

From Eye to Insight



ENERGIZED FOR INSPECTION

Microscope solutions powered by the Enersight software platform





Electronics



Automotive Industry



Medical Devices

Inspection solutions powered by the Enersight software platform

When it comes to inspection and rework, efficiency and reliability are critical. Choosing the optimal solution for your needs depends on several factors, such as the type of samples you are working with, the number of people who will be using the microscopes, and the frequency of use.

Leica Microsystems offers a broad portfolio for inspection that is operated with the consistent and intuitive Enersight software platform, so that all microscope solutions have a common denominator. It enables you to optimize processes and ensure consistent and reliable results no matter the operation mode.

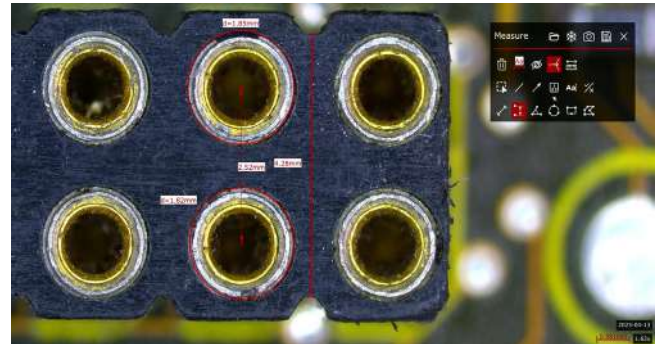
ENERSIGHT SOFTWARE PLATFORM

Streamline your inspection process: This all-in-one integrated software solution can improve your inspection efficiency by helping you compare, measure, and share data easily.

Inspect with a single system

Measure directly during visual inspection, even without a PC

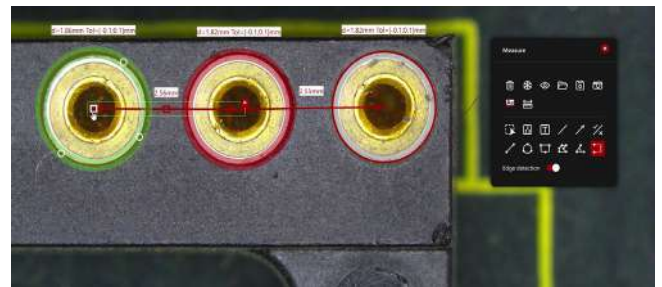
- > Take measurements on the go using the software displayed on the screen.
- > Measure multiple sample features in the live image and save the results together with it.
- > Get more functionality with the measurement tool that allows measuring between any two points.
- > Use snap-to-edge assistance for accurate measurements.



Measurements done with the on-screen display (OSD).

Directly compare to references with a single click

- > Make pass/fail decisions by directly comparing the live image to reference images or customized overlays.
- > Judge whether your sample is out of specification by overlaying tolerance lines on the image.



See quickly if samples are in spec with the help of tolerance lines (green and red circles).

Identify defects more clearly

Higher contrast live images with HDR: Capture details on both light and dark areas of the sample in a single shot with high dynamic range (HDR) live imaging.

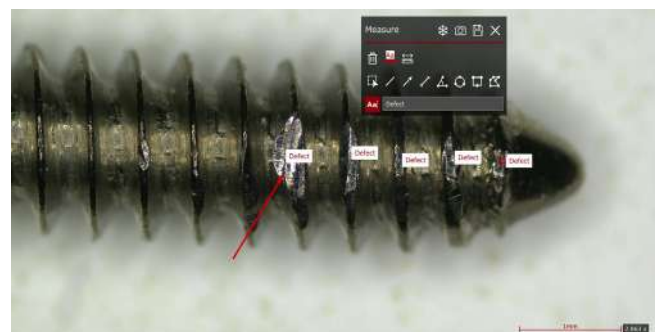
Highlight hard-to-see details: Inspect samples more thoroughly, even those with both transparent and reflective, opaque areas, by inverting the color of your images with negative mode.



Left: Image of an electronic component without HDR
Right: Image of an electronic component with HDR

Enhance communication for fast decisions

- > Annotate your images, e.g., use consecutive numbering to highlight sample characteristics, with or without a PC.
- > Automatically save images on your network for fast storage.
- > Easily share results and documentation via email.
- > Minimize the risk of data loss by keeping data on a local network for secure sharing and instant accessibility.



With Enersight, you can easily add comments or conclusions about your sample.

Get easy access to images for all: Everyone in your team can intuitively use Enersight to acquire images during inspection, resulting in a reduced need for training and supervision time.

Just use it - designed for everyone

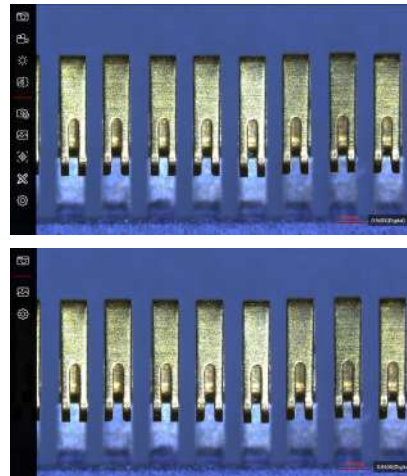
Save time and effort - users of any skill level can intuitively use the Enersight platform with minimal training.

Simplified use with an adaptable user interface

- > Hide unnecessary functions
- > Make the user interface as lean as desired

Customizable for each user group

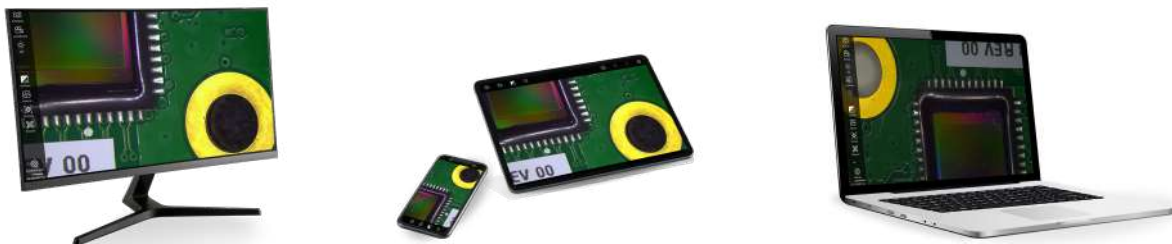
- > Set user access to specific functions



Top: Full user interface / Bottom: Customized user interface

Consistent operation that saves you time

- > Perform your inspection tasks in a consistent way, independent of the Leica product and operation mode being used.
- > With no differentiation in the user experience across operation modes, the need for training and supervision within your team can be reduced.



The Enersight software can be operated directly on a monitor, mobile device or with a computer.

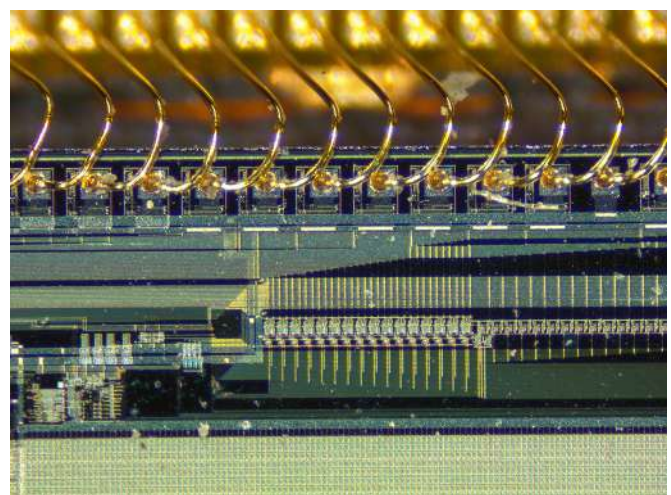
Produce images like a pro

Get crisp images with less manual effort

- > Spend less time manually adjusting white balance and exposure time settings, especially for reflective samples.
- > Get balanced high-contrast images for the region of interest with the integrated assistant functionalities.
- > Obtain images fast and easy thanks to automatic adjustment of camera settings.

Get help with image optimization

- > Use on-screen information to check for maximum level of focus.
- > Find the right illumination settings by checking the image brightness with a histogram.



FIND YOUR INSPECTION SOLUTION

Dedicated configurations are available for your specific needs – all powered by the Enersight software.

Emspira 3 Digital Microscope

The Emspira 3 is a digital microscope which does not use eyepieces, but instead the live image is displayed directly on a monitor. It combines everything needed to perform comprehensive visual inspection into a single system, including comparison and measurement, as well as documentation sharing directly via a network. The compact and versatile microscope inspires simple inspection by allowing you to streamline processes, cover your needs flexibly, and work in a confident and reliable way.



Emspira 3 digital microscope operated with the on-screen display (OSD) of the Enersight software platform.

Ivesta 3 Greenough Stereo Microscopes

Designed to optimize inspection and rework. For tasks which require a 3D view of the sample, the optics with eyepieces enable an optimal 3D perception thanks to FusionOptics. It is also convenient to handle samples with the microscope's large working distance. As a result, you can spend less time adjusting the microscope and stay focused on your work. With the Ivesta 3 Greenough stereo microscopes, you can obtain results you can rely on, in compliance with standard procedures.

Ivesta 3

For inspection and rework only, but no camera for documentation is needed.



Ivesta 3 (C-mount)

With C-mount: Gives you the flexibility to add a camera if needed and thus turn it into a digital microscope solution.



Ivesta 3 (Integrated camera)

With integrated camera: For digital image sharing directly on different devices, e.g., a monitor, mobile device, or computer.



FIND YOUR INSPECTION SOLUTION

M Series Routine Stereo Microscopes

Take advantage of the various measurement capabilities when using a M series stereo microscope with the Enersight software platform. Inspect, analyze, document, and work comfortably with the M50, M60, and M80 routine stereo microscopes. You can customize the microscope to suit your needs with a large range of ergonomic accessories and multiple types of illumination.



M60 stereo microscope with Flexacam c5 camera using the on-screen display (OSD) of the Enersight software platform.

DM2700 M Compound Microscope

When you want to investigate the internal structure of a material, you can optimize your inspection workflow by using the DM2700 M compound microscope with the Enersight software platform. Use this solution for all kinds of routine tasks concerning materials analysis.



DM2700 M compound microscope with Flexacam c5 camera using the Desktop app of the Enersight software platform.

MICROSCOPE CAMERAS

With the Flexacam c5 and i5 microscope cameras, you can efficiently reveal sample insights taking advantage of sharp images showing fine details with precise colors. Additionally, you can work in a flexible way according to your requirements and make team decisions more easily using either camera option. The microscope cameras can be operated with the consistent user interface of the Enersight software platform, no matter the operation mode, i.e., a computer, monitor, or mobile device.

Flexacam c5 Microscope Camera

For C-mount installation on a stereo or compound microscope.



Flexacam c5 camera with M60 stereo microscope using the Desktop app of the Enersight software platform.

Flexacam i5 Microscope Camera

For installation between the optics carrier and binocular tube of a stereo or compound microscope.



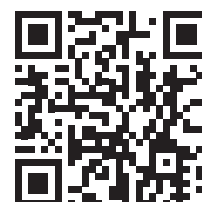
Flexacam i5 camera with M50 stereo microscope using the Enersight Mobile app.

Enersight works with the following operation modes

Characteristics	Enersight OSD	Enersight Mobile	Enersight Desktop
Operation			
Common interface used with multiple operation modes	x	x	x
Simplified use with an adaptable user interface	x	x	x
Customizable for each user group (user management)	x	-	x
Automatic camera setting adjustment	x	x	x
Image Acquisition			
Focus feedback: Help reaching the max level of focus	x	-	x
Histogram showing brightness data to help optimize illumination	x	-	x
Documentation			
Image & video recording, gallery	x	x	x
Save images on a network	x	x	x
	(automatic save)	(manual save)	(automatic save)
Share results via email	x	x	x
		(manually)	(manually)
Annotate images	x	x	x
Consecutive numbering of sample details	x	x	x
Measurement			
Measure directly during inspection	x	x	x
Directly compare to reference images or overlays with tolerances	x	-	x
Snap-to-edge assistance for circular measurements (on OSD it is "edge detection")	x	-	x
HDR for higher contrast, better balanced live images	x	-	x
Negative mode to highlight hard-to-see details	x	x	x
General			
General settings	x	x	x

x = included, - = not available

CONNECT
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