# Automotive Engineering 2. Measurement Systems



### **Laser Scanning Microscope**

# **Keyence VK-X 3D-Laser Scanning Colour Microscope**

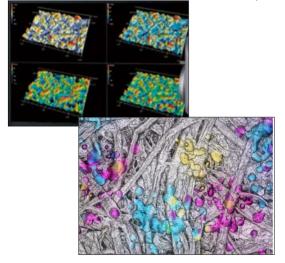
Surface analysis of tribologically stressed surfaces, roughness and ripple determination, 3D analysis of seals or friction linings and particle size determination

#### **Specifications:**

- · Red semiconductor laser with a wavelength of 658 nm
- More than 3 million measurement points in each level
- 16 bit PMT, color CCD image sensor (3072 x 2304)
- 5 nm high resolution
- 8x optical zoom (laser mode)
- · Scanning speed up to 120Hz
- XY image composition module with software and travel table (motorized 100x100mm)
- · Comprehensive evaluation and analysis software
- · Large number of different lenses



Source: Keyence



## **High Speed Digital Microscope**

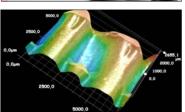
#### Keyence VW 9000

- Analysis of highly dynamic processes in the micrometer range
- 3D measurement of surfaces

#### **Specifications:**

- 4000 fps at 640x480 pixels
- Max. 230000 fps
- Microscope up to 1920x1440 pixels
- Magnification up to 200 times
- · Macro zoom lens for long distance







Source: Keyence