

Product Information

ZwickRoell 3105 combi test

CTA: 46150 46153



ZwickRoell 3105 combi test Hardness Tester

Applications

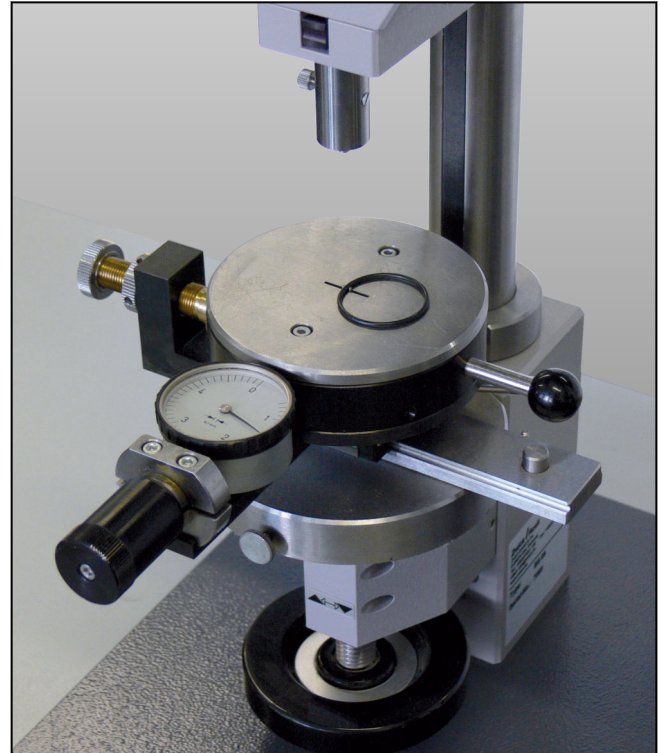
The **ZwickRoell 3105 combi test** is a microcomputer-controlled hardness tester for the following measurement ranges:

- IRHD-M (micro)
- IRHD-N (normal)
- IRHD-H
- IRHD-L (soft)
- VLRH (IRHD supersoft)
- Shore A/B/0
- Shore D/C/D0
- Shore 00/000
- Micro Shore

It satisfies the following standards: ISO 7619-1, ISO 868, ISO 48, ASTM D2240, ASTM D1415, NFT 51 123, NF 46 003.

This hardness tester delivers fast, fully automatic measurement in all Shore and IRHD ranges. Operator influence is eliminated, while digital measuring systems enable high measurement accuracy.

The tester can perform hardness tests on moldings and sheet materials, for example, using an automatic approach system.



Rapid centering device for O-rings

This ensures reliable measurements on moldings with concave or convex surfaces.

VLRH hardness testing is also possible. With this method the hardness of very soft elastomers, particularly silicon and foam rubber, can be determined with material thicknesses from 2 mm.

Advantages and features

- Quick and high measurement accuracy without operator influences via automatic measurement procedures
- Reliable measurements on shaped parts with concave or convex surfaces, e.g. hardness tests on prefabricated parts
- Modular construction with automatic identification of the measurement system and the adjustment of the measurement distance
- Intuitive display with easy operation
- Wide range of accessories, e.g. for quick centering of O-rings and hoses

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Technical data

ZwickRoell 3105 combi test - digital IRHD/Shore hardness tester (all 3 components required)

Description	Item number
ZwickRoell 3105 combi test test stand, consisting of aluminum base with height-adjustable support table for specimens, column for attachment of measuring unit, spacer ring and dustproof cover	324632
ZwickRoell 3105 combi test - electronics unit, RS232 C serial port, hysteresis function for IRHD, function keys, automatic measurement range recognition, power supply 100 - 240 VAC, 50/60 Hz	324633
ZwickRoell 3105 combi test - mounting arm with loading unit and automatic lowering device for mounting Shore and IRHD measuring devices	324634

Accessories required

Measuring device (minimum of 1x required)

Description	Item number
Measuring device for 3105 combi test for Shore A/B/0 for moldings and sheet materials as per ISO 7619-1, ISO 868, ASTM D2240, with removable 12.5N weight, interchangeable Shore A indenter and mounting-pin system	324635
Measuring device for 3105 combi test for Shore D/C/D0 for moldings and sheet materials as per ISO 7619-1, ISO 868, ASTM D2240, with interchangeable Shore D indenter and mounting-pin system	324636
Attachable Shore D/C/D0 load weight (required for Shore D/C/D0 measuring devices: 324636 & 371003)	324637
Measuring device for 3105 combi test for Shore A for sheet materials as per ISO 7619-1, ISO 868, ASTM D2240, with permanently installed Shore A indenter and mounting-pin system	371002
Measuring device for 3105 combi test for Shore D for sheet materials as per ISO 7619-1, ISO 868, ASTM D2240, with permanently installed Shore D indenter and mounting-pin system	371003
Measuring device for 3105 combi test for Shore 00 for sheet materials as per ASTM D2240, with permanently installed Shore 00 indenter and mounting-pin system	371018
Measuring device for 3105 combi test for Shore 000 for sheet materials as per ASTM D2240, with permanently installed Shore 000 indenter and mounting-pin system	023043
Measuring device for 3105 combi test for micro Shore A for moldings and sheet materials; measurement travel 0.5 mm, with removable 5.0N weight, interchangeable Shore A indenter and mounting-pin system	324638
Measuring device for 3105 combi test for micro Shore D/C/D0 for moldings and sheet materials; measurement travel 0.5 mm, with removable 5.0 N weight, interchangeable Shore D indenter and mounting-pin system	324639
Measuring device for 3105 combi test IRHD micro for moldings and sheet materials as per ISO 48, ASTM D1415, with interchangeable indenter (ball, Ø 0.4 mm) compression platen (Ø 3.35 mm), weight as per ISO 48 and mounting-pin system	324640
Measuring device for 3105 combi test IRHD normal for moldings and sheet materials as per ISO 48, ASTM D1415, with interchangeable indenter (ball, Ø 2.5 mm) compression platen (Ø 20 mm), weight as per ISO 48 and mounting-pin system	324641
Measuring device for 3105 combi test IRHD soft for moldings and sheet materials as per ISO 48, ASTM D1415, with interchangeable indenter (ball, Ø 5.0 mm) compression platen (Ø 22 mm), weight as per ISO 48 and mounting-pin system	324642

Product Information

ZwickRoell 3105 combi test

Description	Item number
Measuring device for 3105 combi test IRHD H for moldings and sheet materials as per ISO 48, with interchangeable indenter (ball, Ø 1.0 mm) compression platen (Ø 20 mm), weight as per ISO 48 and mounting-pin system	324643
Measuring device for 3105 combi test VLRH (IRHD supersoft) for moldings and sheet materials, with interchangeable indenter (ball, Ø 2.5 mm), weight as per IRHD and mounting-pin system	324644

Optional accessories

Supplementary units

Description	Item number
Rapid centering device for O-rings (material diameter 0.6 to 5 mm)	890247
Movable retaining block with prism for exact centering of hoses; can be attached to the test table	890246
Magnifying lens with swivel arm, 2.5x magnification	890245
Rapid centering device for O-rings (material diameter 0.6 to 8 mm; outside Ø up to 200 mm) With holding-down clamp, Plexiglas panel (200 x 200 mm), centering aid and carrying case.	017557
Automatic specimen-centering device With multiple measurement, optical specimen detection, thickness measurement and 2-point measurement; travel 90 mm; support table Ø 120 mm For plane-parallel plates or O-rings of 1 mm to 10 mm cross-section diameter Incl. storage case	1046297

Official DAkkS/DKD calibration certificates, Shore measurement range

Description	Item number
Official DAkkS/DKD calibration certificate for Shore A (check performed in accordance with PTB guidelines) Contact surface and indenters, indenter travel and spring force as per ISO 7619	307751
Official DAkkS/DKD calibration certificate for Shore D (check performed in accordance with PTB guidelines) Contact surface and indenters, indenter travel and spring force as per ISO 7619	307752
Official DAkkS/DKD calibration certificate for Shore 00/000 (check performed in accordance with PTB guidelines) Contact surface and indenters, indenter travel and spring force as per ISO 7619	076482
Official DAkkS/DKD calibration certificate for Shore A0 (check performed in accordance with PTB guidelines) Contact surface and indenters, indenter travel and spring force as per ISO 7619	081989

Official DAkkS/DKD calibration certificates, IRHD measurement range

Description	Item number
Official DAkkS/DKD calibration certificate for IRHD micro (check performed in accordance with PTB guidelines) Compression platen, indenter, indenter travel, forces on ball, force on compression platen as per ISO 48	307666
Official DAkkS/DKD calibration certificate for IRHD normal (check performed in accordance with PTB guidelines) Compression platen, indenter, indenter travel, forces on ball, force on compression platen as per ISO 48	307667
Official DAkkS/DKD calibration certificate for IRHD soft (check performed in accordance with PTB guidelines) Compression platen, indenter, indenter travel, forces on ball, force on compression platen as per ISO 48	307668

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Description	Item number
Official DAkkS/DKD calibration certificate for IRHD H (check performed in accordance with PTB guidelines) Compression platen, indenter, indenter travel, forces on ball, force on compression platen as per ISO 48 Method H	307649
Official DAkkS/DKD calibration certificate for VLRH (check performed in accordance with PTB guidelines) Compression platen, indenter, indenter travel, forces on ball, force on compression platen; as per ISO 27588	1027356

testXpert® III testing software

Description	Item number
testXpert III Standard Test Program data connection via serial port	1035143
testXpert III Master Test Program data connection via serial port (3rd license)	1035512
Connecting cable for PC with serial port (9-pin) to ZwickRoell 3105	320959