

**Qness 150 CS**  
**Qness 150 CSA+**

A RELIABLE PARTNER

UNMATCHED SIMPLICITY IN  
ROCKWELL HARDNESS TESTING



THE PERFECT INTRODUCTION TO  
ROCKWELL HARDNESS TESTING

# AT HOME EVERYWHERE: FOR INCOMING GOODS, WORKSHOPS, LABORATORIES AND SERIAL PRODUCTION

LED TEST SPACE LIGHTING Built-in LED workspace lighting simplifies the precise positioning of the test piece, thus enhancing operating convenience.



## AFFORDABLE PRICING

# SOPHISTICATED CONSTRUCTION, ULTRA-SIMPLE OPERATION



### REMOVABLE DOWNHOLDER

No need for long retooling breaks due to inaccessible test points. The clamping head can be removed via 2 screws. Now, even test points in hard-to-reach contours can be accessed with ease.



### COMPACT DESIGN - LATEST TECHNOLOGY

- Test force range 1 kg to 250 kg in one series
- Machine versions to serve all applications and test piece size
- Direct depth measurement system, with a resolution of 0.05  $\mu\text{m}$
- Robust, welded steel frame and covers made of sheet steel



### QNESS 150 CS/CSA+ PEDESTAL

No suitable table in the testing area? No problem! The Qness 150 CS/CSA+ matches perfectly with the machine's optional pedestal. The superior-quality subframe is color-matched to the hardness testing device. The machine pedestal includes a spacious, lockable compartment in which to store accessories. Beechwood (40 mm thick) with a spindle bore.

## SUPPORTED TEST METHODS



### ROCKWELL

DIN EN ISO 6508, ASTM E-18

HRA	HRB	HRC	HRD	HRE	HRF
HRG	HRH	HRK	HRL	HRM	HRP
HRR	HRS	HRV	HR 15-N/T/W/X/Y		
HR 30-N/T/W/X/Y			HR 45-N/T/W/X/Y		



### PLASTICS TESTING

DIN EN ISO 2039

49.03 N	132.9 N	357.9 N	961 N
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### BRINELL

HBT (not acc. to standards)



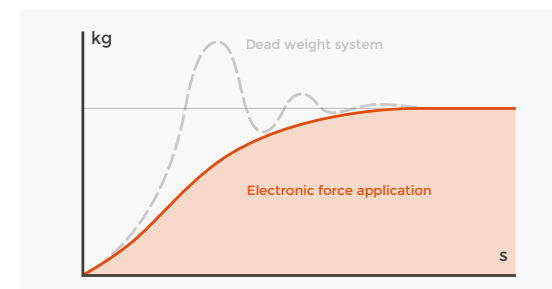
### VICKERS

HVT (not acc. to standards)



### CONVERSION

DIN EN ISO 18265, DIN EN ISO 50150, ASTM E140



## FULLY AUTOMATED TEST CYCLE

Electronic force application and closed-loop control

## ROCKWELL HARDNESS TESTER

# VERSION 150 CS

### READY-TO-USE COMPLETE PACKAGE

- | DAKS & ASTM-conformant Rockwell indenter included
- | Hardened test anvil

### ADVANTAGES

- | Rapid delivery
- | Factory-calibrated

### INDIVIDUAL OPTIONS

- | Test blocks
- | Additional indenters
- | Machine pedestal
- | Clamping devices from the comprehensive QATM accessories program
- | Customer-specific clamping mechanisms



## SOPHISTICATED OPERATION

# INTUITIVE FEATURES AND OPERATION



### TEST TABLE HEIGHT ADJUSTMENT

Via stable, ultra-precise roller-bearing spindle guide. Solid, no-maintenance structure. All devices are available with a  $\varnothing$  25 mm table mount (optional  $\frac{3}{4}$ " adapter available) facilitating the use of a wide range of test tables and devices.



### START BUTTON

Start button at the front of the tester ensures a simple and rapid start to hardness testing (particularly when wearing gloves), and there's also touchscreen control.



### DIGITAL DATA EXPORT

Test results and all related information can be transferred to other data storage mediums via the USB port at the side.



### OPERATION DISPLAY AND QPIX TE SOFTWARE

QATM has developed a 7" color display with a robust sheet steel frame for the Qness 150 CS. The display uses capacitive-touch technology and has been optimized to guarantee operational precision and rapid reaction times.

The new Qpix TE software guarantees simple operation with larger buttons and a more modern and intuitive software interface.

#### Features:

- | Extra-large, clearly-visible presentation of test results
- | High-/low-quality evaluation of results featured in green and red according to the tolerance levels set
- | Test results list for 999 values
- | Statistics overview (min/max/range/cp/cpk/average)
- | Conversions
- | Surface corrections
- | Simple test method changeover
- | Wide range of operating languages
- | Password protected area for expanded range of settings

## ROCKWELL HARDNESS TESTER

# VERSION 150 CSA+

Combines versatility of an automatic hardness tester with the speed of our Rockwell testers.

- | Proven concept redefined
- | Automatic 3-axis control
- | Ideal for multiple samples
- | Short cycle times





FULFILS CLEAR  
REQUIREMENTS

## SIMPLE AND RELIABLE



### TEST TABLE HEIGHT ADJUSTMENT

The height of the test table is infinitely adjustable (position can be fixed) via the play-free roller-bearing spindle guide - ideal for fully automatic series and progression tests on parts with identical test height. The test sequence is performed without clamping. Individual tests can also be carried out with the patented, swivelling downholder clamp.



### AUTOMATIC PROGRESSIONS

The automatic XY slide with high-precision positioning drive enables extensive test series and hardness curves. External joystick for controlling the axis. Usable support surface: 180 x 200 mm, Traverse path: X 220 / Y 220 mm.



### FULLY AUTOMATED 3-AXIS CONTROL

Fully automatic and robust XY slide with high-precision positioning drive. Dynamic joystick to control all 3 axes (XYZ). Usable support surface 200 x 180 mm.



### SAMPLE IMAGE CAMERA

Ultimate ease of use with 5 megapixel colour camera for recording the entire sample for a perfect overview and documentation in the protocol. It is standard in the CSA+ versions to record the entire table surface as sample image.



### IDENTICAL SAMPLE TESTS

An entire range of relevant data, such as test patterns, test methods and user fields can be activated via pre-defined sample magazines. QATM can provide the most suitable clamping setup, matrices and cassette systems for every requirement.

MAXIMUM QATM-STANDARD  
PRECISION

# NORM- COMPLIANT WITH A DIRECT DEPTH-GAUGING SYSTEM

QATM configures the Rockwell hardness testers with a direct, ultra-precise HEIDENHAIN depth-gauging system, positioned exactly on the axis of the indenter. This prevents measurement inaccuracies caused by deformation in the system.

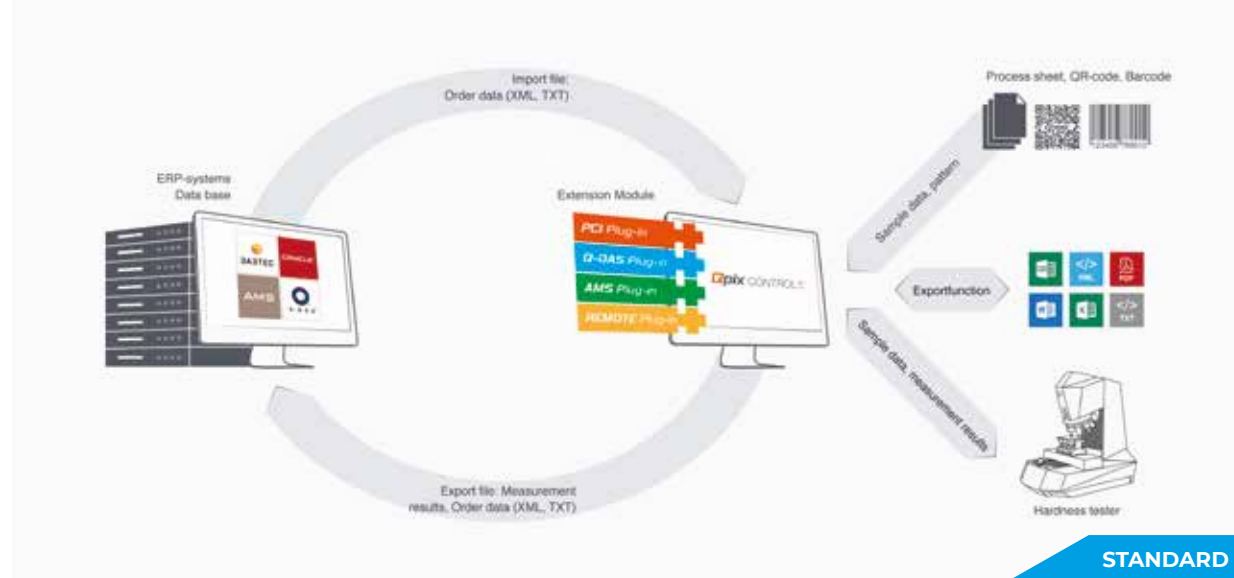
Another unbeatable benefit: Indenting depth can be gauged directly and can be easily calibrated in accordance with the latest Rockwell norms.





INTELLIGENT  
DATA EXCHANGE  
SOLUTIONS TODAY

## FOR CONNECTED TOMORROWS



### QCONNECT

Qconnect is the interface in Qness Qpix Control2 software, providing customers with a full portfolio of inter-device connectivity - from serial production, open XML interfaces (bi-directional) and pre-specified plug-in solutions, such as the QDAS Plug-In+, through to customer-specific connectivity solutions implemented completely by Qness. We have a professional solution for every applicational requirement.



### CALIBRATION MANAGER

**This is a leap forward for calibration result management.** The QATM Calibration Manager reminds operators of the necessary tests at freely definable intervals. Test results are added to the ongoing statistical record at the push of a button.



### BARCODE/QR CODE/DMC READER

Qpix software platforms support barcode and QR code readers. Whether simply inserting header files (serial), managing the complete integration of reading devices for the automatic selection of templates, or calling up data from superordinate systems (optional) - barcode/QR code readers simplify work procedures for the tester, while also preventing operating errors.



### IOT - INTERNET OF THINGS

Your virtual laboratory for managing, controlling and reporting of your QATM devices. Always keep an eye on the measurement progress of your hardness testers. Automatic software updates can be carried out and backups can be saved via the cloud. All settings are of course fully customizable.

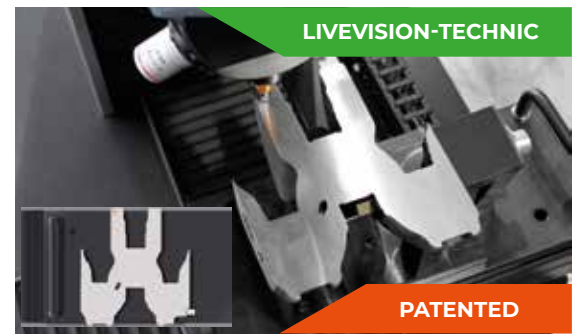
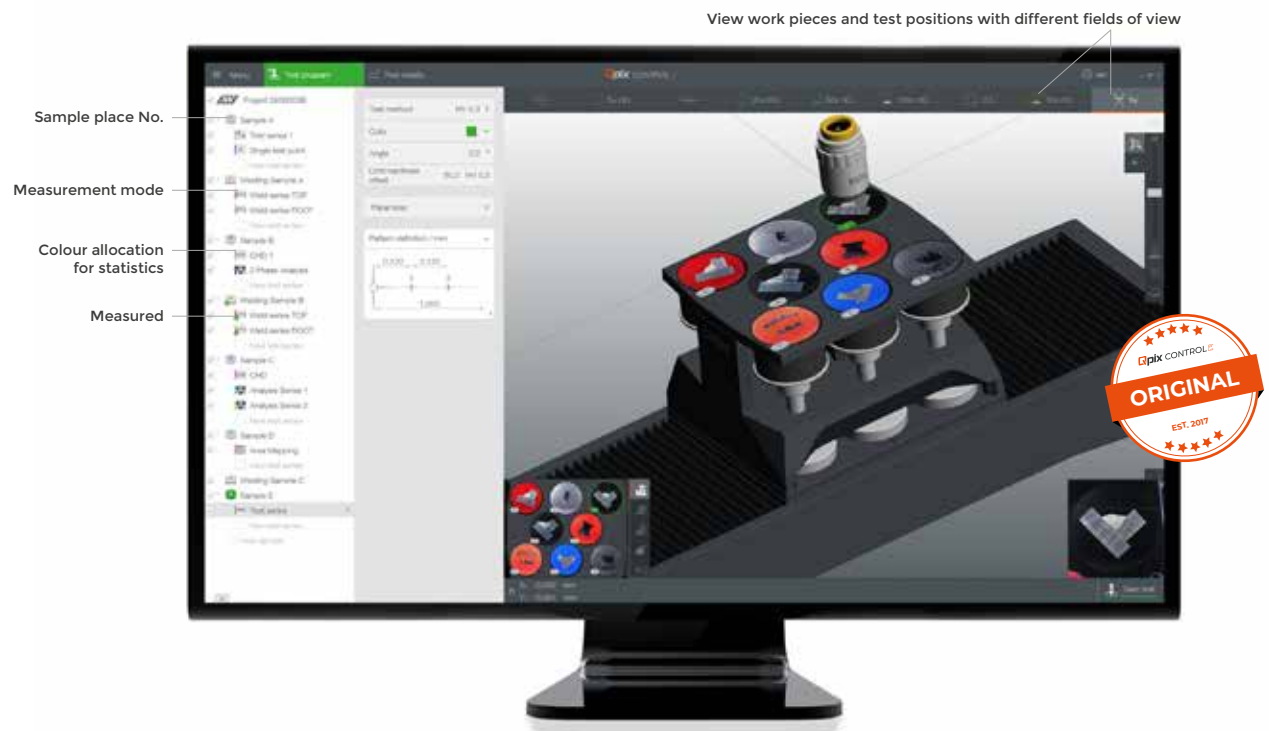
[iot.verder-scientific.com](http://iot.verder-scientific.com)

# SOFTWARE **Qpix** CONTROL2

## OPERATION VIA EXTERNAL PC SYSTEM

# REVOLUTIONARY 3D OPERATING CONCEPT

Intuitive, clearly organized and professional: Qpix Control2 next-generation hardness testing software, developed based on customer feedback and input for maximum user-friendliness. The controlled test head benefits from automatic height adjustment and contactless exploration, complete integration of the Qness sample holder, CAD compatibility with 3D imaging and a whole range of easily understood 3D control elements and views included in the software. It sets new standards in hardness testing.

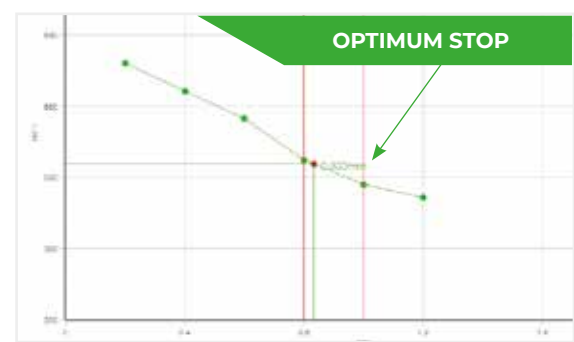


### CUSTOMER-SPECIFIC SAMPLE HOLDER

Identical samples can be set up in the software in scale as a 3D model.

### SIMPLIFIED LENSE SELECTION

Based on the selected method (e.g. HV10), the suitable hardness range is displayed for each lens, which can be measured. The most suitable lens is also highlighted.

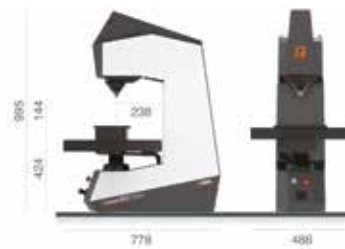


### SAVE TIME WITH OPTIMUM STOP

Time-saving test mode 'Complete all indentations - then evaluate' and 'Optimum stop' to complete test series as soon as the lower hardness limit has been undercut.



**Qness 150 CS**



**Qness 150 CSA+**

Test force range	1 - 250 kg (9.81 - 2450 N)	1 - 250 kg (9.81 - 2450 N)
Height adjustment	manual / spindle	dynamic, automated 3-axis joystick (CAS technology)
Test height	250 mm	140 mm
Throat depth	157 mm	238 mm
Test table	Ø 100 mm	180 x 200 mm
Traverse path	-	X 220 / Y 220 mm
Sample image camera	-	5 MP
Max. workpiece weight	100 kg	100 kg
Weight of basic device	77 kg	140 kg
Software	<b>Qpix T<sub>E</sub></b>	<b>Qpix CONTROL<sub>E</sub></b>
Display	7" capacitive touch (color)	External PC system Windows 11
Test sequence	fully automated / electronic force application	fully automated / electronic force application
Ports	1x USB (Front)	1x RJ45 (Ethernet)



Pedestal (Option)

#### ONLINE PRODUCT-CONFIGURATOR

For more equipment and accessories go to the online product configurator at [www.qatm.com](http://www.qatm.com)



Online Configurator ›



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