



Zoom in. Check. Done.

ZEISS Smartzoom 100



Seeing beyond

ZEISS Smartzoom 100

Zoom in. Check. Done.

Digital microscopes boost efficiency in optical inspection and enable collaborative work, allowing multiple users to view the same images on a monitor. The new solution from ZEISS delivers all these benefits – and more.

The ZEISS Smartzoom 100 is an advanced digital microscope designed to enhance efficiency in quality control, manufacturing, and industrial applications. Equipped with autofocus and motorized height adjustment, it ensures a consistently sharp image.

Its intuitive design reduces the workload, making it an essential tool for industries that require accuracy and productivity. Whether inspecting microcomponents or ensuring product quality, the ZEISS Smartzoom 100 offers a versatile and efficient all-in-one solution.

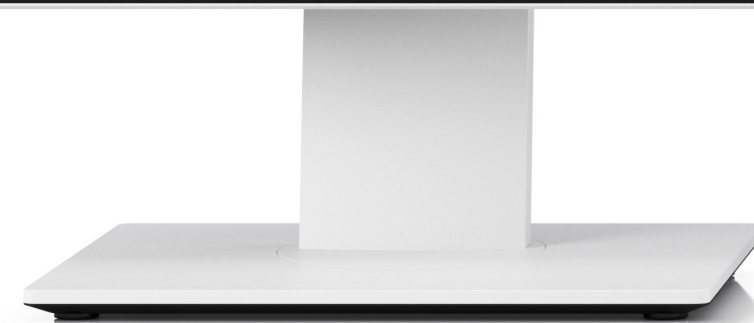
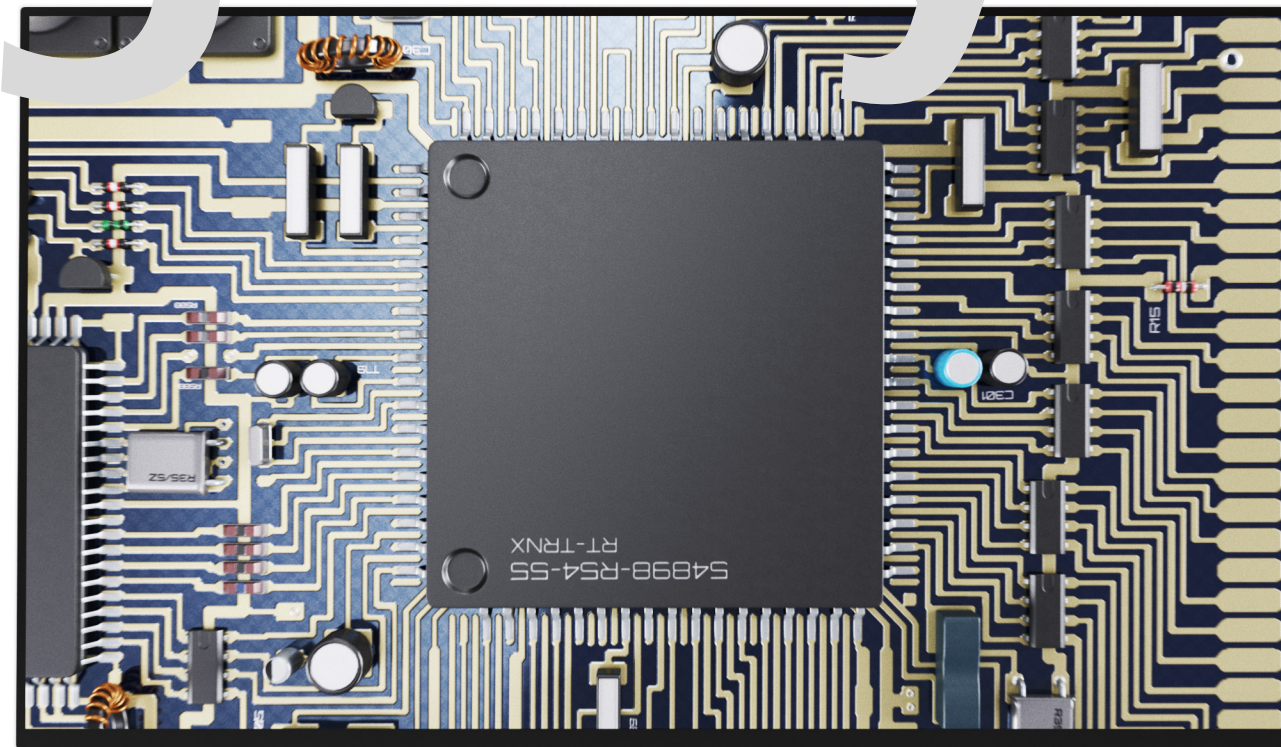
The combination of 4K resolution at 60 FPS ensures no noticeable delay between the microscope image and its display on the monitor. The user can navigate through the sample and inspect it quickly in real time, reducing user fatigue, especially during longer periods of use.



Magnify your usability with ZEISS Smartzoom 100

magnify

- Flexible, large FOV with 25x zoom and
- 370 mm working depth
- 4K at 60 FPS live view – nearly no noticeable latency



- Motorized auto-focus
- Built-in computer
- Intuitive control
- Magnetic mount for objectives and ring light



usability

Key characteristics and benefits

4K live images

The system features excellent usability with live-view visualization without any visible delay. Its camera captures 60 frames per second all displayed on a 4K resolution monitor, ensuring detailed and fast inspections.

Sharpest image at all times

Equipped with autofocus and motorized height adjustment, it always provides a sharp image. To enhance the workflow efficiency and ease of operation, the objectives and ring light have a magnetic mount.

Designed for all inspection tasks

The flexible and large FOV of the objective, combined with the 25x zoom and 370 mm working depth, makes the Smartzoom 100 a versatile microscope for inspecting relevant details in parts of a wide range of sizes.

Choose how to control the system

ZEISS Smartzoom 100 offers versatile control options, including a controller, a keyboard and mouse and an optional foot switch, ensuring flexible and comfortable operation during inspections.

A sleek all-in-one solution

The built-in computer enables all functions and software apps to run directly on the microscope. Its compact, all-in-one design makes the Smartzoom 100 ideal for workstations with limited space.



ZEISS asked their customers how they would describe ZEISS Smartzoom 100.

Customers answer:

“ It opens up optical inspection to people without a background in microscopy. ”

Technical specifications

| Objective | Magnification range | Free working distance | | Field of view |
|-----------------------|---------------------|--------------------------------------|----------|---------------------------------|
| +3 | 1.6x – 40x | 330 mm | (12.99") | 16 mm – 353 mm (0.63" – 13.90") |
| +5 | 2.8x – 66x | 200 mm | (7.87") | 9.5 mm – 210 mm (0.37" – 8.27") |
| +10 | 5.4x – 130x | 78 mm | (3.07") | 4.8 mm – 86 mm (0.19" – 3.39") |
| +25 | 13.2x – 328x | 34 mm | (1.34") | 1.9 mm – 3.5 mm (0.07" – 0.14") |
| Dimensions and weight | | | | |
| Height: | | 390 mm – 635 mm (15.35" – 25") | | |
| Width: | | 320 mm (12.60") | | |
| Depth: | | 325 mm (12.80") | | |
| Working depth: | | 370 mm (14.57") | | |
| Weight: | | 10.8 kg (23.81 lbs) | | |
| Camera specs | | | | |
| Camera resolution: | | 4K (3840x2160), 8.5 MP @ 60/50/30 Hz | | |
| Frame rate: | | 60 frames per second | | |
| Optical zoom: | | 25x | | |
| Video output: | | HDMI | | |
| Aspect ratio: | | 16:9 | | |

ZEISS asked customers how the new digital microscope improves their work.

Customers answer:

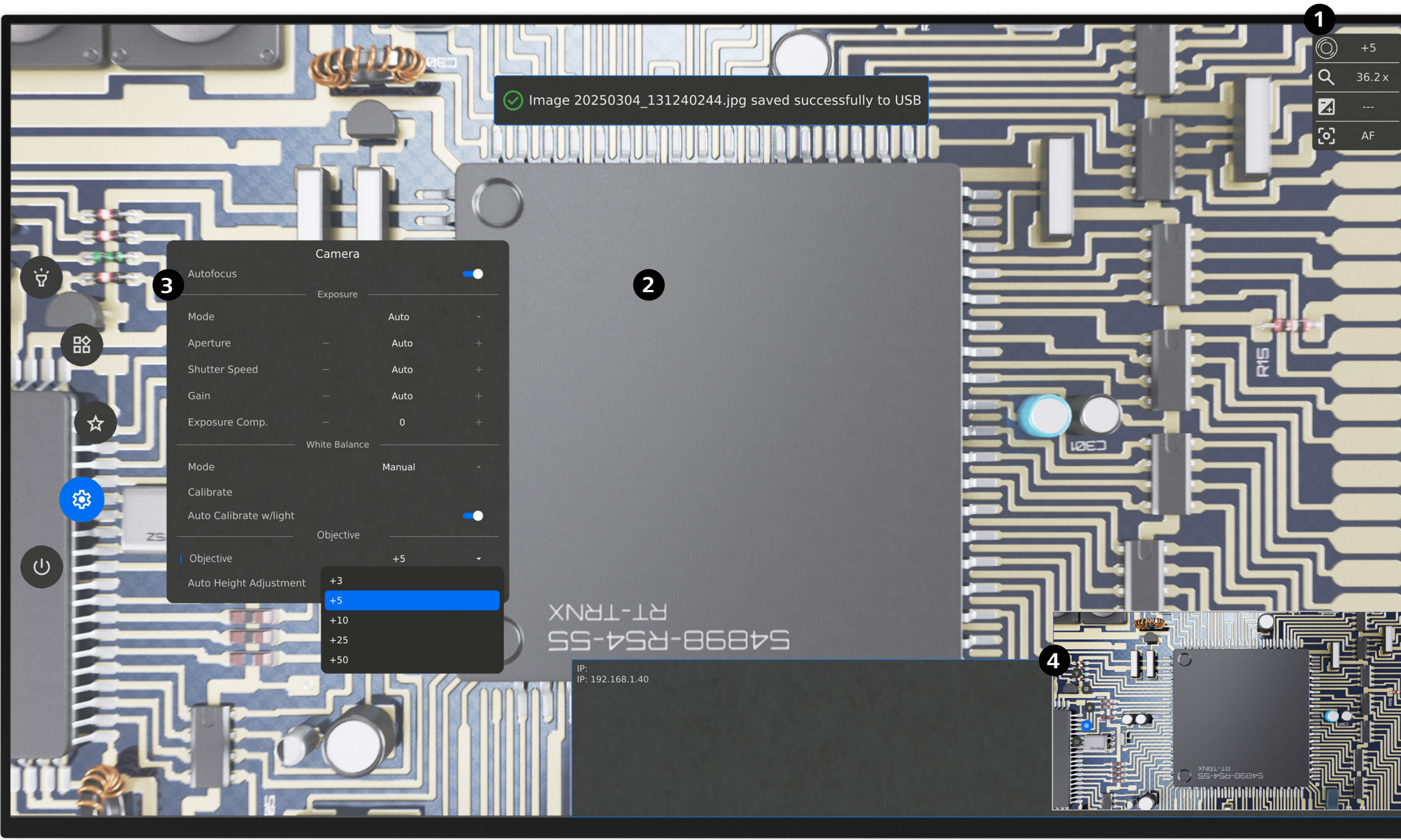
“ It reduces fatigue and provides more flexibility for physical applications as the user doesn’t need to reach the eyepieces. ”

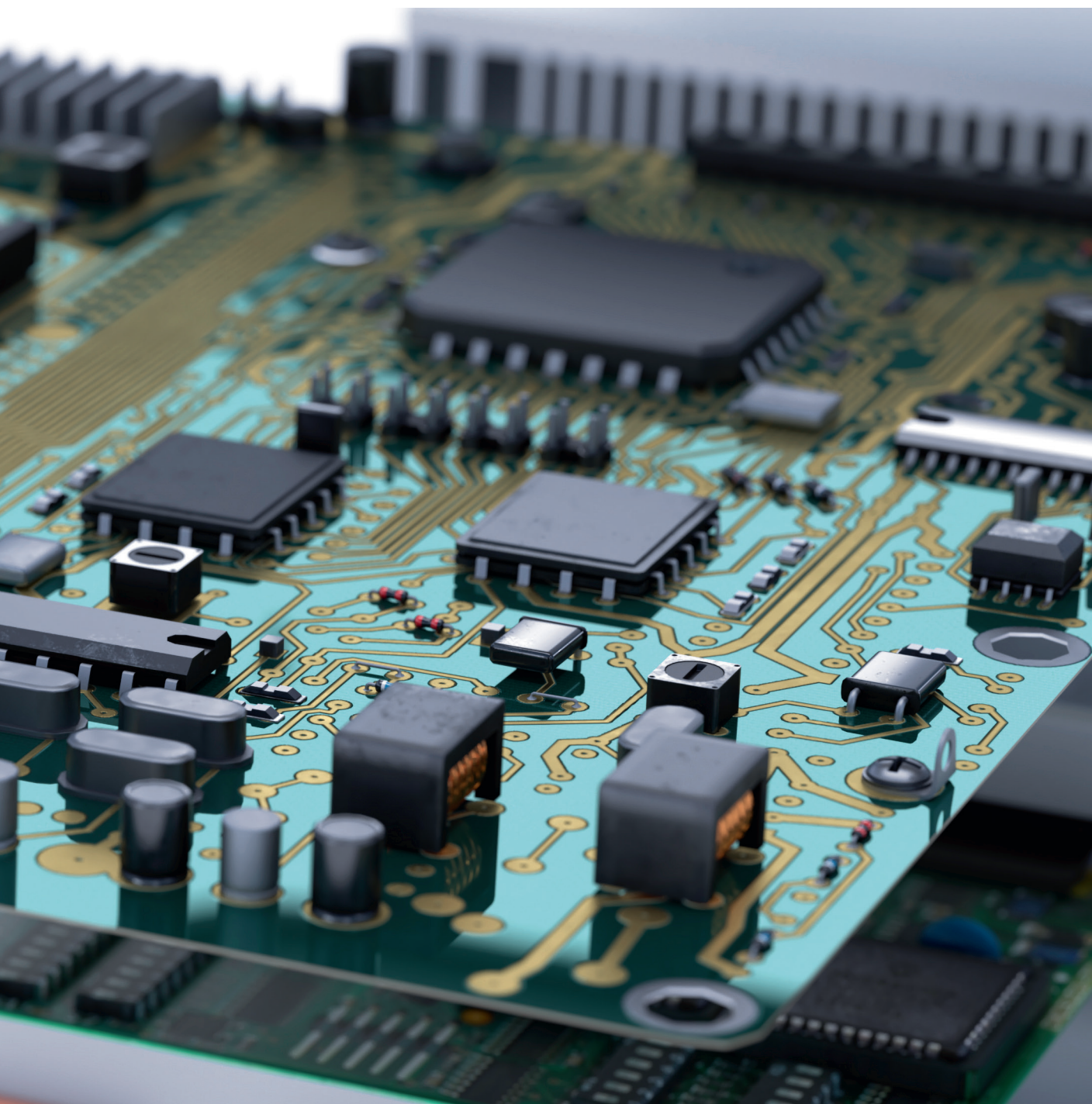
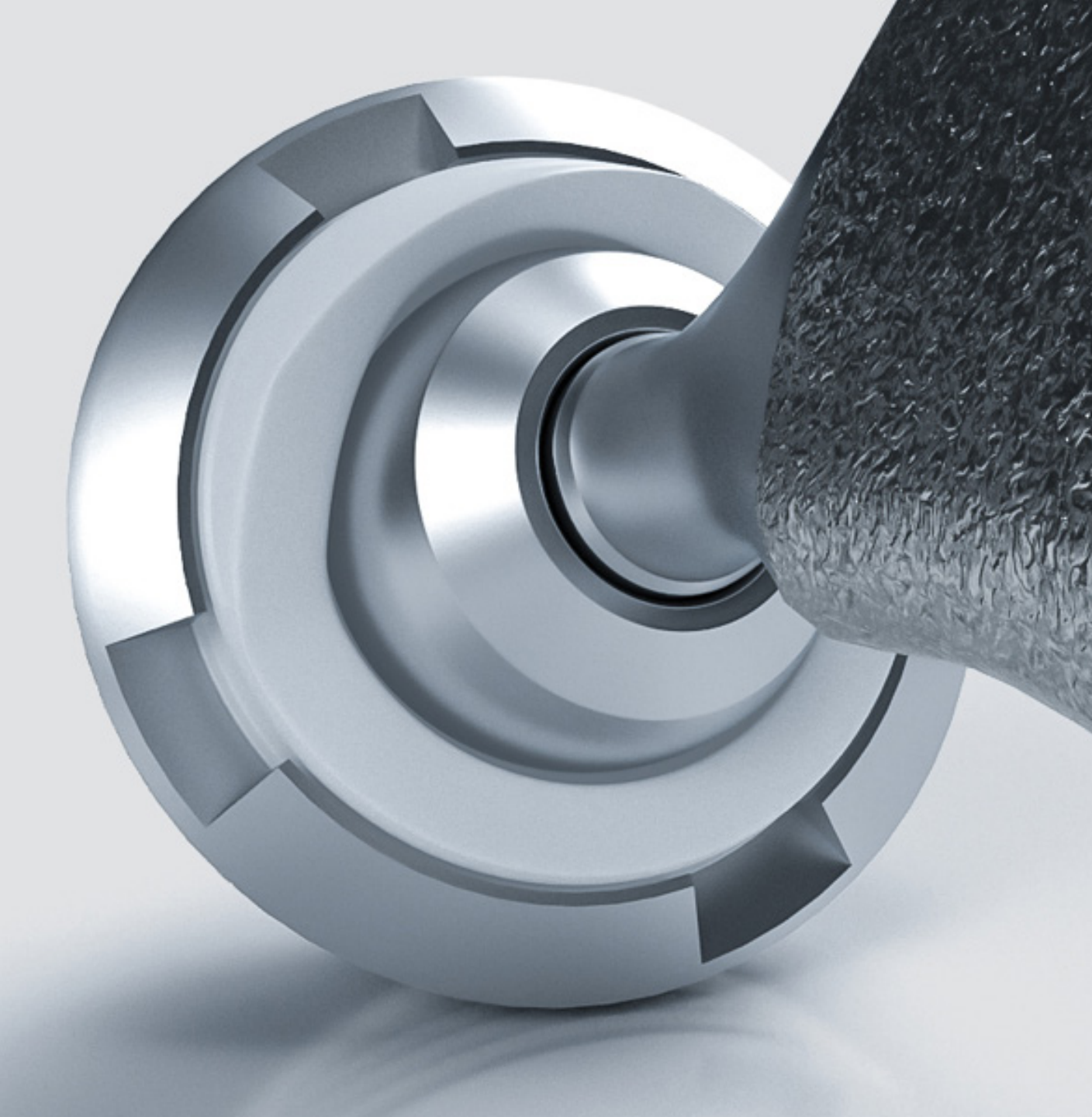


Software - Easy as it gets

The user-friendly software includes the basic software to control the microscope, along with optional software apps designed to meet the needs of specific applications. Customize your Smartzoom 100 with the most suitable apps for your processes and tasks.

- 1 The main microscope settings are always visible in the top-right corner of the live image (objective in use, magnification level, exposure mode, and focus mode).
- 2 The live image of the microscope is always displayed.
- 3 The microscope menu provides access to settings, features, and software. It allows for quick adjustment of light, power, settings, applications, and favorite shortcuts.
- 4 When capturing images, a preview of the captured image is displayed in the bottom-right corner.





Applications

The ZEISS Smartzoom 100 is an advanced digital microscope used in quality control, manufacturing, and industrial applications, making it a valuable tool for monitoring processes and ensuring product quality standards.

Electronics:

Inspection and failure check of PCBs (Printed Circuit Boards) and SMDs (Surface-Mounted Devices).

Medical Devices:

Inspection and failure check of implants, syringes, orthopedic components, and other parts.

Automotive Industry:

Inspects automotive parts, such as seals and valves, for defects and ensures precision in screws and joints.

Aerospace:

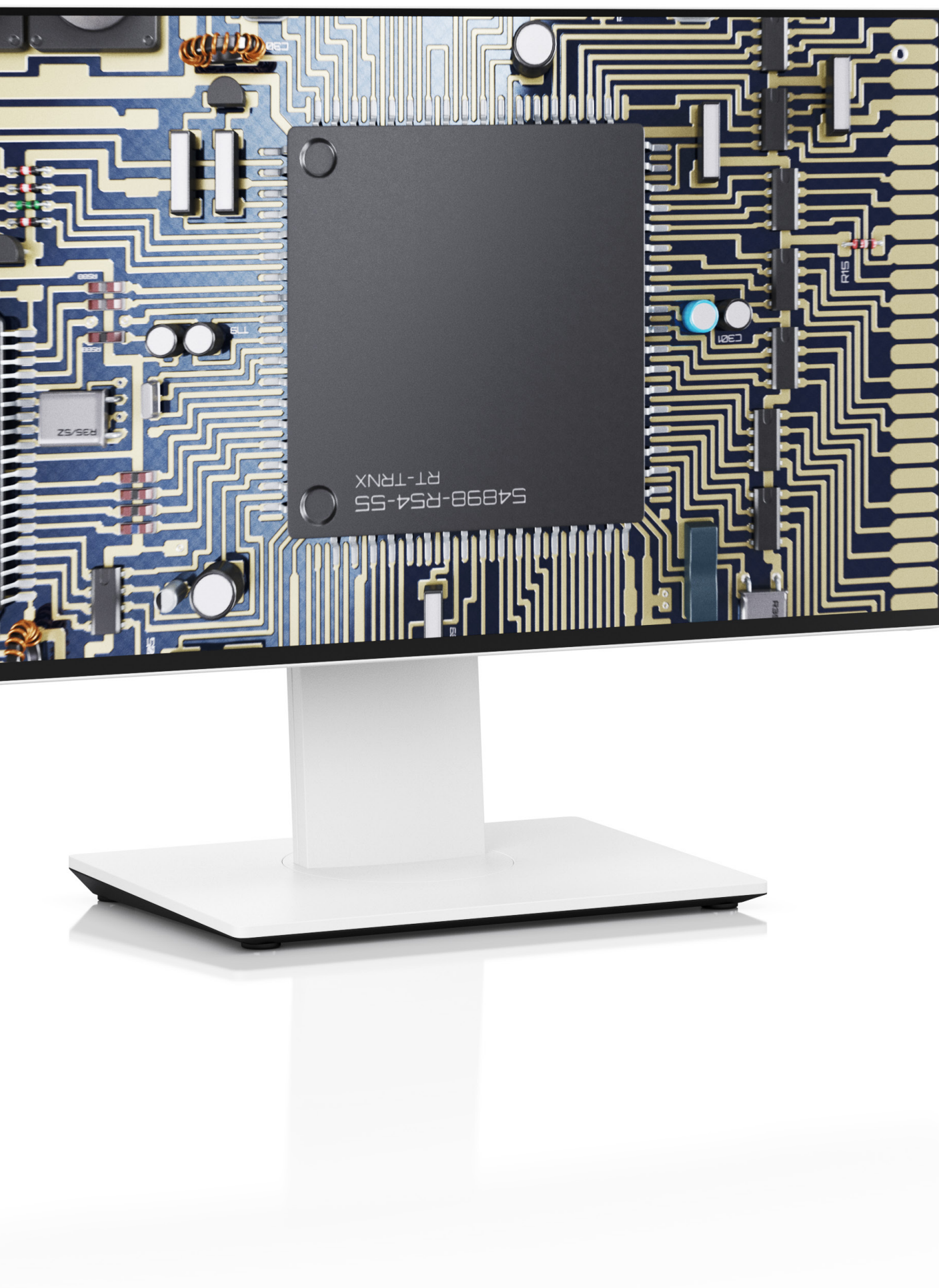
Inspection of compressor blades and mechanical parts.

Pharmaceutical Industry:

Detects defects such as cracks or size issues, and ensures correct labels and expiration dates on packaging.

Research and Development:

Analyzes samples in materials science and studies surfaces at the micro or nano level.



Check out the **ZEISS Smartzoom 100:**

The new digital microscope
for optical inspections.

Contact us for a free demo –
onsite or digital.

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