

SERIES MS-2 METALLURGICAL MICROSCOPES

Modern, reasonably priced microscopes for the metallurgical and materials sciences.



The Unitron Series MS-2 metallurgical microscopes produce clear, sharp, brightfield images of prepared metals samples as well as other specimens, in magnifications from 50X-1000X, and higher with accessory eyepieces and objectives.

The MS-2 microscopes are available in monocular, photo monocular, binocular, and trinocular. Coated Din achromatic 210mm tube length objectives are offered as standard equipment. The 10X widefield eyepieces supplied have comfortable eyerelief and give large fields of view (18mm field stop). They are designed to accept accessory 19mm diameter reticles for measuring purposes and have a focusing eyelens to assure sharp focus of the reticle pattern.

Two illumination systems, 6 volt 20 watt vertical and transmitted with common built-in transformer are supplied with MS-2. The vertical is Koehler type with aperture and field diaphragms and filter slot, provides ample light at all objective powers for most applications. Coaxial course and fine focus controls, which move the stage up and down, are comfortable low positioned. The fine focus is graduated for approximate depth measurements. Adjacent, are the coaxial low-positioned mechanical stage knobs placing all controls conveniently grouped together for easy operation.

The Unitron Series MS-2 microscopes are full-sized professional instruments with coated optical systems to minimize glare and enhance image contrast. They provide the optical quality, dependable performance, modern design and efficient operation often expected only with more expensive microscopes. A variety of accessories expands versatility still further to meet special requirements.

Series MS-2 Microscopes Standard Specification Chart

| MODEL | MONOCULAR | PHOTO MONOCULAR | BINOCULAR | TRINOCULAR |
|---------------------------------------|---|--|--|--|
| | MSM-2 | MSM-2P | MSB-2 | MST-2 |
| Objectives DIN 210mm Achromatic | M5X N.A. 0.10 W.D. 20mm M10X N.A. 0.25 W.D. 7.5mm M20XR N.A. 0.40 W.D. 2.2mm M40XR N.A. 0.65 W.D. 0.60mm | | | |
| Eyepieces widefield | NWF10XR (single) | NWF10XR (single) | NWF10XR (pair) | NWF10XR (pair) |
| Magnifications 1.1x Factor | 55X-440X | 55X-440X | 55X-440X | 55X-440X |
| Body Tube | Monocular Body at 45° inclination and rotatable thru 360° | Photo monocular at 45° and 90° inclination and rotatable thru 360° | Binocular at 45° inclination and rotatable thru 360° provided with interpupillary and dioptic adjustments | Trinocular-same as on the binocular body only with vertical tube |
| Illuminator | Brightfield vertical and transmitted illuminators, complete with lamphousing & pre-centered bulb, sockets, vertical includes field and aperture diaphragm and transmitted rack and pinion substage N.A. 1.25 condenser. | | | |
| Focus Controls | Coaxial coarse and fine focus controls for vertical stage movement, coarse focus range 30mm and fine focus adjustment continuous through the 30mm range with locking lever. The fine focus is graduated. | | | |
| Stage | Mechanical stage 124mm x 153mm size, provided with low positioned coaxial stage controls for 70mm x 50mm cross motion graduated to read 0.1mm by vernier. | | | |
| Transformer | Conveniently built-in the microscope base. Provided with a dimmer control and cord for vertical illuminator which operates when plugged into the base. One on-off switch and line cord for both lights. | | | |

Optional Accessories:

Cameras: 15157 Polaroid 3 1/4" X 4 1/4" for photo models
4100A Polaroid 3" X 4" MicroCam Automatic Eyetube Camera
15195 TV Adapter with C-mount
21006 CCTV Color System
21007 CCTV Black and White System

Eyepieces: 15547 WFH 15XR widefield eyepiece single
15548 WFH 15XR widefield eyepieces paired
15574 WF 20XR widefield eyepiece single
15715 BIWF20XR widefield eyepieces paired
15536 EGT Austenite 10X grainsize turret eyepiece
15563 EAG-WF Austenite 10X grain size eyepiece

**Replacement
Bulbs:** 15435 6V 20W for both illuminators

Measuring: 15503 FWE inch 10X widefield filar micrometer eyepiece
15533 FWM 10x metric widefield filar micrometer eyepiece
15719 L1MS (0.1mm) micrometer reticle
15721 L2MS (0.05mm) micrometer reticle
15723 L3MS (0.01") micrometer reticle
15637 S10S Austenite grainsize reticle
15563 ASME Stage micrometer inch scale
15554 ASMM Stage micrometer metric scale
15553P ASME Stage micrometer inch scale traceable to NIST
15554P ASMM Stage micrometer metric scale traceable to NIST

Objective: 15166 M50XR Achromatic N.A. 0.68 is available to
achieve ASTM standard of 500X
15170 M100XR Plan dry N.A. .90

Filters: 15155 Green filter
15156 Blue filter