

## **Product Information**

roboTest C (Compact) robotic testing system



'roboTest C' robotic testing system

#### **Range of application**

The system is used for fully automatic tensile tests on:

- metal specimens (e.g. to DIN EN 10002-1, JIS Z 2201, ASTM E8)
- dimensionally stable specimens made of other materials

#### System configuration

- 300 kN to 1200 kN materials testing machine
- Symmetrically closing hydraulic grips
- Extensometer (optional)
- roboTest C automatic specimen feed system with magazine for 20 or 40 specimens
- Industrial controller with testXpert testing software and autoEdition3 automation software

#### Benefits

- ZwickRoell has over 35 years of experience and expertise, gained while supplying more than 700 automated testing systems worldwide.
- Operator influences (hand temperature/moisture, offcenter or angled specimen insertion, etc.) are eliminated for high test-result reproducibility.

- Qualified laboratory staff are relieved of routine activities, making them available for more complex tasks.
- The machine can be used during idle times (lunch breaks and night shifts), which increases capacity and produces faster results.
- The testing system reduces the testing costs per specimen and typically pays for itself within one to two years.
- Manual tests can be performed whenever required the specimen feeder simply swings out of the way for access.

#### **Test sequence**

- The operator fills the specimen magazine directly on the system. Specimens can be added at any time to magazine slots which are still unoccupied.
- Specimen data (identification number, width, thickness etc.) are entered on the PC. This step can be omitted when using barcodes.
- Once the system has been started on the PC, specimen feed, tensile testing and disposal of specimen remains are performed automatically.

CTA: 131239



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#### **Technical data**

MechanicalMounting"docked" to load frameMagazine slots24 specimens / 40 specimensDimensions (H x W x D)2218 x 3200 x 700Weight (without specimens), approx.200Power supply (dataElectrical supply3L/N/PEPower consumption200Power supply frequency50/60Compressed air, filtered, oil-free6Compressed air consumption, approx.2AutomationautoEdition 3Peripherals connectionProfinetTestIterestSpecimenssepecimensSpecimen shapedumbbell, strip, round, pipe, profile specimensMaterialdimensionally stable, non-tackySpecimen length, max.60Specimen thickness, max.30Specimen thickness, max.30	Туре	roboTest C	
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	Specimen width, max.	60	mm
	Specimen thickness, max.	30	mm
Weight, max. 5.67 kg	Weight, max.	5.67	kg

Description	ArticleNumber
<ul> <li>roboTest C automatic testing system for flat tensile specimens</li> <li>Belt magazine, typically for 24 specimens (3 specimen carriers)</li> <li>Feed unit with pincer gripper</li> <li>Gripper stroke: 26 mm</li> <li>Max. specimen thickness: 30 mm</li> </ul>	640334
<ul> <li>roboTest C automatic testing system for flat tensile specimens</li> <li>Belt magazine, typically for 40 specimens (5 specimen carriers)</li> <li>Feed unit with pincer gripper</li> <li>Gripper stroke: 26 mm</li> <li>Max. specimen thickness: 30 mm</li> </ul>	010244

#### **Specimen carriers**

With roboTest C the specimen carrier (yellow) is the basic unit for positioning specimens. Specimen spacer units (green) and specimen supports (red) are mounted on the specimen carrier

Description	ArticleNumber
Specimen carrier (400 x 480 mm) for roboTest C (Compact) testing system	646654

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#### Specimen spacer units

Specimen spacer units are required for positioning specimens of different thickness.

A set contains 4 spacer units and is sufficient for filling one specimen carrier.

Description	ArticleNumber
Set of specimen spacer units for specimen thickness 2 to 8 mm	646655
Set of specimen spacer units for specimen thickness 8 to 16 mm	646656
Set of specimen spacer units for specimen thickness 16 to 30 mm	646657

#### **Specimen supports**

Specimen supports are required for positioning specimens of different parallel width.

A set contains 2 supports and is sufficient for filling one specimen carrier.

Specimens with a parallel width of 40 mm can be inserted directly into specimen spacer units; additional specimen supports are required for other widths.

Description	ArticleNumber
Set of specimen supports for specimen parallel width <b>25 mm</b>	646658
Set of specimen supports for specimen parallel width 20 mm	646659
Set of specimen supports for specimen parallel width 12.5 mm	646660

The specimen gripper is included in the basic system and does not have to be offered separately.

An associated gripper finger (depending on specimen thickness) must be offered for the gripper.

Description	ArticleNumber
Gripper finger for roboTest C specimen feeding system	640332
<ul> <li>Flat specimens 1.5 to 25mm thick</li> </ul>	
Gripper finger for roboTest C specimen feeding system	010245
<ul> <li>Flat specimens 6 to 30 mm thick</li> </ul>	

#### Options

- Specimen identification
- Specimen disposal

• Data exchange: Higher-level computer systems (e.g. LIMS) via upload/download of ASCII files or ODBC

• Optical status indicator: 3-tiered light (running, refill specimens/finished, error/malfunction)