



ZEISS O-INSPECT duo

First multi-technology system from ZEISS
Microscope and measuring machine in one.



Seeing beyond

ZEISS O-INSPECT duo

Metrology and microscopy joined together in one system

ZEISS O-INSPECT duo combines two technologies in one single product and provides a solution for both, microscopy and metrology with optical and tactile measurements. The integration of the ZEISS ZEN core microscopy suite and ZEISS CALYPSO metrology software into one multisensor machine delivers unique benefits and helps to automate workflows, streamline setup and document results.

It is suitable for a wide range of applications, whenever a workpiece is flat and requires optical measurement, or when measurement and surface inspection is needed.



Example Applications

Automotive

- Battery foils
- Fuel cell stacks
- Hairpins

Electronics

- Printed circuit boards
- Displays
- Pins
- Connectors

Medical

- Knee implant
- Bone screws
- Dental implants

Technical data

Specifications	ZEISS O-INSPECT duo
Size / Measuring range in mm	800×600×300
Camera	ZEISS Discovery.V12 scout 160 c 5 MP color camera, 2464×2056 pixel
Illumination	16 segment LED ring light with white LEDs, coax uplight and backlight
Working distance in mm	55
Mechanical zoom lens	12×
Field of view in mm	10,48 x 8,6 (max.)
Compatible tactile probehead	ZEISS VAST XXT – TL1/TL3
Accuracy	1D: 1,5 µm + L/250 2D: 1,8 µm + L/250 µm 3D: 2,2 µm + L/250 µm
Software	ZEISS CALYPSO (for metrology) ZEISS ZEN core (for microscopy)
Part weight	Up to 100 kg



Key characteristics and benefits

1 2-in-1 system

ZEISS O-INSPECT duo is a multi-purpose machine and combines CMM and microscope in one single device.

2 Large stage

Due to its size of 800×600×300 mm, ZEISS O-INSPECT duo offers a non-destructive inspection solution for large workpieces or for many small parts.

3 Two software products

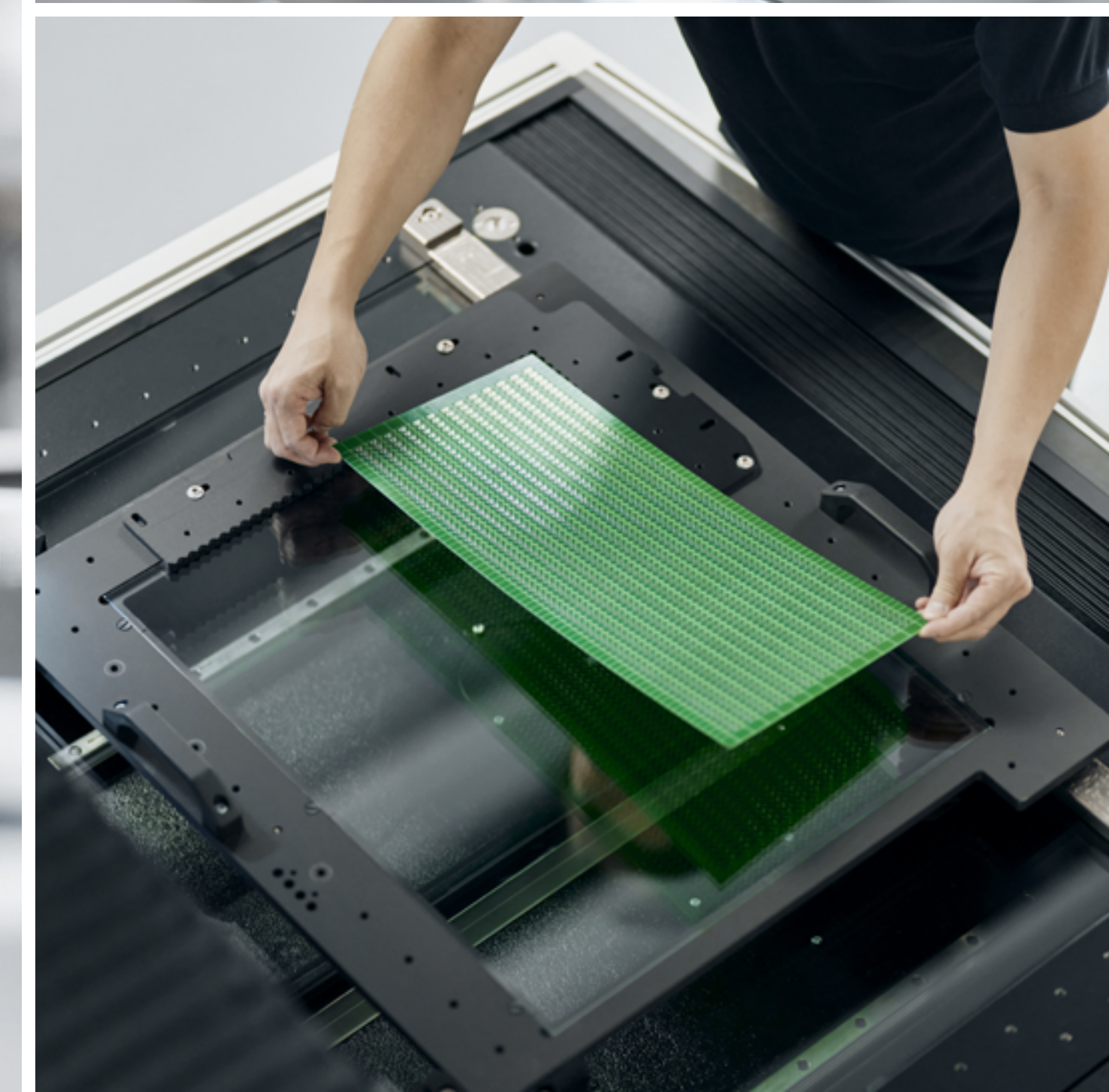
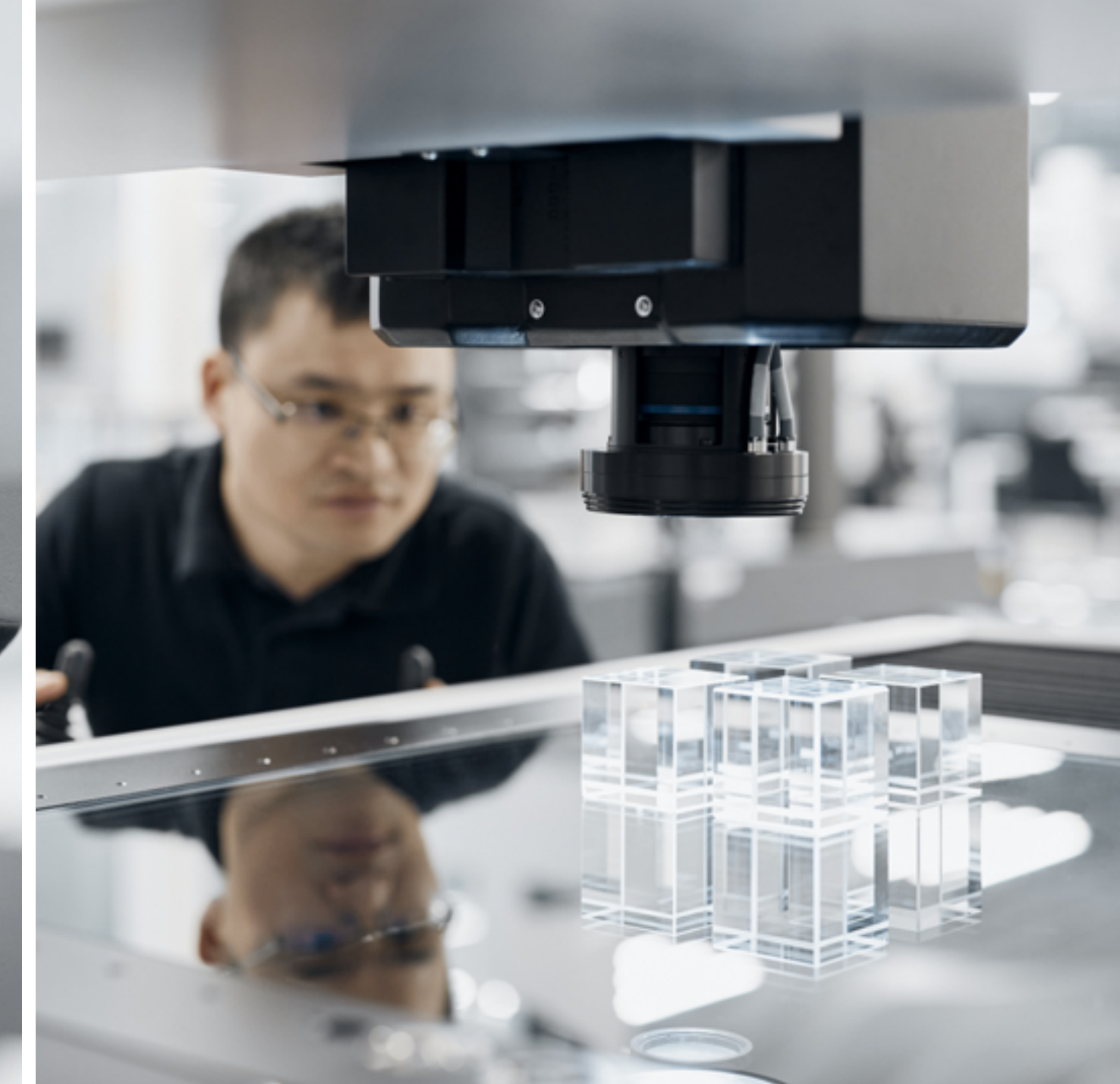
Includes two specialized softwares for each task: ZEISS CALYPSO for metrology and ZEISS ZEN core for microscopy.

4 Improved processes

By performing measurement and inspection tasks on the same device, you can reduce setup times, lower maintenance and open floorspace in the facility.

5 Brilliant image quality

The new 5 MP color camera with ZEISS scout 160 optics offers a high resolution with multiple magnification levels for capturing even the smallest details.



Key characteristics and benefits

6 Automated workflow

Fully automated metrology and inspection, imaging and documentation of large components or for multiple parts at high throughput.

7 Flexible measurements with tactile sensor

ZEISS O-INSPECT duo is a multisensor machine and works with the tactile sensor ZEISS VAST XXT for high accurate scanning.

8 High accuracy

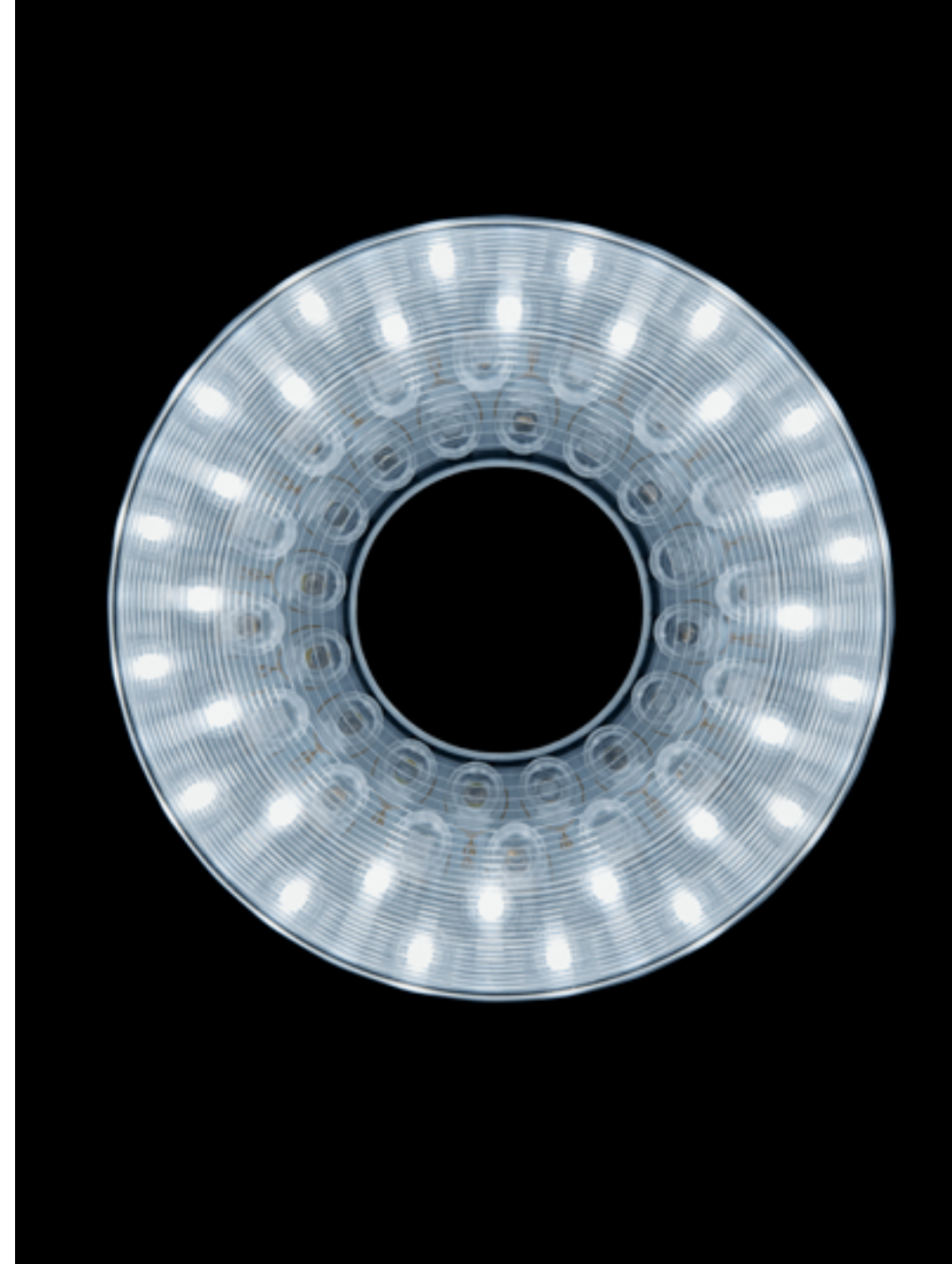
Based on MPE E0 (3D) from ISO-10360, ZEISS O-INSPECT duo promises reliable measurement results and ensures global comparability with an accuracy from $1,5 \mu\text{m} + L/250 \mu\text{m}$.

9 Cost efficient

Due to the 2-in-1 technology the machine offers a sustainable and cost efficient solution as the system and service costs are lower in comparison to two machines.

10 16-segment LED light

With 16-segment LED ring light with white LEDs, coaxial uplight and backlight for different measuring tasks and high-contrast images.



Would you like to automate your measurements and inspections with **ZEISS O-INSPECT duo**?

Contact us for a free demo – on site or digital.





Seeing beyond