



OPTICAL ANALYZER - INVERSE MACROSCOPE

## QEYE 800

## **WELD SEAM MEASUREMENT - FAST, HIGH-RESOLUTION AND EFFICIENT**

**The new Qeye 800 impresses with fast, high-resolution and efficient optical analysis and measurement of specimens. Especially for standardized weld seam measurement and inspection according to DIN EN ISO 5817.**

Measurement tools such as A dimension, depth burn-in, evaluation limits and standard-compliant inspection report are included as standard in the proven and user-friendly Qpix Control2 Software. Integrated graphical template mode with predefined measurement elements and QATM standard catalog, as well as management of customer-specific templates.

Qeye saves time, providing detailed analysis and measurement with supreme accuracy. Robust modern industrial design. Easy replacement of the glass sample carrier. Absolutely dust-tight due to assembly in a clean room.



[Click to view video](#)

### **Product Video**

## COMING SOON: QEYE 200

We will soon be introducing the Qeye 200, our specialist for laser welds in the automotive industry. You can already learn about the key differences and discover the microscope that's right for your application.



### Compact precision for detailed macrosection analysis

- | Quality inspection of laser welds in the automotive industry
- | Inspection of delicate welded joints in electronics and precision engineering
- | Analysis of narrow deep welds in series production
- | Process monitoring and optimisation in manufacturing
- | Research and development in the field of laser welding processes



### Precise macro-section analysis for quality and safety

- | Quality control of welds in series production
- | Material testing in testing laboratories
- | Analysis of weld penetration, weld shape and potential defects
- | Applications in the automotive industry, steel construction and plant engineering
- | Research and development in the field of joining technology

4K ULTRA HD

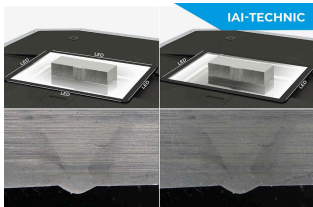
## OPTICAL SYSTEM

Qeye impresses with absolute precision:

- | 8.5-megapixel color camera system
- | 20x optical zoom
- | 35x combined zoom (optical and digital)
- | Wide field of view 80 x 60 mm - 2.3 x 1.7 mm
- | Built-in automatic autofocus and brightness control
- | Focus plane can be manually adjusted for measurements of non-planar components



INNOVATIVE OPERATION  
**CONVINCING BENEFITS**



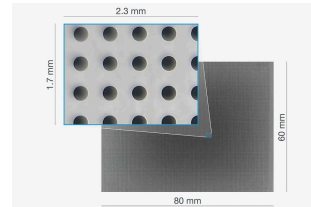
**OPTIMIZED SPECIMEN ILLUMINATION**

IAI = Intelligent Area Illumination. The Qeye system features innovative LED analysis area illumination. Each of the 4 illumination profiles (right, left, front, rear) can be switched on or off smoothly and individually. This now enables faster and more precise testing, without the disturbance of light influences or grinding reflections.



**TOUCH CONTROL PANEL**

Qeye offers impressive ease of use via freely programmable capacitive buttons. Once centered, the Q lights up to indicate the current status, and used to trigger imaging. The buttons located in the corners can be configured to control LED illumination, zoom, field of view and brightness. The soft-touch control panel is responsive, even when used with gloves.



**35 TIMES COMBINED ZOOM**

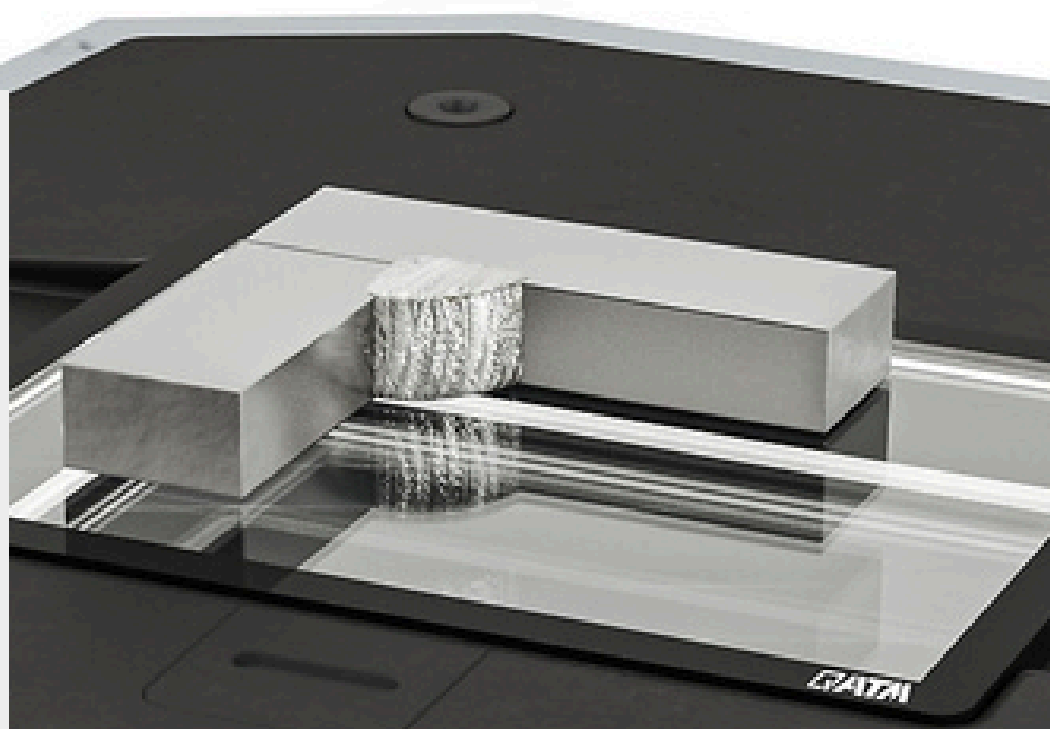
The Qeye's optical system allows the variation of the field of view between 80 x 60 mm and 2.3 x 1.7 mm. By zooming in optically as well as digitally, a combined magnification of 35 times is achieved. This allows the user to see smallest details, while keeping the overview.



Operated by tried and trusted Qpix Control2 software. Combination of hardness testing and optical analysis in a familiar user interface using just one PC. Efficient measurement and inspection of weld specimens in seconds, live image, 3D Smartview and a uniform reporting system for hardness testing and macro analysis.

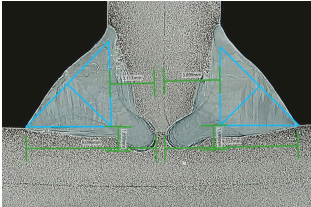
## WELDING SAMPLES

Qeye guarantees fast, simple, precise, standardized weld inspection, and displays all irregularities. Documentation of abnormalities can be added to a measurement at any time. The use of template systems in reporting ensures unlimited precise repeatability and reliability regarding weld inspection procedures, measurement sequences and limit values.



APPLICATION EXAMPLES

**BENEFITS OF PRACTICAL EXPERIENCE**



**WELDING SEAMS**

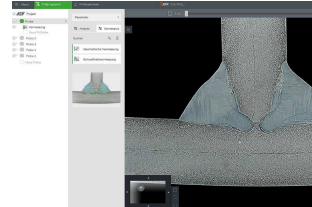
Fillet weld measurement with full range of intuitively operated measurement tools

- | Easy adjustment of measuring lines
- | Seam quality evaluation
- | Recordable notes



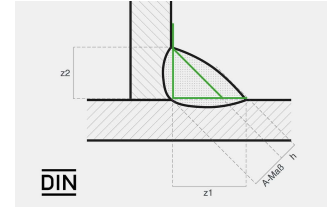
**MEASURING TOOLS**

Precise measurement tools ensure the fast and easy measurement of weld specimens. Lengths, angles, circle, polygons for area or perimeter calculations. Zoom and brightness can be calibrated individually.



**TEMPLATE OPERATION**

Individual customer templates can be saved and recalled at any time. Predefined measurement elements and the QATM standard catalog are also preinstalled in the system.

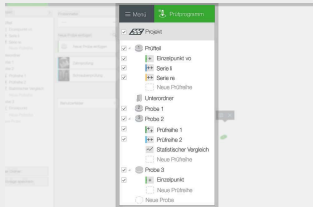


**STANDARD-COMPLIANT TEST EQUIPMENT**

All necessary measuring tools are, of course, a basic component of the software for weld inspections according to DIN EN ISO 5817. For example: the A dimension, the depth of burn-in, evaluation limits and a standard-compliant inspection report.

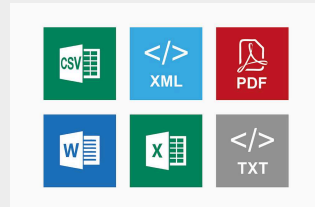
INDUSTRY 4.0

## EQUIPPED FOR TODAY AND TOMORROW



### PROFESSIONAL DATA MANAGEMENT

Benefit from clearly-structured batch management, the effective template use of various test projects, well-organised measurement results and all job information in the background. Once created, templates receive all requisite information about test samples, including test methods, designations and user-field information.



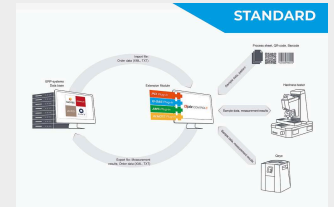
### AUTOMATIC EXPORT FUNCTIONS

Many pro-level export functions are built into Qness solutions as standard. Raw data is exported into CSV/TXT and XML, report exports into MS Word, Excel, PowerPoint and PDF – as part-specific issues or as individual exports. All export configurations can also be stored individually for templates.



### BARCODE/QR CODE/DMC READER

Qpix software platforms support the use of barcode and QR code readers, simplifying workflows for inspectors and preventing operator error. Populating header data is simple (standard), and readers can be fully integrated to automatically select templates or retrieve data from higher-level systems (optional).



### QCONNECT

Qconnect is the interface in QATM 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 QATM. We have a professional solution for every applicational requirement.

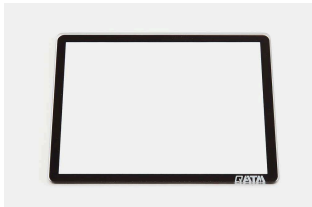
## FULLY- INTEGRATED SYSTEM SOLUTION

The new Qeye can also be integrated into a test lab table. Adapted to individual requirements, height-adjustable and optionally available with a hardness tester for every laboratory.



ACCESSORIES & TOOLS

**PRECISE, CLEAN AND UNCOMPROMISING**



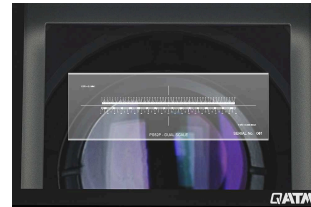
**SAMPLE CARRIER**

Sample carriers are small but extremely important tools in sample analysis. Available in sets of 5, made of borosilicate glass with anti-reflective coating. Optionally available in tempered borosilicate glass.



**QEYE COVER**

The Qeye shielding hood absorbs extraneous light and reflections are completely eliminated. Included as standard with every Qeye.



**OBJECT MICROMETER**

A 50 mm object micrometer with a resolution of 0.1 mm guarantees easy and accurate control of optical magnification. Optionally available with a UKAS certificate.



**QATM CLEANING MATERIALS**

High-quality microfiber cloths, cleaning cloths and special glass cleaners for a perfect shine. We recommend the use of specially-developed QATM cleaning material only.

QEYE 200 / QEYE 800

**TECHNICAL DATA**



<b>Field of view</b>	23,7 x 17,8 mm - 3,7 x 2,8 mm (0,933 x 0,7" - 0,146 x 0,11")
<b>Zoom levels</b>	0,63x - 1x - 1,6x - 2,5x - 4x
<b>Camera</b>	4K Ultra HD - 12 Megapixel - USB 3.0
<b>Illumination</b>	IAI - LED unit (Intelligent Area Illumination)
<b>Software</b>	Qpix Control2
<b>Machine operation</b>	external PC system (Windows 11 64-bit)
<b>Dimensions glass sample carrier (L x W x H)</b>	95 x 75 x 2 mm (3.7 x 3.0 x 0.08")
<b>Max. sample weight</b>	5 kg (11 lbs)
<b>Interface</b>	1 x USB 3.0
<b>Power connection</b>	100 - 240 V ~1/N/PE, 50 - 60 Hz
<b>Power Consumption</b>	Idle: ~35 W Operation: ~60W Max. ~100 W
<b>Dimensions</b>	220 x 220 x 260/365* mm (8.7 x 8.7 x 10.2/14.3") *inkl. Qeye cover

<b>Field of view</b>	80 x 60 mm - 2.3 x 1.7 mm (3.1 x 2.4" - 0.091 x 0.067")
<b>Zoom levels</b>	1x - 1.5x - 2x - 2.5x - 4x - 5x
<b>Camera</b>	4K Ultra HD - 8.5 megapixel - USB 3.0
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<b>Space requirement</b>	300 x 300 mm (11.8 x 11.8")
<b>Weight</b>	16 kg (35.3 lbs)
<b>Ambient temperature</b>	18 - 28 °C (64 - 82 °F)
<b>Humidity maximum</b>	maximum 70 % - non-condensing

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[www.qatm.com/qeye-800](http://www.qatm.com/qeye-800)

## ORDER DATA

### OPTICAL ANALYZER - INVERSE MACROSCOPE QEYE 800

QB0130101  Qeye 800

QB0130102 Qeye 800 - Table integration

QB0130201 Qeye 200

#### PC SYSTEM FOR MACHINE CONTROL

QA0057500 High-end PC system Full HD - Qpix Control2

QA0057600 2nd 24" Full HD UltraSharp monitor

QA0057501 High-end PC system Ultra HD (4K) - Qpix Control2

QA0057601 2nd 27" Ultra HD (4K) monitor

#### SOFTWARE MODULES

QSO013600 Qpix - Barcode / QR code scanner software module

QA0089600 Barcode/QR-Code 1D/2D Scanner Kit - Bluetooth

QA0071700 El. Measurement caliper - Qpix Control2 compatible

QA0108200 NFC Login Package QpixControl2

QSO213600 RFID Tag MIFARE, key chain gray 10 pcs.

#### QPIX CONNECT - DATA CONNECTION

QSO031600 Qpix Control2 - PCI plug-in

QSO013500 Qpix Control2 - AMS plug-in

QSO030400 Qpix Control2 - Q-DAS plug-in

#### ACCESSORIES

QA0095500 Glass sample carrier set of 5 - Qeye 800

QSO194400 Dust protection cap - Qeye 800

QA0099600 Cleaning kit Qeye

QSO197900 Glass scale 50mm, verification - Qeye 800

A7500500	Qeye table 1760x770x800 with stone plate
A7500501	Qeye table 1760x1000x800 with stone plate
A7500502	Qeye table 1760x770x800
A7500503	Qeye table 1760x1000x800
QA0048500	UPS - Uninterruptible Power Supply 900VA
QSO192600	Accessory box - Optical analyzer
QVV0030	Documentation