R₁M+L_AS

Nano Station

(Portable Metallurgical Microscope)

- Precision optics on a DIN A5 sheet
- Portable testing
- Checking printing rollers
- Material analysis

This ultra-compact unit (180x180x160 mm) includes high quality optics and coaxial illumination. The 4way lens-capstan holds 4x, 10x, 20x and 40x object lenses. The optical system is mounted on a crosstable and can be positioned over a 10x10 mm area. Height is adjusted by a combined coarse/finepositioning drive.



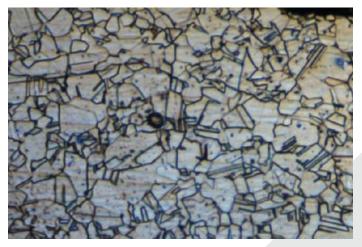
The unit is mounted on twin guides, permitting reliable positioning on rollers with diameters 200mm and above. For metallurgical tests, the roller supports can be swapped for magnetic feet. The system is equipped with a highresolution Notebook-compatible USB digital camera. When used with a 15" monitor, magnifications of up to 2520x are possible. The VIS 6.4 software is optimised for rapid documentation and precise 2D measurement, to determine distances, diameters, angles, areas etc.

All Inclusive:

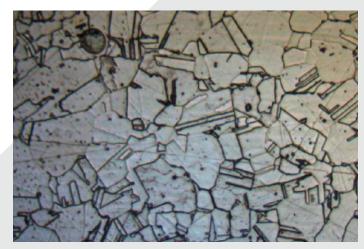
- + Optical system with 4x, 10x, 20x and 40x object lenses
- + Roll support guides
- + Coaxial LED illumination, adjustable brightness
- + USB digital camera, model DFC-42
- + VIS 6.4 image analysis software and measurement module

Made in Germany by Optometron GmbH

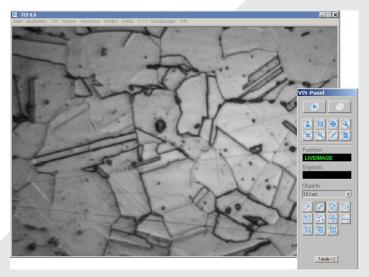




Material sample, 4x object lens



Material sample, 10x object lens



20x object lens, image analysis with VIS 6.4

Optical data			
Lens	Mag	Field of view	Working distance
4x	250	750 x 560 μm	17,9 mm
10x	630	300 x 225 μm	8,8 mm
20x	1260	150 x 112 μm	3,7 mm
40x	2520	75 x 56 μm	0,56 mm
Magnification = overall magnification with 1/3" camera and			

Magnification = overall magnification with 1/3" camera and 15" monitor

The components

Optical system	Fixed object lenses, 4x, 10x, 20x, 40x, Coaxial LED illumination with adjustable aperture		
Design	- sturdy aluminium construction - height adjustment with a 20 mm travel, coarse/fine drive - X/Y cross-table, 10x10 mm positioning with micrometer screws		
Dimensions	180 x 180 x 160 mm, Weight: 5.2 Kg		
Digital camera	DFC-42, 1/3" CCD colour camera, USB 2.0 connection, 1024x768 pixel resolution, 35 image/sec.		
Software VIS 6.x	Image documentation and measuring module for Windows Vista and WIN-7/8/10		

The modular video system can be extended to suit your applications :

- → Plan achromatic lenses: 60x and 80x
- → Additional eyepiece output
- → Depth measurement by incremental encoder (measurement resolution 5µm with 20x object lens)
- → Object lens capstan with encoder for display of selected magnification
- → Magnetic feet as alternative to roller guides
 - G-32, Sector-3, Gautam Buddha Nagar, Noida- 201301, Uttar Pradesh