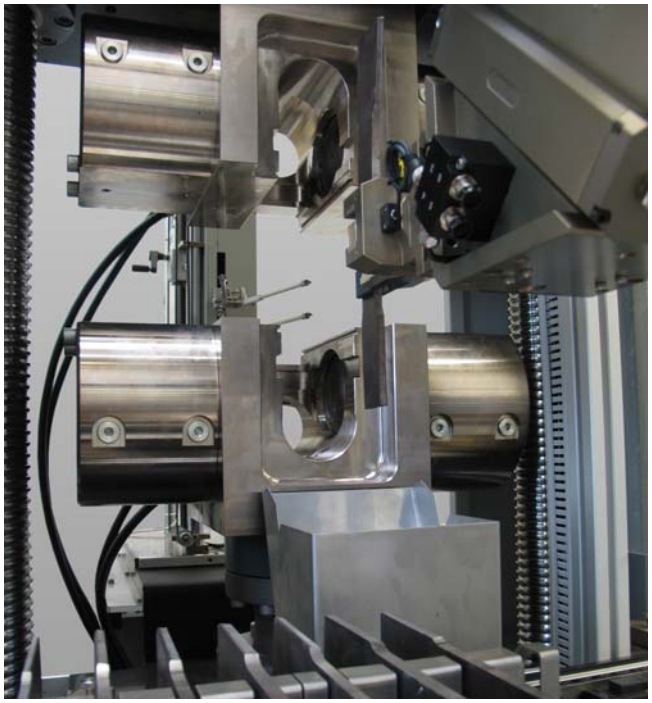

Feeding of the specimen to the testing machine

Test Sequence

- The user fills the specimen magazine directly on the test 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	coupled to the load frame
Capacity	24 specimens / 40 specimens
Dimensions (H x W x D)	2200 x 2600 x 800 mm
Weight	approx. 200 kg (without specimen)

Connected values	
Electrical connection	3x 400V 3L/N/PE
Output	2 kVA
Mains frequency	50/60 Hz
Compressed air	6 bar
Required compressed air	10 lpm

Control	
Automation	autoEdition2
Peripheral connection	PROFIBUS

Specimens	
• Specimen type	dumbbells, stripes, tubes, round or profile specimens
• Material	dimensionally stable, non-adhesive
• Weight	max. 5 kg
• Length	max. 450 mm
• Width	max. 60 mm
• Thickness	max. 30 mm

Options

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

All Data at ambient temperature.