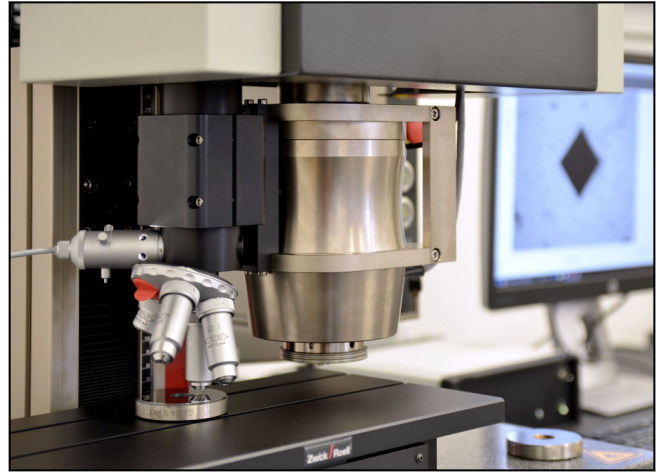


Product Information

testXpert® hardness edition

CTA: 46449 142890

testXpert®
hardness edition



Basic software for hardness applications

testXpert operates with basic software for all applications. It takes care of data, user, and test program management, together with communication with the testing system and other peripheral systems.

Master Test Programs

Cover the test categories intended for frequently changing or complex testing requirements. Little effort or previous knowledge is needed to:

- create and alter test programs
- configure screen views to suit individual needs
- create situation-specific test reports.

Intelligent software wizards guide you swiftly and unerringly through each menu, while simultaneously performing consistency checks. Two Master Test Programs are available for hardness testing machines and hardness testers:

- optical hardness testing methods (Vickers, Knoop, Brinell)
- instrumented indentation test and hardness testing methods using indentation depth measurement.

Customized test programs

Individual solutions for specific testing situations, with functions and sequences specified by the user. These programs can be created in one of two ways.

- ZwickRoell supplies the appropriate master test program and the user himself creates specific test programs with the aid of a software wizard.
- ZwickRoell creates the test programs for you in accordance with your specifications.

Software tools

(wizards, editors macro language) provide support for the user in many different ways:

- in adapting test programs to the relevant testing situations
- in configuring screen views and reports
- in the management of test series with sub-series and test results
- in user management and data management
- in programming the user's own results and access to actions (ZIMT)
- in creating user groups and specifying access rights

Standardized testing software

testXpert supports different hardness testing systems using a standardized user interface. The range of application covered by the hardness testing system, with regard to test method, force range, properties and options, is automatically configured in testXpert.

Product Information

testXpert® hardness edition

Ranges of application

ZHU/zwickiLine+

- For universal hardness testing in the range from 2 N to 2500 N.
- Instrumented indentation test, Rockwell, ball indentation, Vickers, Knoop and Brinell.
- For automated series and traverse tests.
- Load/indentation depth curve is recorded and displayed regardless of method.





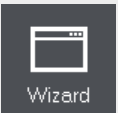
ZwickRoell/ZHV10 - low-load Vickers

- For Vickers, Knoop and Brinell hardness tests in a range from HV0.2 to HBW1/30.
- For manual series and traverse tests.
- With swiveling load unit for testing larger components, plus numerous standard accessories.

ZHV30/zwickiLine

- For Vickers, Knoop and Brinell hardness tests in a range from HV0.1 to HBW2.5/31.25.
- For automated series and traverse tests.
- Flexible test area height - hardness testing unit travels vertically.
- With 5-compartment lens turret (motorized or manual) and motorized X-Y tables.

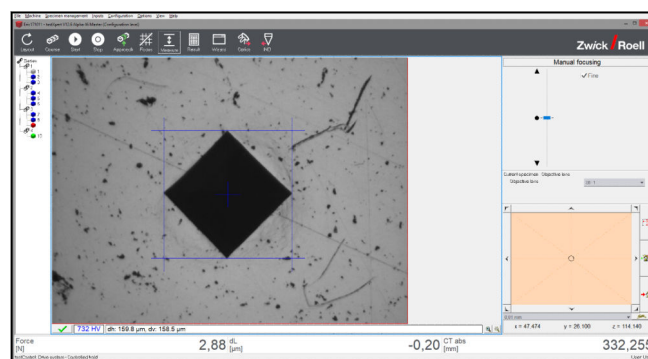
Toolbar functions

	Starts a hardness traverse		Starts automatic focusing
	Starts an individual test		Starts automatic measurement of the indentation shown in the video image
	Terminates an individual or traverse test		Re-evaluates the data for all highlighted indentations
	Moves the X-Y table to the position of the highlighted indentation		Settings for the test are performed in the wizard

Standardized user interface

The user interface is formed of modular screen layouts. These contain the functions and relevant buttons, the camera image, virtual controls for the X, Y and Z-axes, curve graphics and result and statistics tables. testXpert provides complete control of the hardness tester and test sequence.

CTA: 46016



The user interface for all layout windows always has the menu bar at the top, the toolbar below it and the series tree on the left.

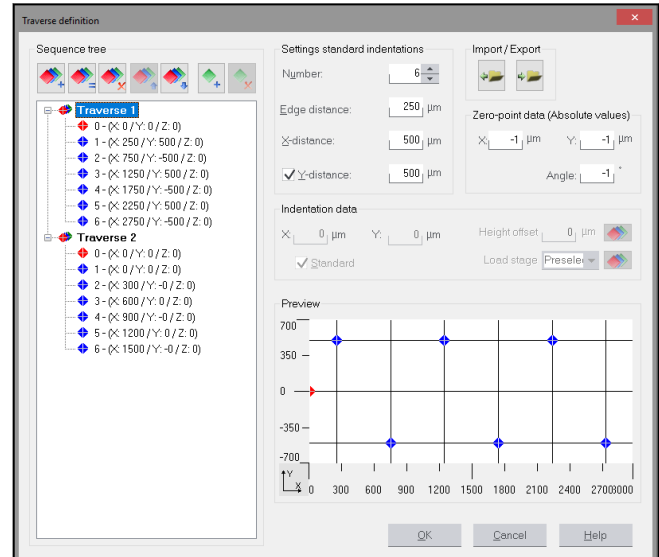
Product Information

testXpert® hardness edition

Video image with measured value display

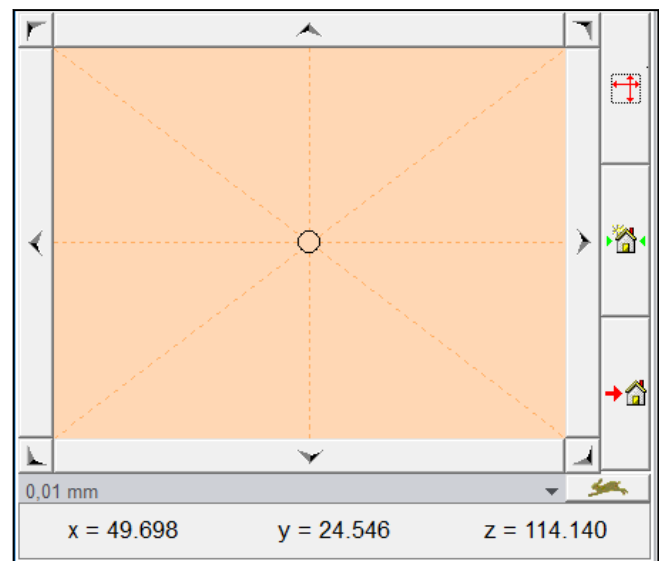
The video image status bar has a button for confirming the measuring lines. The hardness value and gauge lengths are displayed automatically and can be accepted as a result by pressing the button. The video image is zoomed digitally using the magnifying glass. A motorized X-Y table is moved by mouse click on the video image. The step size is calibrated in accordance with the zoom level.

CTA: 34659



Virtual control of X/Y axes

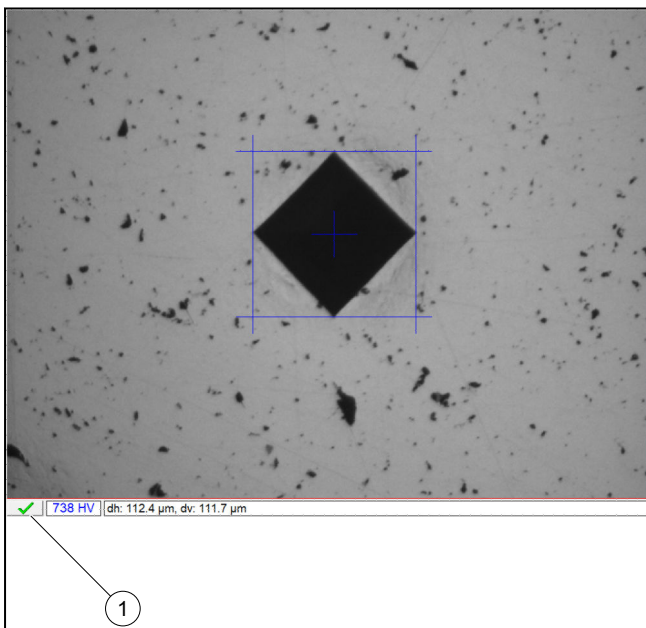
In the X-Y Table Control window, use the Arrow buttons for incremental travel of the motorized X-Y table or move the circle for continuous travel (hold mouse key down). The degree of movement of the circle determines the speed of travel. Travel speed can easily be changed by pushing a button. Use the Set Home Position button to set the home position of the X-Y table in the travel range; use the Approach Home Position to travel to the home position.



Virtual control of Z-axis

Travel of the motorized Z-axis of the hardness testing system is controlled through the software via a mouse-operated virtual slide-control in the Manual Focusing

CTA: 34672



1 Confirmation button

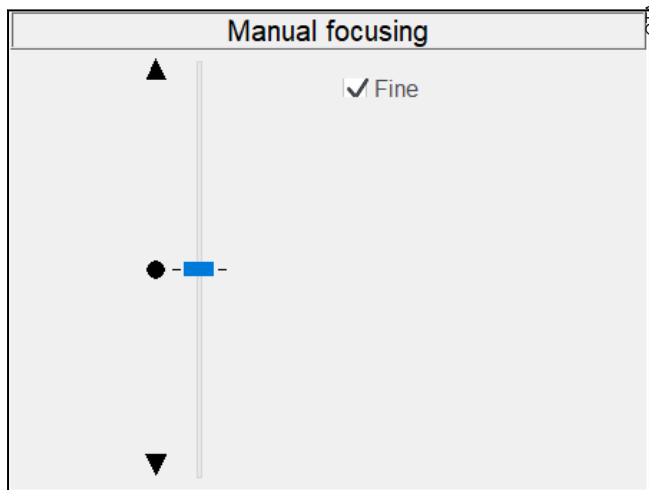
Definition of hardness traverses

In the Traverse Definition mask, hardness traverses are easily configured, copied, adjusted and modified. Existing patterns can be saved and exported or imported.

CTA: 46025

testXpert® hardness edition

CTA: 46008



CTA: 46010

CTA: 34685

<input checked="" type="checkbox"/> Measuring objective lens	20:1
<input checked="" type="checkbox"/> Overview objective lens	5:1

CTA: 46012

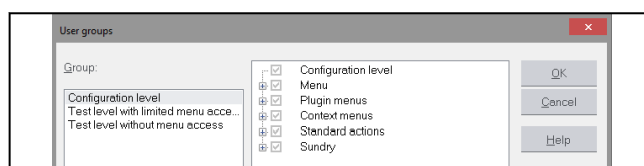
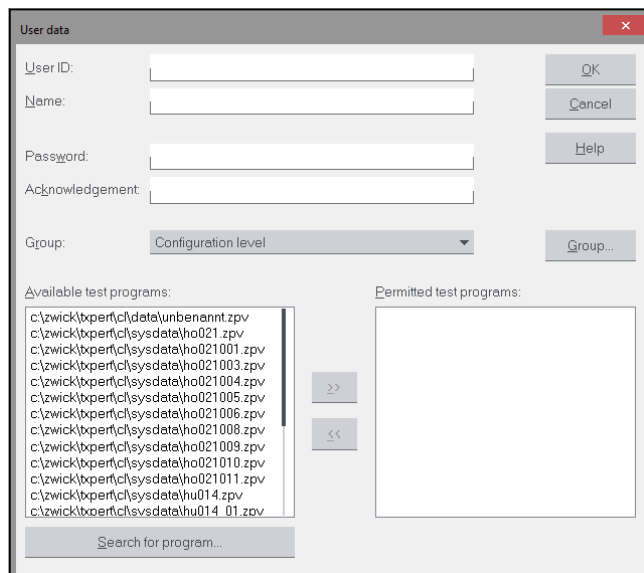
CTA: 46034

- ☐ Freeze the video frame during measurement?
- ☐ Focus before each measurement for single tests?
- ☒ Focusing in small drive range?

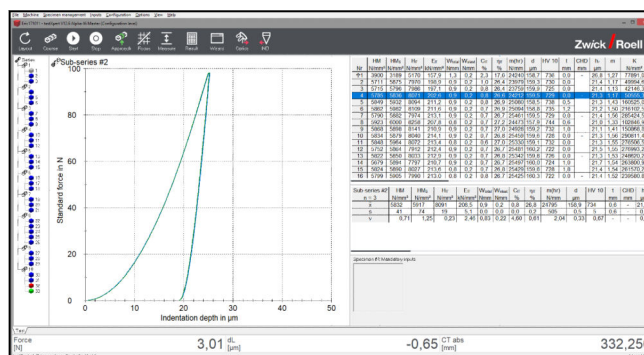
- ☐ Correct automatic measurements at traverse testing?
- ☒ Focus before each measurement for traverse testing?
- ☒ Check the sequence positions beforehand

CTA: 46036

All data at ambient temperature.



Test results are automatically displayed in graphical and tabular form and statistically evaluated. The user interface and report template can easily be modified by the user to suit individual requirements.

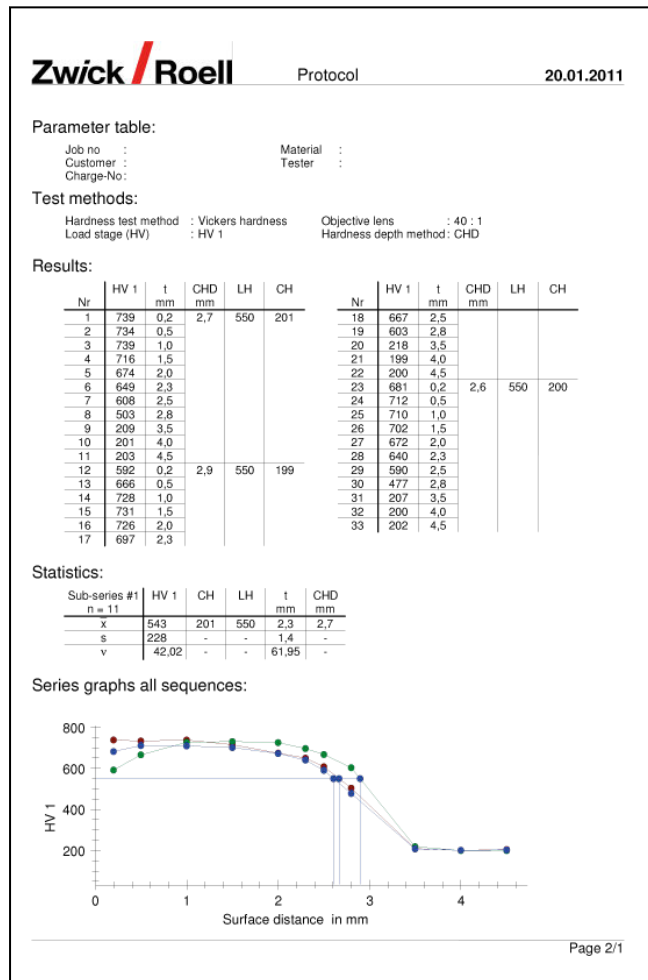


We reserve the right to make technical changes in the course of ongoing development.

Product Information

testXpert® hardness edition

CTA: 46032



Hardware and software requirements

Hardware requirements

testXpert hardness edition will run on any standard commercially available PC. No special interface is required to connect ZwickRoell testing systems to the computer. A connecting cable is supplied with testXpert for connection to the serial port provided as standard on the PC. An electronic unit incorporated into the connecting cable plug ensures very fast, trouble-free signal transmission. A standard installation requires no internal changes of any kind to the PC, leaving CE compliance unimpaired.

Hardware requirements for testXpert® hardness edition

- Standard PC with Intel Core i5 or higher
- 4 GB RAM
- Minimum of 4 GB free hard disk memory
- DVD drive (for installation only)

All data at ambient temperature.

- Gigabit Ethernet interface for GigE camera system
- Ethernet interface for the machine with testControl II electronic
- Ethernet interface for network connection
- USB interface (for license dongle)
- Suitable graphics card for optical hardness testing, e.g. NVIDIA GE Force GT 730; (Note: PCI or PCIe slot required); Space required circa (W x H x D): 190 mm x 130 mm x 50 mm
- Minimum one serial RS232 interface for connecting the hardness tester (e.g. machine with testControl electronic) and if applicable, a second ZwickRoell RS232 interface for further peripheral devices (e.g. X-Y table). Note: USB-RS232 adapters can be used for this only to a limited degree.
- If applicable, free PCI slots for accessory cards (multiple-RS cards for machine and X-Y table connection or graphic card, etc.)
- Printer (optional): all printers supported by Windows®

Software requirements for testXpert® hardness edition

- Operating systems: Microsoft® Windows® 7, Microsoft® Windows® 10 (only for hardness testing applications)
- Note: Windows-Feature .NET Framework 3.5 must be activated
- We recommend that you install your operating system's latest service pack.

Installation and operation of testXpert®

- Administrator rights are required for each testXpert installation.
- Write and read rights in the testXpert installation directory are required for testXpert operation.
- Microsoft® Windows® internet browser

We reserve the right to make technical changes in the course of ongoing development.