

Digital microscope VHX-5000

Microscopy laboratory (371 A)

Main purpose

Next-generation optical microscope with a large depth-of-field and advanced measurement capabilities for inspection and failure analysis. Designed specifically for industry use, enables all basic analytical operations – measurements, investigations, 2D and 3D images.



Main competitive advantages

The VHX can recognize the focus information automatically when the field of view is moved and then create a depth composition image quickly. This allows intuitive and instant focusing on a point you want to observe. The 50 frames per second camera captures a large amount of image data with different focus positions, and the REMAX V high-speed processing graphics engine processes it at high speed. It uses technology that adopts best focus data for each pixel to allow for clear, fully focused images to be observed and recorded. A high resolution image is obtained with single-wavelength light and the HDR (High Dynamic Range) function that captures multiple images by varying the shutter speed to produce a fine detail image. These two functions enable high resolution and high contrast observation.

The VH-Z20R/Z20W/Z20T lens offers high-resolution observation at general-purpose magnifications of 20x to 200x. This lens has been designed to optimize both depth-of-field and resolution and can also be used in handheld mode.

Types of expertise

- Observation of metallography samples, fractography samples, surface morphology of samples
- Sample photo-documentation
- Geometry characteristics measurement in all the axes

Ares of operation

Mechanical engineering, chemistry, petrochemistry, oil & gas, automotive, metallurgy.

Technical description

Camera: 1/1.8-inch CMOG image sensor

Resolution: 1600 (H) x 1200 (V)

Frame Rate: 50 frame/sec

High Dynamic Range: 16-bit resolution through RGB data from each pixel

Magnification:

Low Magnification Lens: VH-Z20R/Z20W/Z20T 20x-200x

Medium Magnification Lens: VH-Z250T 250x-2500x



Výskumný ústav zvaračský
Priemyselný inštitút SR
Račianska 71
832 59 Bratislava



0918865 375



sales@vuz.sk



www.vuz.sk