Nexcope®

NM700

METALLURGICAL MICROSCOPE

NOVEL OPTICS

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NM700 series

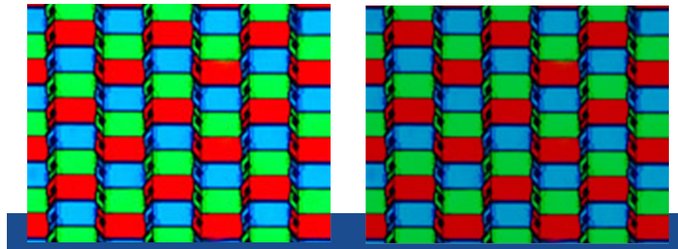
Metallurgical Microscope for Routine Inspection

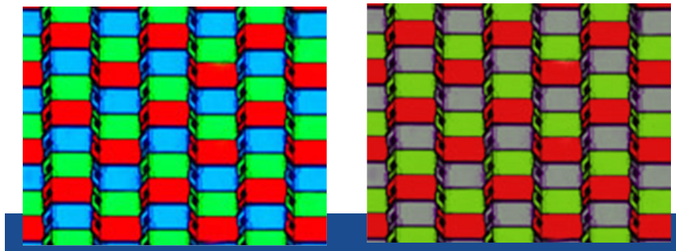
The NM700 is engineered for users who work long hours at the microscope day in and day out.Featuring LED illumination for both transmitted and reflected light with adjustable color temperature, it delivers true-color images at all brightness levels.Paired with a coded objective turret and integrated light source, the microscope offers intuitive and straightforward operation.It excels at routine inspection tasks in metallography, earth sciences, forensic examination, sampling quality control, and materials research.When combined with a dedicated metallographic software platform, it supports image capture, data analysis, and visual presentation.Truly versatile for diverse working environments, the NM700 stands out with comprehensive functionality, ease of use, and hassle-free maintenance.

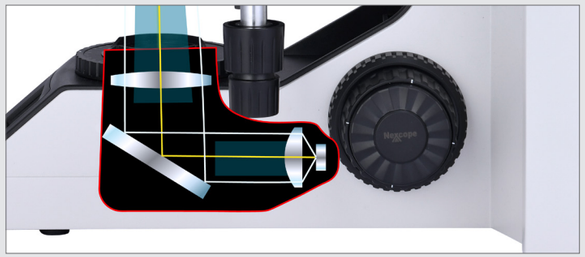
Highly Adaptable LED Lighting

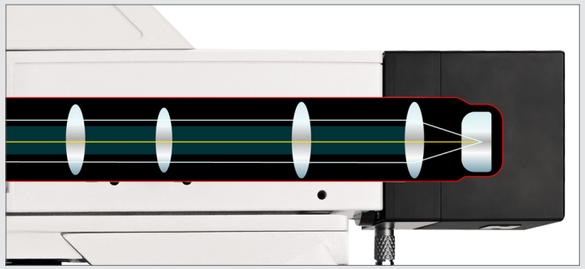
LED illumination delivers bright, even lighting for brightfield, oblique, polarized light and other observation methods with adjustable color temperature, ensuring true-color images at any brightness level.It features an exceptionally long service life, eliminating the need for frequent bulb replacement. Low heat generation removes overheating risks, and the absence of cooling fans creates a quiet, disturbance-free working environment.Thanks to these superior advantages, LED light sources are replacing traditional halogen lamps and becoming the preferred illumination solution for modern microscopes.

Delivers consistent color temperature under any brightness






Built-in LED Transmitted Light Illumination


LED Reflected Light Illumination

User-Friendly Details for Easier Operation

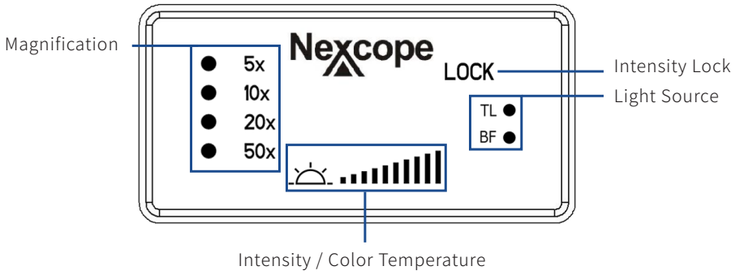
Innovative Light Source Switching Mechanism

Both transmitted and reflected light sources are linked to the multi-function turret. Compared with conventional push-button switching, light source conversion is more convenient and particularly user-friendly for beginners.

Status Display Function

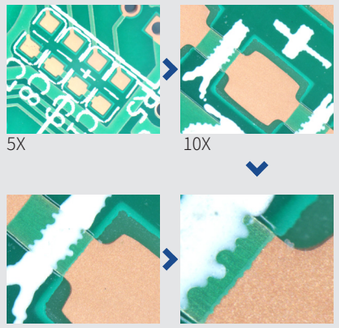
The LCD screen on the front of the microscope clearly shows real-time operating status, including magnification, illumination intensity, color temperature, light source status and more.

Main Interface



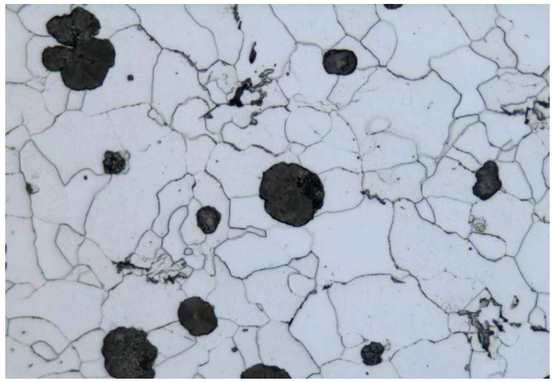
Brightness Memory Function

The microscope memorizes the preferred illumination brightness for each objective lens. When switching between different objectives, it automatically adjusts the light intensity accordingly, reducing visual fatigue and boosting operational efficiency.

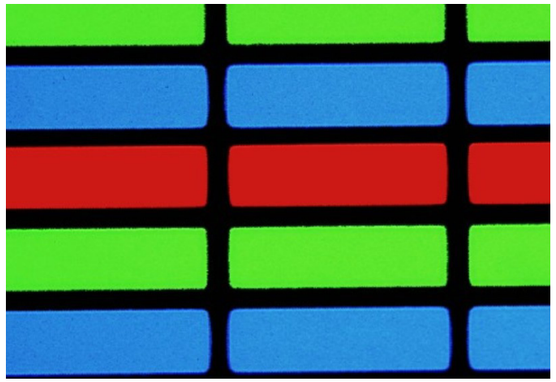


Suitable for Daily Material Microscopy Requirements

In addition to conventional reflected brightfield and transmitted brightfield, optional observation methods such as oblique illumination and polarized light are available to enhance image contrast, expanding the microscope's applicability to a wider range of scenarios, including pharmaceutical and chemical engineering, materials research, quality assessment, cleanliness analysis, and forensic inspection.

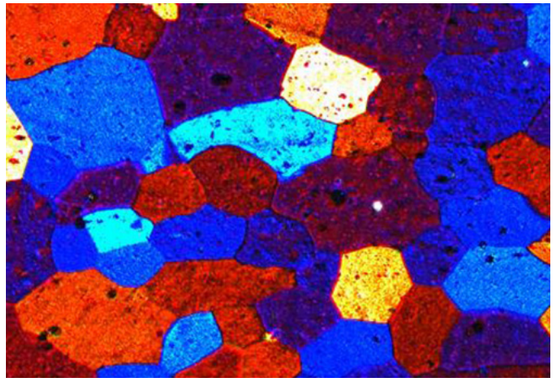


Reflected Brightfield



Transmitted Brightfield

Oblique Illumination



Polarized

Wide Range of Objective Lenses for Every Need

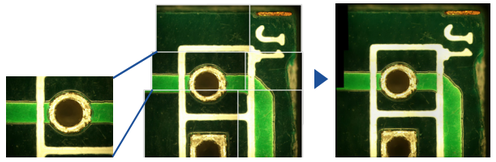
We offer objective lenses from 2.5× to 100×, compatible with all observation methods.The 2.5× overview objective enables quick identification of macroscopic structures in samples, while switching to 100× allows detailed inspection of alloy edges and material cracks.Seamless switching between different observation methods delivers an in-depth, comprehensive understanding of your samples.

Powerful & Easy-to-Use Software Platform NOMIS Pro X

With a simple user interface, it guides you step by step through capture, adjustment, measurement and reporting.It fully supports all your real-time microscopy observation needs during daily inspection work.

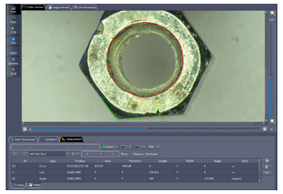
Image Stitching

NOMIS offers manual stitching to generate panoramic images of samples larger than a single field of view.By capturing images in real time or importing existing files, it can quickly stitch them together into a large, high-resolution image.



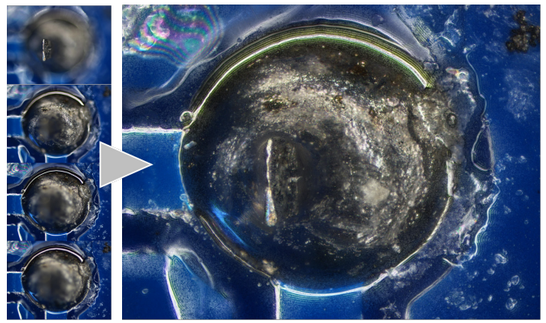
Real-Time & Static Measurement

Typical observation and quality control applications demand interactive measurement tools, including distance, angle, rectangle, circle, and ellipse.All measurement data from this system can be exported directly to Microsoft Excel spreadsheets.



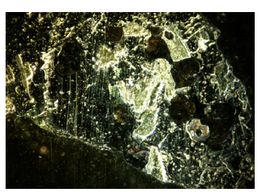
Depth of Field Fusion / 3D Reconstruction

NOMIS provides depth of field fusion and 3D reconstruction, both of which can be operated in real-time HDR mode.After applying depth of field fusion, users obtain a 3D reconstructed model that can be imported and visualized in the 2.5D module.

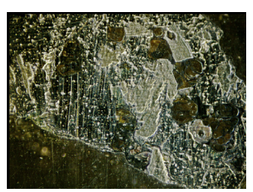


High-Definition Real-Time HDR Imaging & VideoA

Samples often exhibit high-contrast surface features under observation.NOMIS incorporates GPU-accelerated real-time high-dynamic-range (HDR) imaging technology, allowing users to produce perfectly exposed images with just a single click.



Auto Exposure Image



HDR Image

Convenient to Transport and Store

It is equipped with a dedicated carrying handle, featuring light weight, excellent stability and a robust structure.A cable hub is integrated into the microscope’ s back panel to effectively organize excess power cords, enhancing lab cleanliness and reducing tripping hazards during transport.

Cable management hub

Carrying handle

NM700 Microscope Specification		
Optical System		Infinity Corrected Optical System
Eyepiece (Field of View)		High-Eyepoint Wide-Field Plan Eyepiece 10× (22mm FOV)
Observation Tube		30° Inclined Infinity Hinged Binocular Tube, Interpupillary Distance Adjustment: 48-75mm 30° Inclined Infinity Hinged Trinocular Tube, Interpupillary Distance Adjustment: 48-75mm, Fixed Beam Splitting Ratio R:T=50:50
Objective Lenses		Infinity Corrected Plan Achromatic Objectives
Nosepiece		Inward-Tilting 5-Position Coded Nosepiece
Stage		Double-Layer Mechanical Stage, Compatible with Reflective Metal Stage Plate & Transflective Glass Stage Plate
Condenser		Achromatic Condenser (NA 0.9), with Variable Aperture Diaphragm, Centrable, Universal for 4×-100× Objectives
Focusing System		Low-Profile Coaxial Coarse/Fine Focusing Mechanism, Fine Focus Accuracy: 0.001mm Equipped with Tension Adjustment, Upper Limit Stop, and Stage Vertical Adjustment Mechanism
Illumination	Transmitted	3W LED, Adjustable Color Temperature
	Reflected	Coded Reflected Light Lamp House, 3W LED, Adjustable Color Temperature, Koehler Illumination With Field Diaphragm, Aperture Diaphragm, Centrable, Oblique Illumination Attachment, Brightfield Illumination
Photography & Videography Accessories		1×, 0.5× C-Mount Adapters