Nexcope®

NSZ7 Series

Stereo Microscope

Delivers clear, dependable, and stereoscopic image information

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A breakthrough product in the pursuit of ultimate optical imaging performance

The NSZ7 series stereo microscopes are equipped with the groundbreaking NIS apochromatic optical system, delivering a qualitative leap in four core areas: resolution, depth of field, contrast, and color fidelity. This enables the clear visualization of fine structures and intricate sample details, redefining the imaging standard for Greenough-type stereo microscopes.

With an ultra-long 125 mm working distance, the NSZ7 provides a safe and spacious operating environment, allowing tools to be used with confidence and significantly enhancing the efficiency of both live specimen manipulation and industrial inspection. Its industry-leading zoom range allows users to effortlessly transition from macro to micro observation, while ergonomic and reliable controls ensure smooth, precise operation.

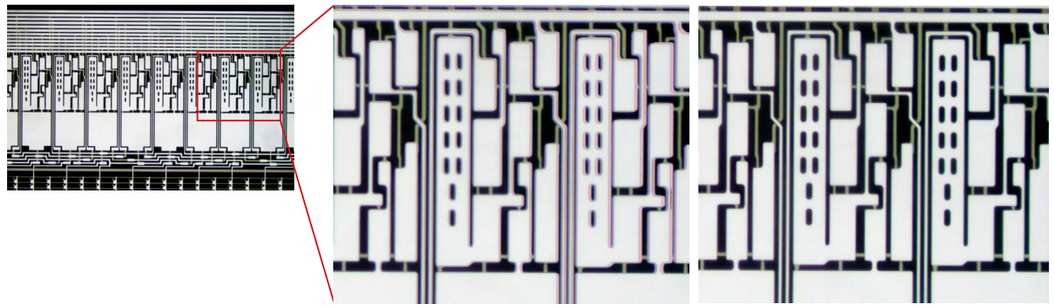
Three major technological breakthroughs make the NSZ7 series ideally suited for a wide range of applications, including life sciences, industrial inspection, art authentication, and precision assembly—empowering efficient exploration in both scientific research and industrial fields.

NSZ709

NSZ707

Exceptional Imaging Quality with Stunning Detail

Equipped with the groundbreaking NiS apochromatic optical system, the NSZ7 series achieves aperfect fusion of high contrast, high resolution, and superior color fidelity. Whether observingfine structures or analyzing complex samples, it delivers imaging quality that surpasses previousstandards-empowering users to obtain precise and detailed sample information.



Imaging with Plan Achromatic Objectives

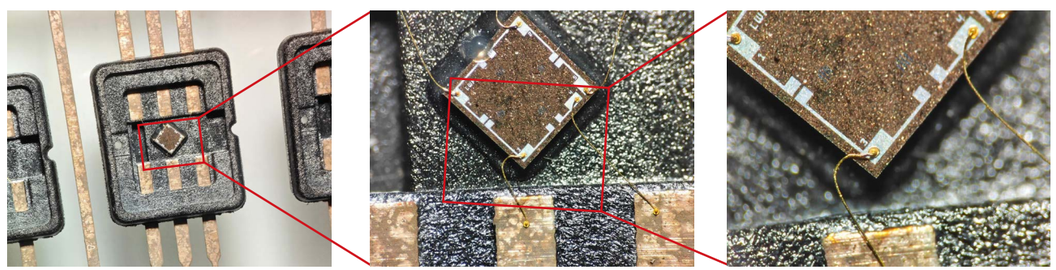
Imaging with Plan Apochromatic Objectives

Generous Working Distance, Comfortable Operation

With an ultra-long 125 mm working distance, the NSZ7 series provides ample space to protect samples and ensures a spacious, unhindered working environment under the microscope. It eliminates the constraints of traditional, cramped setups—restoring a natural, relaxed operating experience. Users can maintain a comfortable sitting posture for focused observation, minimizing fatigue even during extended use. The result is an operation that combines efficiency with ergonomic comfort.

Seamless Transition from Macro to Micro Observation

NSZ709: Featuring an impressive 1:9.1 zoom ratio, the NSZ709 offers a continuous magnificationrange of 6X to 55X (with 10X eyepieces), enabling effortless switching between wide-field imagingand high-magnification, high-resolution observation-ideal for diverse inspection needs.
NSZ707: With a strong 1:7.5 zoom ratio, the NSZ707 stands out among products in its class. Itdelivers high-quality imaging from 6.7X to 50X (with 10X eyepieces), making it a cost-effectivechoice for users seeking an optimal balance between performance and budget.



Supports multiple observation methods and offers broad compatibility

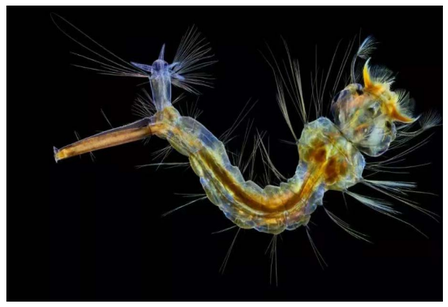
A wide range of product configurations supports multiple observation modes, including brightfield, darkfield, polarization, and high-contrast imaging, and offers both binocular and trinocular models. Whetherfor routine sample observation or specialized sample analysis, it precisely meets diverse user needs.

Transmitted / Reflected Brightfield

The NSZ7 series delivers an optimal balance betweenhigh resolution and large depth of field in brightfieldobservation. Whether examining plant cellmorphology or insect surface textures in life sciencesor inspecting solderjoints and assembly gaps on PCBboards in industrial applications, the system providesdelicate, true-to-life imaging with accurate colorreproduction and crisp, well-defined edges.

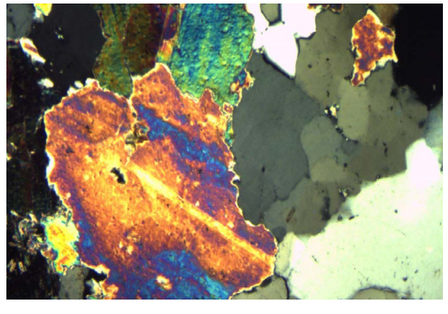
Darkfield

Professional-grade darkfield illumination components can be configured to precisely control the angle and intensity of light, ensuring optimal illumination of the sample. In industrial quality control, this allows for the sensitive detection of surface scratches, cracks, and microscopic short circuits on PCB boards.



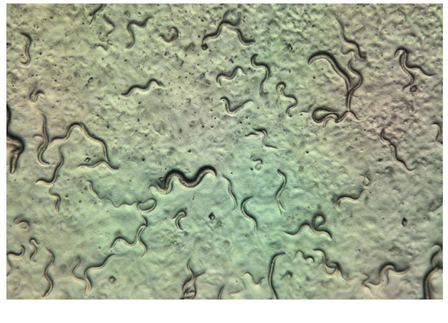
Polarization

High-precision polarizing components are available to enable accurate control of polarization angles. Whether analyzing mineral crystals in geology, inspecting internal stress distribution in plastics for the polymer industry, or observing birefringence in biological samples such as starch grains or bone tissue, the NSZ7 delivers clear, detailed, and richly colored microscopic images.



High-Contrast Imaging

Enhances the light and dark differences and boundary features of sample structures, delivering clear, layered, three-dimensional visual effects even when observing low-contrast or transparent specimens.



Complete set of accessories

Equipped with a comprehensive and professional accessory system, it enables functional upgradesthrough flexible combination of accessories—catering to diverse user needs across basic observation, advanced scientific research, industrial inspection, and educational demonstration.

Eyepieces

Multiple types of eyepieces are available. The standardconfiguration includes a 10X/23 wide-field eyepiece,providing an ultra-large field of view. Additionally,15X, 20X, and 30X high-magnification eyepieces areoptional, allowing for higher magnificationobservation at a low cost.

Stand

Supports various types of stands, including standard,ultra-thin, and multifunctional models. The ultra-thinstand, featuring a slim base and high color fidelityillumination, is perfectly suited for the new NSZ7 seriesstereo microscopes.

Ring Light

Professional high-performance ring light supportingstandard reflected illumination, with four-zonebrightness adjustment to meet the observation needs ofspecial samples.

Fiber Optic Illuminator

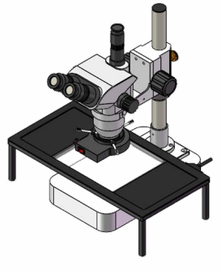
Flexible dual-arm or single-arm fiber optic illuminators canbe adjusted according to observation needs, allowingchanges in illumination direction and angle to achieveoptimal imaging contrast and effect.

Platform

Professional stereo platform enabling high-precision sample control.

Heating Stage

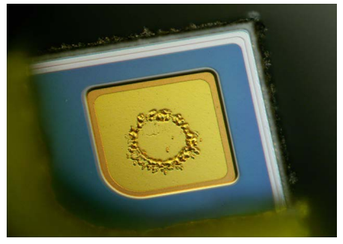
Professional stereo heating stage with a large glass surfacesupporting oversized sample observation. It offers temperature control from room temperature to 50° C, suitable for long-term observation of live specimens.



Applicable Scenarios

The NSZ7 series stereo microscopes cover a wide range of fields, including life sciences, precision manufacturing and inspection, as well as artifact authentication and restoration. They support applications such as animal dissection, electronic quality control, and cultural relic restoration, delivering clear observation and precise stereoscopic imaging. Fully adaptable across scenarios, the NSZ7 series excels from scientific research to industrial inspection.

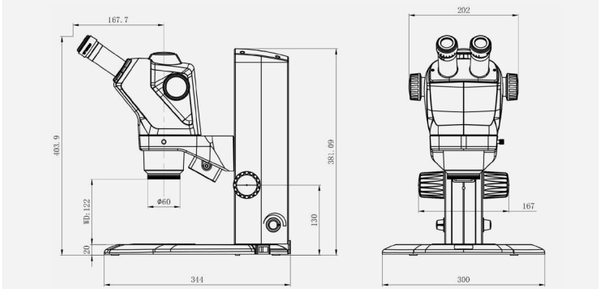
Field	Application	Application scenarios
Life Sciences	Animal dissection operations	Supports teaching and research dissection of small animals (e.g., mice, frogs, insects, etc.). Enables clear differentiation of blood vessels, nerves, muscles, and micro-organ layers. Supports precise procedures such as delicate separation, extraction, and vascular perfusion.
	Biological development observation	Observe the entire development process of various model organisms' eggs, embryos,ding, fac and larvae. Supports precise operations (e.g., microinjection) and live recorilitating research on developmental mechanisms.
	Exploring Plant Microstructures	Observe the structural organization of plant organs, root development dynamics, physiological disorders, and parasitic phenomena, providing direct evidence for research in plant physiology and pathology.
	Insect and Ecological Observation	Observe insect morphological characteristics and record their behavior, supporting biological community imaging and ecological research in both field and laboratory environments.
	Aquatic Organism Observation	Observe the live conditions, reproductive behaviors, and early developmental stages of fish and other aquatic organisms.
	Parasitic Detection and Identification	Screen, identify, and classify various parasitic samples, supporting parasitology research and diagnostics.
Precision Manufacturing and Inspection	Electronic Manufacturing Quality Control	Visually inspect printed circuit boards (PCBs) to accurately locate soldering defects, circuit flaws, foreign residue, and poor contacts, while thoroughly documenting the findings.
	Product Failure Analysis	Assist engineers in in-depth examination of faulty circuits and components, trace the root causes of failures, and provide direct evidence for compiling professional failure analysis reports.
	Micro Device Assembly	Support the precise assembly, positioning, and adjustment of small components in precision devices such as implants, optical/fiber optic assemblies, and watch movements.
	Material Surface and Structural Analysis	Examine the surface morphology, coating condition, fabric structure, and fiber characteristics of various materials such as metals, ceramics, and composites.
Identification and Restoration	Microfossil Analysis	Observe microfossil samples to provide key data for stratigraphic dating and paleoenvironmental reconstruction.
	Jewelry and Gemstone Evaluation	Used for gemstone identification and clarity grading, clearly distinguishing internal inclusions, fractures, and surface features.
	Forensic Examination	Analyze tool marks, ballistic characteristics, suspicious documents, and trace evidence such as fibers, glass fragments, and hairs.
	Cultural Heritage Restoration and Research	Conduct detailed examination and conservation of artworks (paintings, sculptures, artifacts, etc.), enabling non-destructive layered observation.



NSZ709
NSZ709T

	NSZ709	NSZ709T
Optical System	Infinity-Corrected Apochromatic Optical System	
Zoom ratio	9.1:1	
Zoom range	0.6-5.5X	
Working distance	125mm	
Magnification	6X-55X	
Eyepiece	10X(23)	
Viewing Head	Binocular	Trinocular
Interpupillary Distance	50-76mm	
Observation Methods	Brightfield, Simple Polarization, Darkfield, and Oblique Illumination	

Dimension Unit: mm

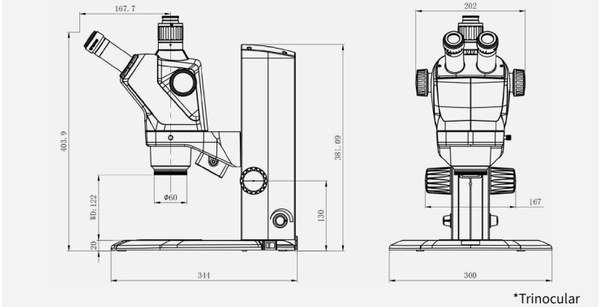


*Binocular

NSZ707
NSZ707T

	NSZ707	NSZ707T
Optical System	Infinity-Corrected Apochromatic Optical System	
Zoom ratio	7.5:1	
Zoom range	0.67-5X	
Working distance	125mm	
Magnification	6.7X-50X	
Eyepiece	10X(23)	
Viewing Head	Binocular	Trinocular
Interpupillary Distance	50-76mm	
Observation Methods	Brightfield, Simple Polarization, Darkfield, and Oblique Illumination	

Dimension Unit: mm



*Trinocular