metrios

The ultimate shopfloor measuring devices



VICIVISION

Discover accuracy, precision and industrial quality control with the Metrios range of optical measurement machines.

Powerful simplicity on the shopfloor

> If a customer is asking for 100% inspection, you've got to be fast. The Metrios has proven to be extremely successful, the accuracy is incredible. You can put 15 components on the Metrios machine at once and it'll measure them in 4.5 seconds.
>
> David Sage, Managing Director, Dalau Ltd

The way we manufacture has changed. **The way we measure is changing.**

Complete control. That is what manufacturers are getting when they invest in Metrios' fast and accurate optical measurement systems.

Seen as the advanced replacement for shadowgraphs, our machines deliver automated, accurate and repeatable measurements directly on the shopfloor.

Ideal for small to medium components, the technology captures the most intricate details in seconds, driving increased productivity and giving total confidence in quality.

In some cases, powerful magnification up to 100x the human eye can even reveal cleanliness levels, burrs and scratches for total accuracy across the field of view.

And better still, auto-position detection means multiple parts can be scanned quickly, whilst different size beds allow for 2D inspection – another important weapon in your measuring arsenal.

Larger parts are not left out. Companies can explore the power of the Metrios Cross, which combines the same high-resolution imaging with a larger field of view.

Growing solution

Metrios is fast becoming a solution for a wide range of companies in the UK and Ireland, with our super-easy and super-fast capabilities making us a natural partner for educational settings, such as colleges, universities and R&D centres.

Regardless of application, technical experts at our advanced demonstration centre in Derbyshire can work with you to identify the right machine for your inspection and measuring requirements and these are backed up by after-care and maintenance teams to support efficient installation and optimum performance.

Made for the shopfloor

Built with an alloy steel construction, Metrios machines protect sensitive parts to allow for reliable and repeatable inspection in some of the harshest industrial environments imaginable.

They are equipped with three temperature sensors to ensure all measurements are taken correctly and changing shopfloor conditions are compensated for. An on-board step-master also gives real-time feedback during every cycle.

Making our technology intuitive is another key feature of the design, with all machines boasting a modern touch-screen interface to help speed up setting and making it easy to use for production and inspection staff.

Will you invest in the ultimate shopfloor measuring device?



The benefits of Metrios **optical measurement machines**

Speed

Takes even complex measurements in a matter of seconds. Distances, radii, diameters, angles, straightness, roundness, as well as elements constructed on virtual lines.

Robust & reliable

With an alloy steel construction, Metrios machines are designed specifically for use on any shopfloor, protecting sensitive machine parts and delivering reliable and repeatable inspection in the harshest of environments.

Built for the shopfloor

Equipped with three temperature sensors to ensure all measurements are taken correctly, Metrios compensates for changing shopfloor conditions. An on-board stepmaster gives real-time feedback during the cycle.

Automatic part recognition

Place multiple parts anywhere in the field-of-view and highlight edges with touch screen technology. Allow Metrios to take care of the rest with auto-position detection for precise measurement in seconds.

Eliminate human errors

Metrios helps to eliminate user interference in the measurement process with automatic and digital optical inspection of key features, driving increased productivity and reducing costly errors.

User-friendly interface

Equipped with an intuitive touch screen interface, Metrios has been designed to make it accessible for users of all skill levels while still providing powerful measurement capabilities.

Powerful magnification up to 100x

Capture minute details in a single shot, while the software showcases high-resolution imagery, revealing cleanliness levels, burrs and scratches with maximum accuracy across the field-of-view.

Measure all types of components

Metrios is the perfect solution for measuring a wide range of parts, including mechanical parts, circuit boards, gears, stamped and pressed parts, springs, seals and much more.

Metrios Software

Powerful and precise measurements. **At your fingertips.**

Metrios Software provides users with a range of advanced programming capabilities, including the ability to programme complex measurement routines and create custom reports. This allows users to tailor the measurement process to their specific needs, ensuring accurate and repeatable results.

Industry 4.0. Ready

User-friendly touch screen



The intuitive touch screen interface sets you up for Industry 4.0, with on-screen programming in Sandbox mode enabling users to measure the features that matter most.

Key Features:

- Advanced programming capabilities.
- Real-time measurement feedback.
- Fully comprehensive data management and analysis.
- Instant, customisable measurement reports.
- Simple and user friendly.
- Colour-coded display for part tolerance.
- Export data in multiple formats.



Applications

Measure, connect, automate

Application-driven measurement tools

Some components require special attention during production and dimensional inspection. Traditional tools like profile projectors or manual systems no longer meet today's quality standards. Metrios allows any operator to perform fast, accurate dimensional checks, regardless of part geometry or production environment.

Why focus on applications?

Because no two companies are the same. But manufacturers using similar processes often face the same measurement challenges.
We've grouped our experience by application, developing a range of free, built-in tools designed to meet specific production needs.

Software that adapts with your process

Metrios software is constantly updated and expanded. Tools evolve to match your workflow, helping ensure reliable results across every application.



Springs



Gaskets



Connectors



Punched parts



Gears



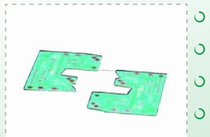
Mechanical parts



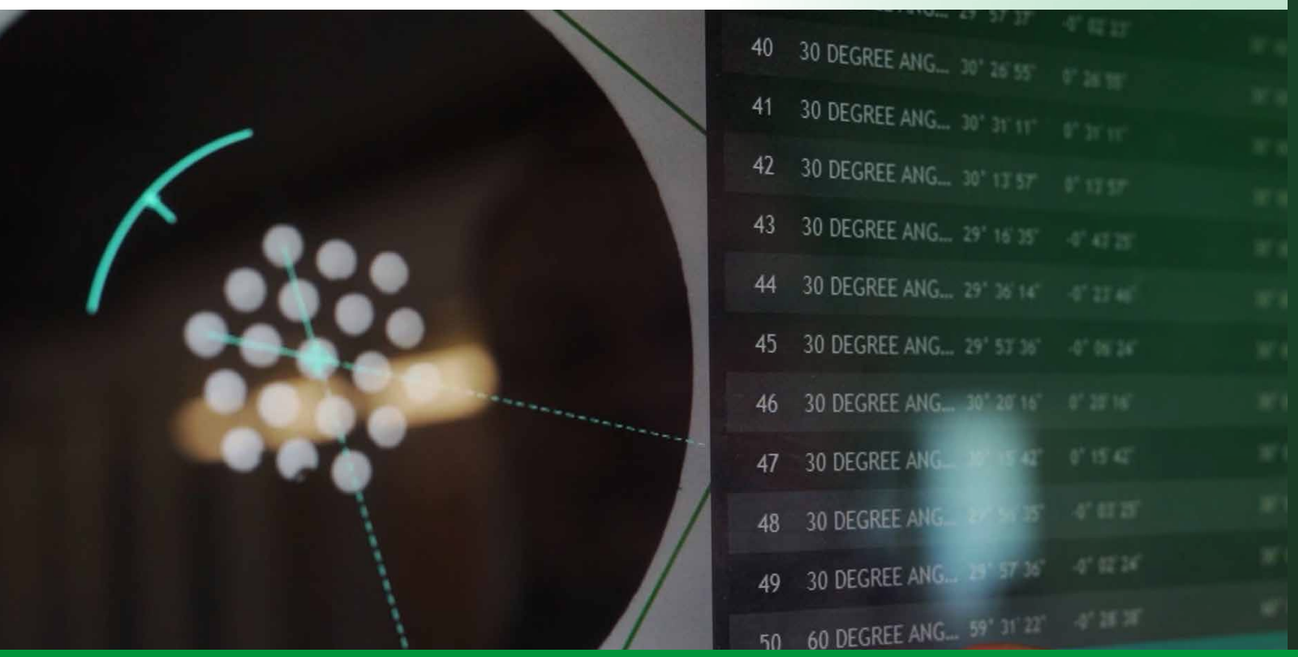
Molded parts



Watch components



Electrical boards



Exclusive New Features

See what you measure, measure what you see

Industry 4.0. Ready

Manual measurements: when automation is not enough

Some conditions, such as undefined edges or transitions, high process variability or reflective surfaces, can affect the use of automated measurement systems. This is why Metrios offers two features unique in its class: the ability to work on the actual image of the part and a large 22-inch touch screen. This allows operators to manually select the points to be used in the measurement cycle, solving complex situations that cannot be automated.



Manual measurements

OCR function: read and verify text content

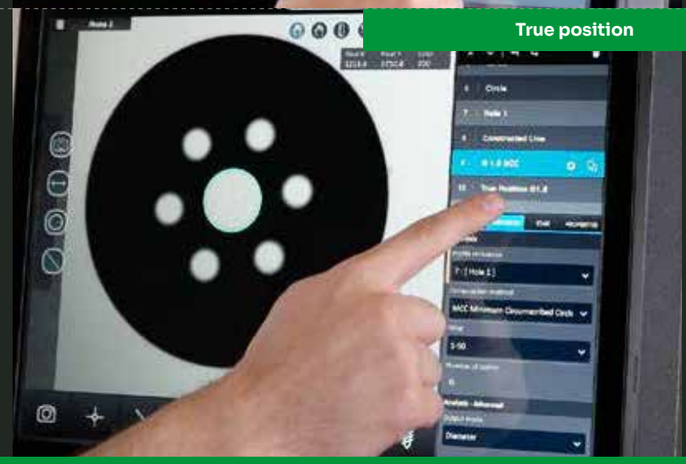
Recognize and detect text written on the component. Whether it is a serial number or a simple label, Metrios can read it, verify it and transcribe it into the measurement report. Useful for maximum traceability or quality verification.



OCR function

True position and MCC

Check your components according to GD&T standards. Metrios now offers True Position measurement with maximum and minimum material functions to dynamically adjust tolerances.



True position

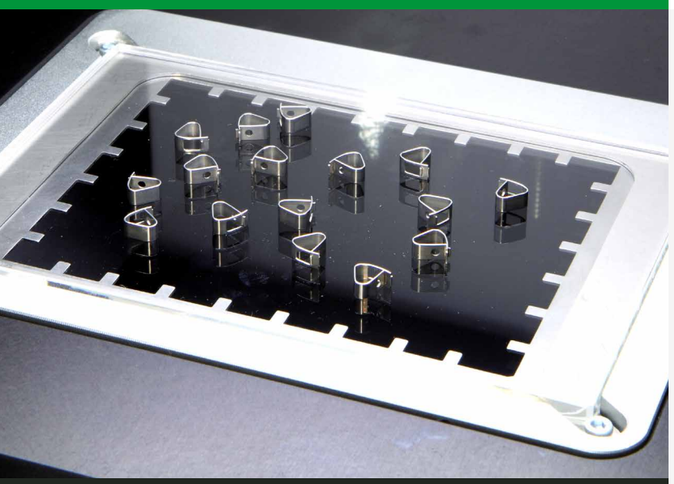
Metrios

Fully-automatic, rapid part inspection.

The Metrios is a state-of-the-art optical measurement system, delivering automated, accurate and repeatable measurements directly on the shopfloor. Ideal for small to medium components, the Metrios captures the smallest, most intricate details in seconds, driving increased productivity and increased confidence in quality.

Metrios from £144 per week*

*Indicative price for base machine only, subject to credit approval



Specifications:

Key Feature:	Powerful part magnification up to 100x
Maximum Part Size (Z-Axis):	100mm
Measuring Area:	95 x 65mm
Accuracy:	Fixed FOV: (5+0.01L [mm]) (µm)
Repeatability:	Fixed FOV: 2 (µm)





Metrios Cross

High-definition measurements for large and multiple parts.

The Metrios Cross combines high-resolution imaging with a large field-of-view for superior accuracy and unrivalled speed. Ideal for large parts and multiple part measurements, the Metrios Cross offers the highest resolution and automatic focus across the full measuring field, so that even the smallest details and parts requiring a different focus position can be captured.

Metrios Cross from £225 per week*

*Indicative price for base machine only, subject to credit approval



Optional rotary axis designed for both flat and cylindrical parts.

Specifications:

Key Feature:	Sliding stage along the X and Y-axis
Maximum Part Size (Z-Axis):	80mm
Measuring Area:	265 x 200mm
Accuracy:	Fixed FOV: (5+0.01L [mm]) (µm) Moving FOV: (7+0.01L [mm]) (µm)
Repeatability:	Fixed FOV: 2 (µm) Moving FOV: 3 (µm)





Industry 4.0. Ready

Metrios HD Cross

Verify multiple parts in seconds.

The Metrios Cross HD measuring system, a cutting-edge 2D metrology solution designed to elevate the quality control and inspection processes of various industries. It combines high-definition imaging with superior accuracy and unrivalled speed, enabling well-informed decisions and unparalleled quality standards.

Metrios HD Cross from £283 per week*

*Indicative price for base machine only, subject to credit approval





Specifications:

Key Feature:	Powerful part magnification up to 100x
Maximum Part Size (Z-Axis):	50mm
Measuring Area:	200 x 100mm
Accuracy:	Fixed FOV: (2.5+0.01L [mm]) (µm) Moving FOV: (3.5+0.01L [mm]) (µm)
Repeatability:	Fixed FOV: 1.5 (µm) Moving FOV: 2.5 (µm)
Height Measurement:	(Z-Axis): 3 (µm)

Z-axis measurements



Metrios 332

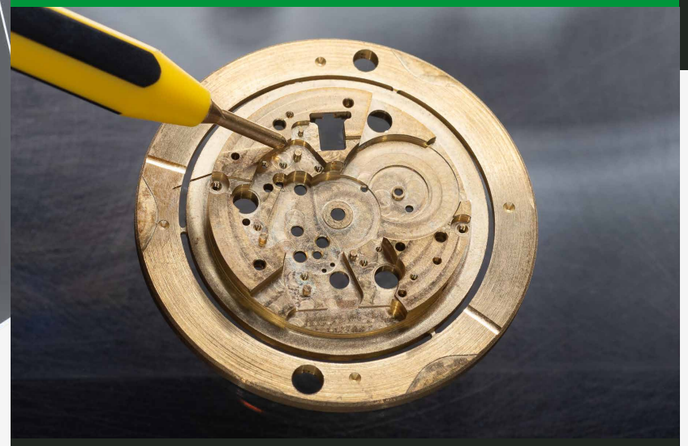
Industry 4.0. Ready

Speed and precision in one measurement machine.

Modern vision measurement systems are fast and easy to use. Multi-sensor systems offer additional capabilities but can become complex to program and operate. Metrios 332 offers the best of both worlds, combining speed and ease of use with precision and broad capabilities, in a single shopfloor instrument.

Metrios 332 from £329 per week*

*Indicative price for base machine only, subject to credit approval

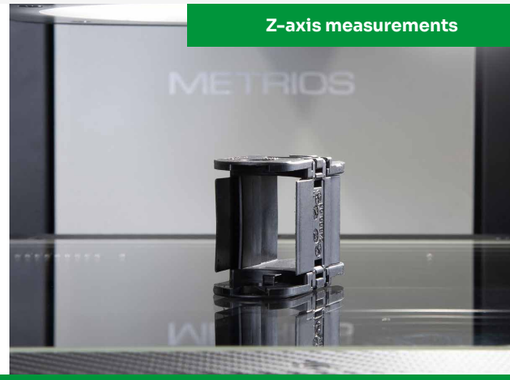




Specifications:

Key Feature:	Sliding stage along the X and Y-axis
Maximum Part Size (Z-Axis):	200mm
Measuring Area:	305 x 305mm
Accuracy:	Fixed FOV: (2.5+0.01L [mm]) (µm) Moving FOV: (3.5+0.01L [mm]) (µm)
Repeatability:	Fixed FOV: 1 (µm) Moving FOV: 2.5 (µm)
Height Measurement:	(Z-Axis) with Ultra HD Sensor: 2 (µm)

Z-axis measurements



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VICIVISION

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