



Qness 150

ROCK AND MORE

**ROCKWELL HARDNESS TESTER WITH
ADD-ON MODULES FOR FULL AUTOMATION**

A LONG TERM INVESTMENT

A HARDNESS TESTER THAT GROWS WITH YOUR REQUIREMENTS



Qness 150 R

ROCKWELL HARDNESS TESTER

- | Automatic test sequence with optional automatic start
- | Test clamped or unclamped
- | Creation of favorites, statistics, progression displays, ISO and ASTM conversions
- | Direct data export via RS232, Ethernet or USB
- | Various result export possibilities as configurable protocol or data export in Qpix T2R software

UPGRADE MODULE UND ZUBEHÖR



Lens system

Qness 150 A
Qness 150 A+



Work space lighting

Qness 150 R (Standard)
Qness 150 A



Connected measurement caliper

Qness 150 A
Qness 150 A+
Qpix CONTROL E (compatibel)



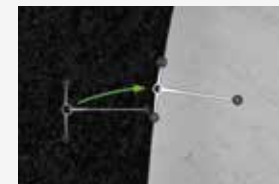
2nd lens system

Qness 150 A



Sample image camera

Qness 150 A



Edge recognition

Qness 150 A+



Qness 150 A

ROCKWELL / BRINELL / VICKERS / KNOOP FULLY AUTOMATIC SINGLE HARDNESS TESTER

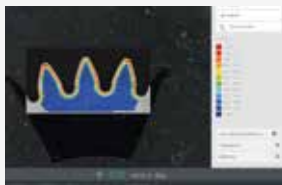
- Integrated, optical path measuring system in test head for ultimate positioning precision whilst approaching work piece or sample holder height
- Up to 8 Jominy-samples
- Up to 2 multi-sample holders
- Dynamic 3-axis joystick for the manual control of the axis



Qness 150 A+

ROCKWELL / BRINELL / VICKERS / KNOOP FULLY AUTOMATIC HARDNESS TESTER WITH SAMPLE IMAGE CAMERA

- Integrated sample image camera (field of view 50 x 40 mm)
- Optional 2nd screen for sample image
- Upgrade for optical test methods (Vickers, Brinell, Knoop)



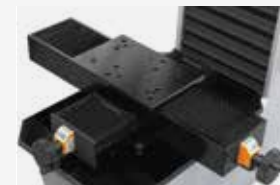
2D/3D mapping modul

Qness 150 A+



Qpix JOMINY

Qness 150 A
Qness 150 A+



Digital slide
260 mm x 166 mm

Qness 150 R



Barcode reader

Qness 150 R
Qness 150 A
Qness 150 A+



Qpix REMOTE Control
via SPS/PCI

Qness 150 A
Qness 150 A+



Sample magazine
recognition

Qness 150 A
Qness 150 A+

TEST SPACE LIGHTING

TEST POINT POSITIONS PERFECTLY IN FOCUS

The functionally integrated test space lighting permits accurate positioning of the indenter. (Standard on Qness 150 R)



TEST METHODS AND CONVERSION

Qness 150 R / A / A+



ROCKWELL

DIN EN ISO 6508, ASTM E-18

HRA	HRB	HRC	HRD	HRE	HRF
HRC	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		



PLASTIC TEST

DIN EN ISO 2039

49.03 N	132.9 N	357.9 N	961 N
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Qness 150 A/A+ with lens system



BRINELL

DIN EN ISO 6506, ASTM E-10

HBW 1/1	1/2.5	1/5	1/10	1/30
2.5/6.25	2.5/15.6	2.5/31.25	2.5/6.5	2.5/187.5
5/25	5/62.5	5/125	5/250	10/100
10/250	HBT (not acc. to standards)			



VICKERS

DIN EN ISO 6507, ASTM E-92, ASTM E-384

HV1	HV2	HV3	HV5	HV10	HV20
HV30	HV50	HV60	HV100		
HVT (not acc. to standards)					



KNOOP

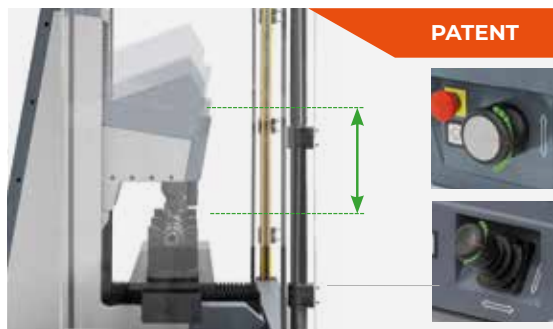
DIN EN ISO 4545, ASTM E-92, ASTM E-384

HK1	HK2
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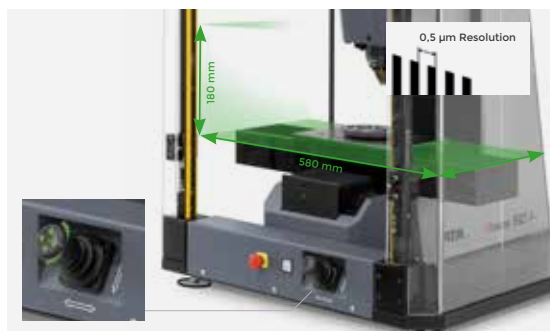
CONVERSION

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



DYNAMIC HEIGHT ADJUSTMENT

The compact hardness tester in combination with the electronic movement control allows quick, accurate and sensitive positioning of the test head. Forceless, precise and collision-proof positioning of the test head via rotating the control knob (6mm/s) - even automatically with Qness 150 A or A+, if required.



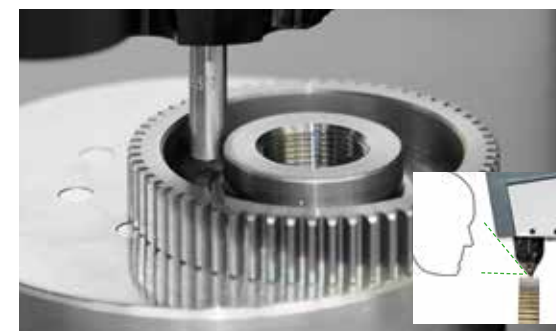
EXACT POSITIONING AND LARGE TEST ROOM

The sophisticated construction offers a large and well arranged test area. The fully automatic XY-slide with high precision optic path measurement system can be equipped i.e. with two 8-fold sample holders. Beyond that, customer specific magazines can be managed and created in the software.



HIGH PERFORMANCE AND HIGHLY PROFESSIONAL

Completely connected in high performance with the integrated Windows PC with SSD hard disk even in the base model Qness 150 R in standard equipment. Customized data connection and integration into production lines possible up to request.



ACCESSIBILITY TO NARROW TEST PLACES

- | Maximal visibility
- | LD lenses provide an increased working distance
- | Collision proof
- | Overview and analysis via optical system
- | Field of view 0.2 - 40 mm



Ergonomically adaptable

High-quality and sturdy aluminium case



USB for data export and data input



Configurable protocol and data management

Qpix T2 R

MOST SIMPLE OPERATION

ON 10,1" TOUCH-SCREEN

- | Across-the-line software design
- | Numerous statistic functions: bar graph, progression, histogram
- | Measurement value list to export as „Excel“ (CSV via export configurator))
- | Standardized detail information to each indentation
- | A4 protocol as PDF / direct print
- | User management with different security access levels



Test result harder than allowed limit hardness



Result list test point identification

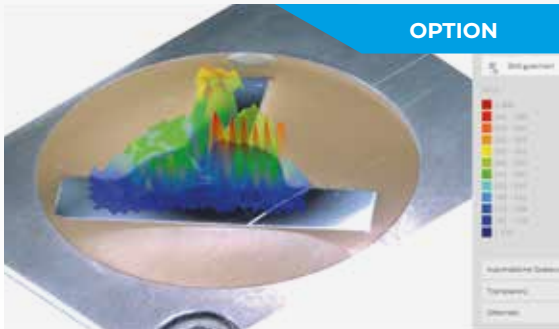


Integrated statistic view



CONFIGURABLE PROTOCOL AND DATA PRESENTATION

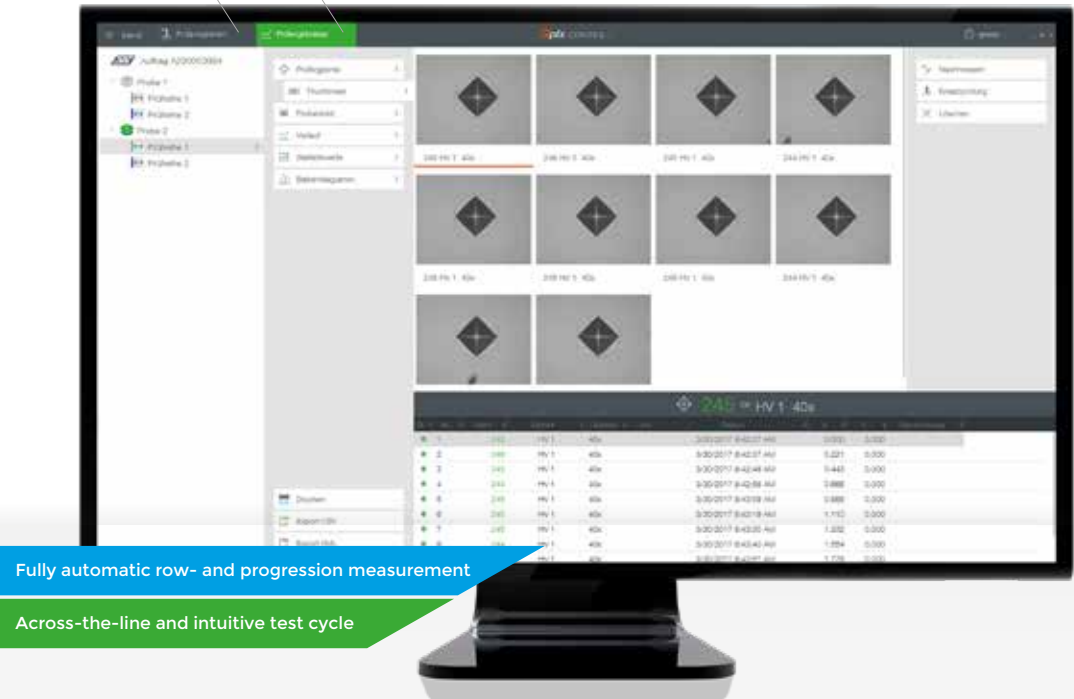
Wide range of structuration options for stored test item data. Adaptable content for export files and protocol content simplifies daily operation with Qpix Control2 software.



2D/3D AREA MAPPING

The optional software module '2D/3D hardness chart' is the perfect aid for the detailed determination of hardness distribution over the total cross section, especially for heat-treated samples. This is extremely important in material exploration, and also for weld testing or in damage analysis.

Creation of test data Test result management



SETS NEW STANDARDS

MAXIMUM REPEATABILITY

All test specific data are stored for every single test point. Test points can be easily checked or tested a second time. In addition to the automated A and A+ versions also the semi-automatic device Qness 150 R can, if required, be equipped with a desktop PC system. Customers can provide their own PC system and use it to control their hardness tester.



Qpix CONTROL 2

OPERATION VIA EXTERNAL PC SYSTEM

REVOLUTIONARY 3D OPERATING CONCEPT

Intuitive, clearly organized and professional: Qpix Control 2 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

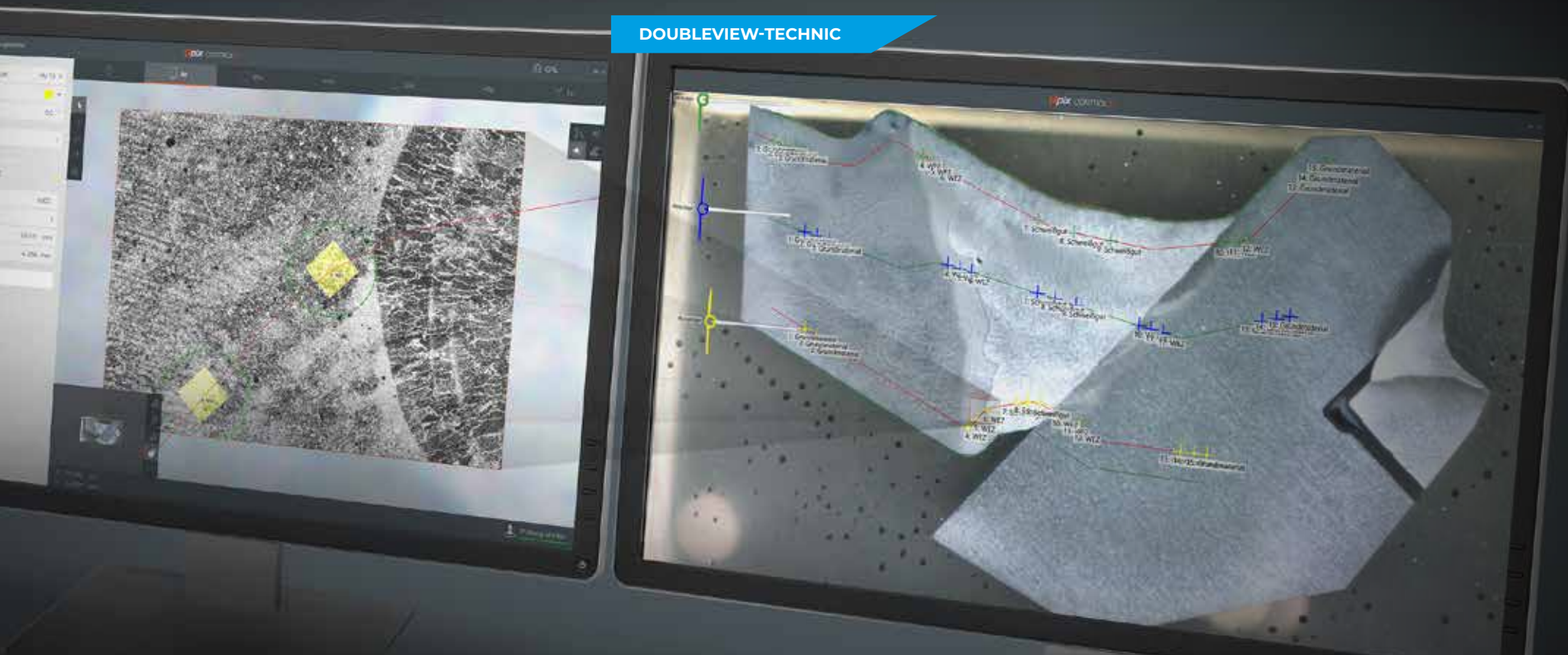
Identical samples can be set up in the software in scale as 3D model.



CAS TECHNOLOGY

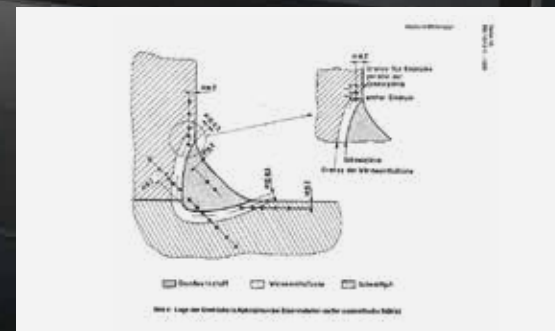
Innovative CAS technology (Collision Avoidance System) protects the mechanical components in the device from collisions and operating errors by generating 3D preview calculations of all movements in the visualized testing area.

DOUBLEVIEW-TECHNIC



BEST ORIENTATION

BY SIMULTANEOUS
MACRO AND
MICRO VIEW



SOPHISTICATED SOFTWARE TOOLS

- | Image with graphic indentation size pre calculation
- | Graphic hint when test points are located to close to each other (3x d)

WELDING TEST SAMPLES

- | Ideal for welding test samples or visual test point positioning jobs
- | Test points can be norm-positioned based on the visual presentation

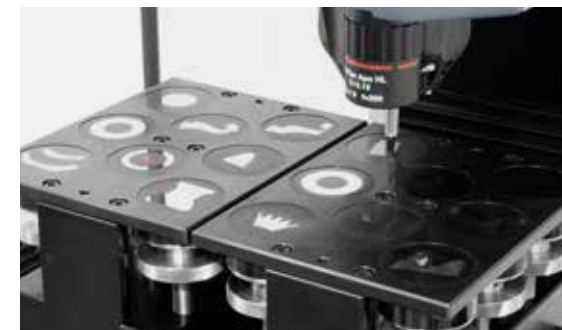
PROVEN UNIVERSALITY

PRACTICAL APPLICATIONS



IDENTICAL PART TESTING

Identical sample test series can be saved as templates. Pre-defined sample magazines can be used to activate all relevant data, such as test patterns, test methods and user fields.



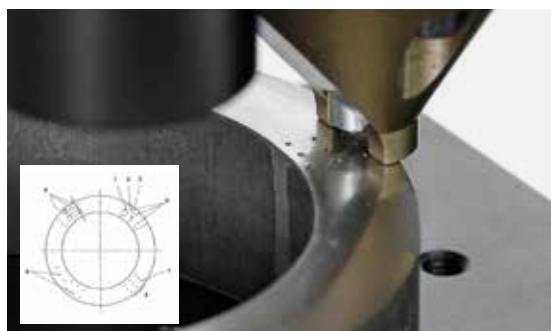
EMBEDDED SAMPLES FOR CHD, NHD, SHD

The sample patterns can be easily selected using the program. In addition to the single and row measurement, the user can select CHD, NHD and SHD.



MULTI JOMINY SAMPLE TESTING

Up to 8 samples can be placed in the Jominy sample holder for testing. The testing cycle is fully automatic and executed according to the norm.



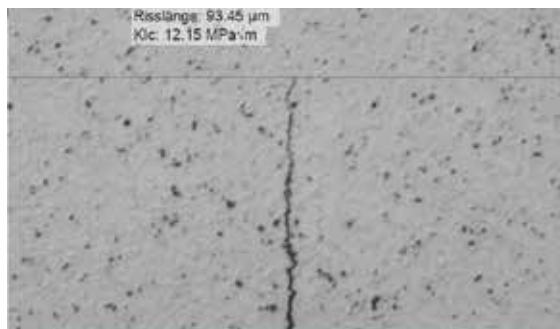
PIPE TESTING

Check pipes economically with the Qness 150 A/A+ according to the applicable API standards.



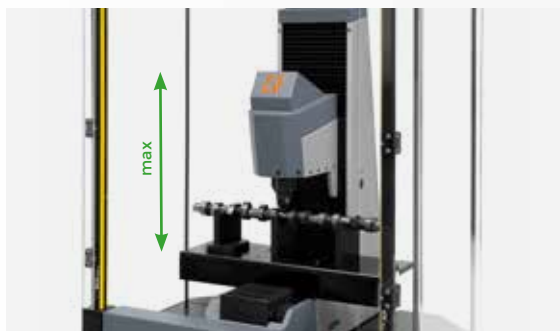
RAIL TESTING

Another perfect application is the testing of rail profiles. The complete track can be scanned via the standardized panorama picture function, thus allowing accurate and fast positioning of the individual test series.



CRACK LENGTH MEASUREMENT K1C

For evaluating the K1C value the 4 cracks are measured according to the norm. After that the MPa√m value is evaluated automatically.



EXTENDED TEST AREA

The complete Qness 150 series can be customized. Send us your specifications and you will immediately receive a customized concept.



	Qness 150 R	Qness 150 A	Qness 150 A+
Test force range	1 - 250 kg (9.81 - 2450 N)	1 - 250 kg (9.81 - 2450 N)	1 - 250 kg (9.81 - 2450 N)
Test height/Throat depth	260 mm / 180 mm	187 mm / 180 mm	
Test height extension	450 mm (Option)	377 mm (Option)	
Height adjustment	v max 6 mm/s	v max 6 mm/s	
Software	Qpix T² R	Qpix CONTROL^E	
Integrated optic system	-	- (Option)	
Camera system	-	up to 2x high resolution camera systems	
Sample image camera	-	-	Yes
Test anvil/Cross slide	250 x 260 mm	motorized 170 x 250mm	
Traverse path	-	X 260 / Y 166 mm	
Data interface	1x USB (Display), 2x USB, 1x RJ45 (Ethernet), 1x RS232	Interface PC-Hardness tester: 3x USB	
Weight of basic machine with Test height extension	105 kg 125 kg	172 kg 192 kg	
Max. work piece weight	100 kg	50 kg	
Power supply	100 - 240V ~1/N/P, 50 - 60Hz	100 - 240V ~1/N/P, 50 - 60Hz	
ACCESSORIES AND OPTIONS			
General	Test anvils, Indenters	Single and multi sample holders, Jominy sample holder, Indenters, Lenses, Software modules	

ONLINE PRODUCT CONFIGURATOR

Additional modules and accessories can be viewed using the online product configurator at www.qatm.com



Online Configurator >

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