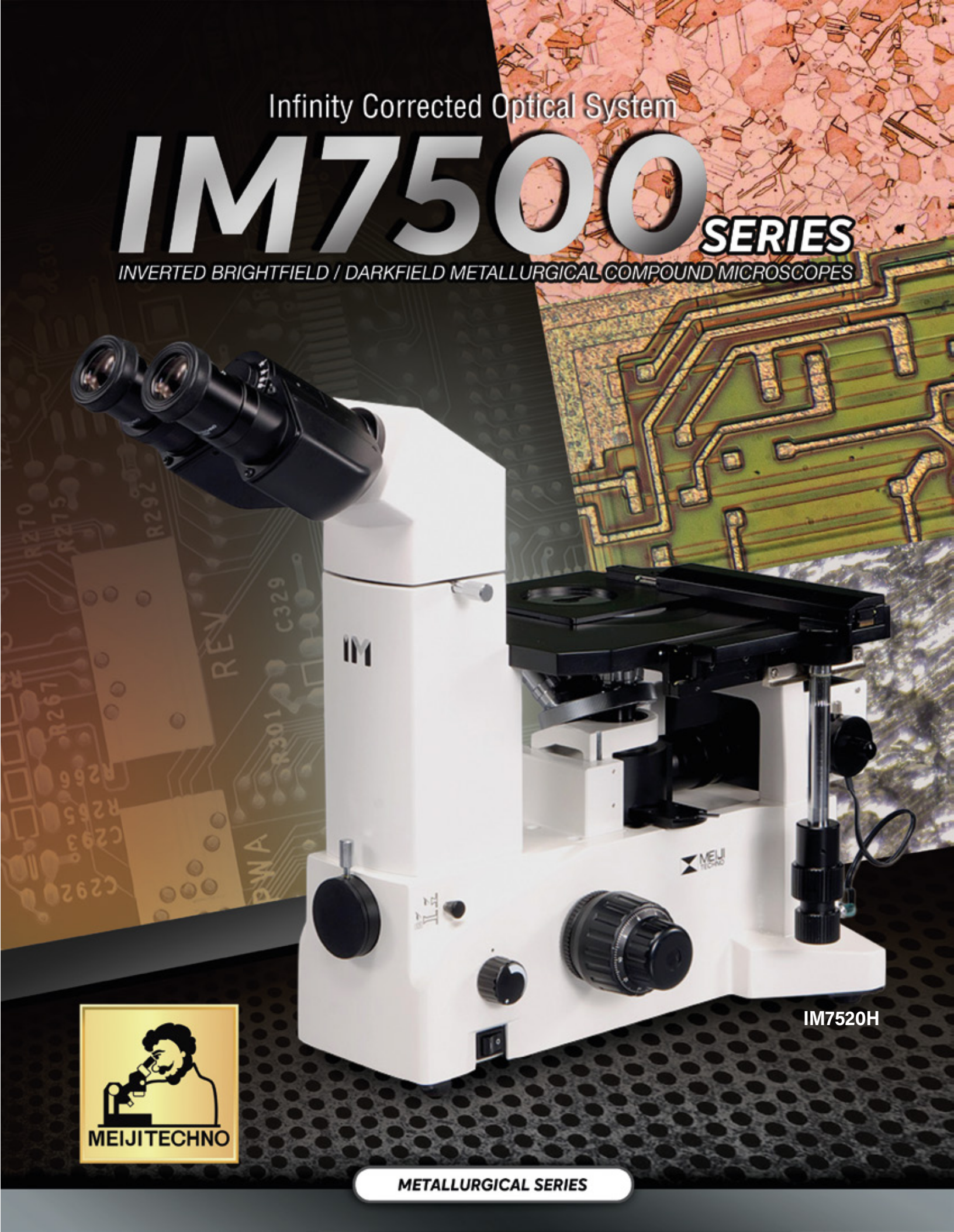
Infinity Corrected Optical System

IM7500 SERIES

INVERTED BRIGHTFIELD / DARKFIELD METALLURGICAL COMPOUND MICROSCOPES



IM7520H

MEIJITECHNO

METALLURGICAL SERIES

IM7500 METALLURGICAL SERIES

MEIJI TECHNO

INVERTED BRIGHTFIELD INDUSTRIAL GRADE COMPOUND MICROSCOPES

EQUIPPED WITH INFINITY CORRECTED OPTICAL SYSTEM F=200MM

VERSATILE SOLUTION FOR DEMANDING METALLURGICAL APPLICATIONS. THE IM7500 SERIES REPRESENTS A NEW STANDARD IN METALLURGICAL INSPECTION, COMBINING ADVANCED OPTICAL ENGINEERING WITH A RUGGED INVERTED DESIGN TAILORED FOR REAL-WORLD INDUSTRIAL ENVIRONMENTS.

The IM7500 Series is engineered for high-precision metallurgical inspection, delivering dependable performance in both brightfield and darkfield imaging. Its ergonomic inverted design allows operators to examine large, heavy, or irregularly shaped samples with ease, all while maintaining exceptional optical clarity and consistent illumination. This makes it an ideal choice for demanding industrial environments such as electronics, aerospace, automotive, machining, and materials research laboratories. Built to support detailed failure analysis, quality control, and routine inspection tasks, the IM7500 provides the level of accuracy and repeatability required for modern metallurgical workflows. Every component is designed to help users work efficiently, comfortably, and with confidence.

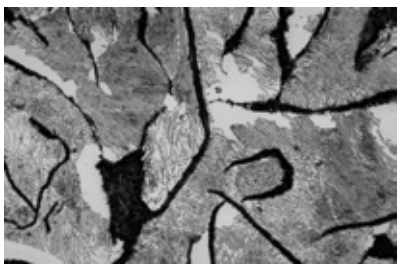


IMAGE OF IRON CAST ALLOY AT 100X

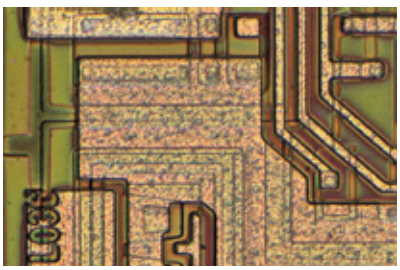


IMAGE OF INTEGRATED CIRCUIT DIE AT 100X

With a modular platform and multiple configuration options, the IM7500 Series adapts effortlessly to a wide range of applications and inspection requirements. Available in binocular and trinocular versions, it delivers sharp, high-contrast images that reveal fine microstructures, surface defects, inclusions, and edge details with remarkable clarity. Its durable construction and smooth mechanical performance ensure long-term stability, even in high-use industrial settings. The system's optical quality, combined with user-friendly ergonomics and flexible accessory options, makes the IM7500 a strong investment for professionals who need reliable, long-lasting equipment that consistently delivers accurate, repeatable results.

IM7510EH (FRONTAL VIEW)

INVERTED BRIGHTFIELD/DARKFIELD SYSTEMS - QUINTUPLE NOSEPIECE

MODEL	BODY	ILLUMINATOR	EYEPIECES	OBJECTIVES	STAGE	POWER SUPPLY
IM7520H	Binocular	INCIDENT KOEHLER ILLUMINATOR 6V, 30W HALOGEN	SWH 10X F.N. 22 (O.D. 30mm) PAIRED	INFINITY CORRECTED OPTICAL SYSTEM F = 200mm Planachromat E5X Planachromat E10X Planachromat E20X Planachromat E50X LWD	ATTACHABLE MECHANICAL STAGE 112MM (X) X WITH DROP DOWN COAXIAL CONTROLS	AUTOMATIC VOLTAGE SENSING POWER SUPPLY 110V-240V
IM7510EH	Ergonomic Binocular					
IM7530H	Ergonomic Trinocular					

Designed for professionals who inspect large or heavy metal samples with precision. Its inverted design allows easy viewing of polished surfaces without repositioning bulky components. This makes it ideal for industrial QC labs, manufacturing environments, and materials research applications.

IDEAL FOR RESEARCH, INSPECTION, AND INDUSTRIAL APPLICATIONS.

for METALLOGRAPHIC INSPECTION

VIEWING HEAD
Binocular 30° inclined tube or or Trinocular Viewing Head 30° inclined

ATTACHABLE DIGITAL CAMERA
23.2mm PHOTO PORT

EYEPIECES
Paired HWF 10X//20mm F.O.V. 30.0mm with diopter adjustment

MODULAR DESIGN facilitates
ATTACHMENT OF A VARIETY OF ACCESSORIES

BEAM SPLITTER
Beam splitter 80/20 split ratio, 80% light is directed to the camera and the remaining light 20% going to the eyepieces

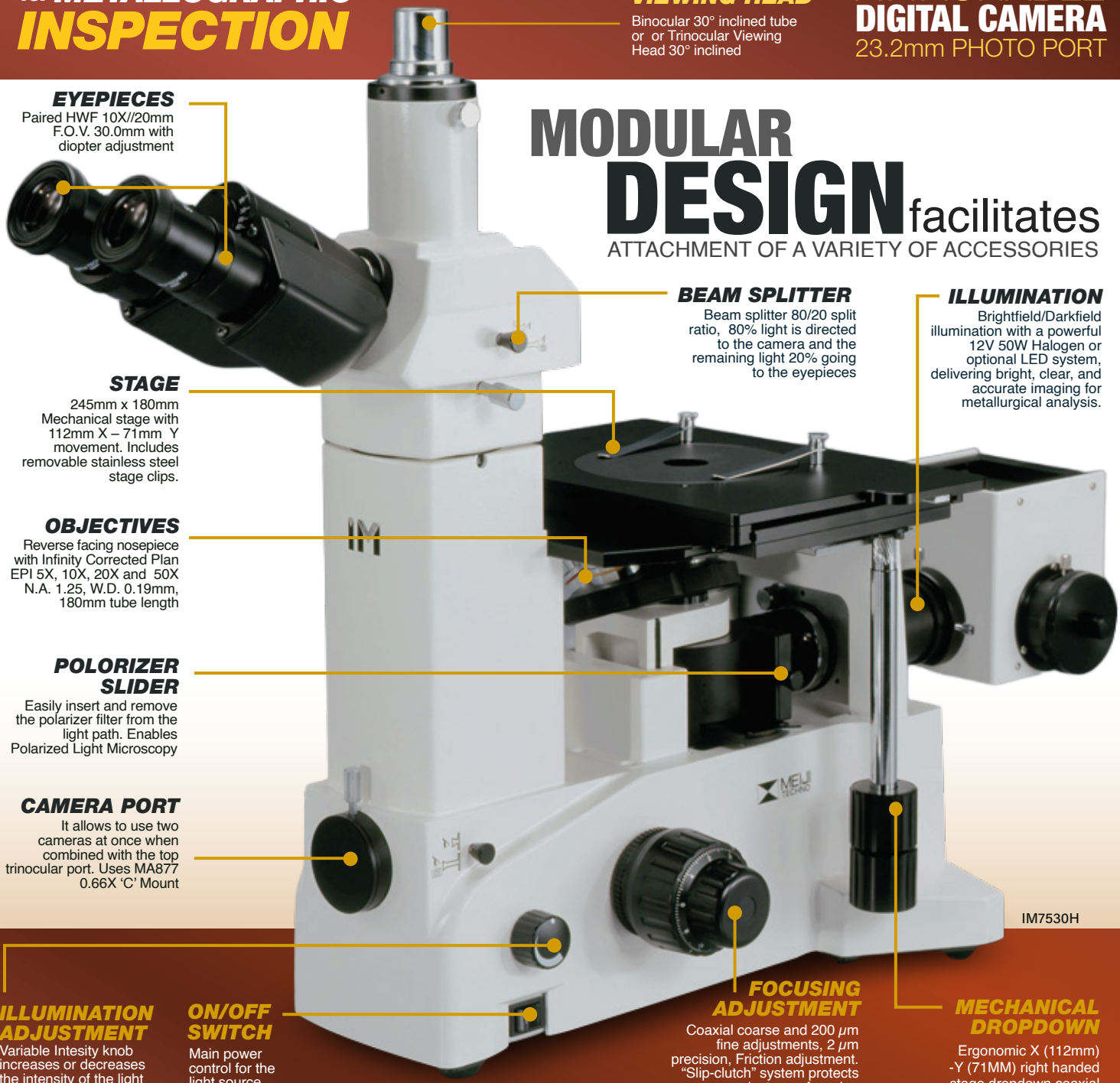
ILLUMINATION
Brightfield/Darkfield illumination with a powerful 12V 50W Halogen or optional LED system, delivering bright, clear, and accurate imaging for metallurgical analysis.

STAGE
245mm x 180mm Mechanical stage with 112mm X – 71mm Y movement. Includes removable stainless steel stage clips.

OBJECTIVES
Reverse facing nosepiece with Infinity Corrected Plan EPI 5X, 10X, 20X and 50X N.A. 1.25, W.D. 0.19mm, 180mm tube length

POLORIZER SLIDER
Easily insert and remove the polarizer filter from the light path. Enables Polarized Light Microscopy

CAMERA PORT
It allows to use two cameras at once when combined with the top trinocular port. Uses MA877 0.66X 'C' Mount



IM7530H

ILLUMINATION ADJUSTMENT
Variable Intesity knob increases or decreases the intensity of the light source.

ON/OFF SWITCH
Main power control for the light source

FOCUSING ADJUSTMENT
Coaxial coarse and 200 μm fine adjustments, 2 μm precision, Friction adjustment. "Slip-clutch" system protects against over-focusing

MECHANICAL DROPDOWN
Ergonomic X (112mm) -Y (71MM) right handed stage dropdown coaxial

HDMI-USB 2.0 CAMERAS WITH 11.8" MONITOR

Requiers 0.3 "C"-Mount Adapter Model MA151/35/03

HD1000-LITE-M	Affordable Color HD 5MP CMOS 15FPS/ HDMI/ USB 2.0 Camera/Annotation & Measurement Software with 11.8IN HDMI monitor.
HD1500T-M	Color HD 6MP CMOS 60FPS/ HDMI/ USB 2.0 Camera/Annotation & Metric Measurement Software with 11.8IN HDMI monitor.
HD1500MET-M	Color HD 6MP CMOS 60FPS/ HDMI/ USB 2.0 Camera/Annotation & Metric Measurement Software with 11.8IN HDMI monitor.
HD1500MET-AF-M	Autofocus HD 6MP CMOS 60FPS/ HDMI/ USB 2.0 Camera/Annotation & Metric Measurement Software with 11.8IN HDMI monitor.

HD1500MET-AF CAMERA

35mm PHOTOMICROSCOPY

Following three accessories are required for mounting a 35mm SLR camera body

1. The appropriate T-2 adapter ring for your SLR camera body

T2-1	Canon	**T2-6**	Olympus
T2-2	Minolta	**T2-7**	Contax, Yashika
T2-3	Pentax K	**T2-8**	Konica
T2-4	Pentax S	**T2-9**	Canon Eos
T2-5	Nikon	**T2-10**	Minolta Alpha / Maxim 2000

These adapter rings attach directly to your camera body's lens mount.

2. A photo eyepiece, available in the following magnifications:

MA512 2.5X magnification

MA500 3.3X magnification (with reticle mount)

MA508 5X magnification

The photo eyepiece performs the same function as a standard 35mm camera lens (i.e. focusing the image at the plane of the film).

3. One of two MA150 series camera attachments:

MA150/50 Straight-tube camera attachment

MA150/60 Camera attachment with built-in focusing eyepiece

These attachments are used to mount the camera with T2 adapter ring to the photo tube.

IM75300

11.8IN HDMI MONITOR

EQUIPPED WITH USB 2.0, SD CARD

MA151/35/03 "C" MOUNT ADAPTER

COMPONENTS AND ACCESSORIES FOR IM7500 SERIES

EYEPIECE MICROMETERS (25MM DIAMETER) FOR USE WITH MA817 OR MA859 EYEPIECE)

MA523	Cross-line reticle, 25mm diameter
MA506	10mm divided into 100 units, 25mm diameter
MA509	5mm divided into 100 units, 25mm diameter
MA524	10mm square into 400 parts, 0.5mm square, 25mm diameter
MA510	10mm square into 100 parts, 1.0mm square, 25mm diameter
MA542	Cross-line with 0.1mm graduation, 25mm diameter
MA541	Photo framing reticle for SWF10X eyepiece
MA738	Eyepiece micrometer, for grain sizing in steel (25mm)

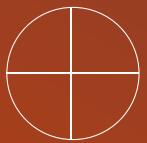
EYEPIECE MICROMETERS (19MM DIAMETER, FOR USE WITH MA818 OR MA819 EYEPIECE)

MA223	0.50" divided into 50 units, 19mm diameter
MA279	Cross-line reticle, 19mm diameter
MA280	10mm divided into 100 units, 19mm diameter
MA281	5mm divided into 100 units, 19mm diameter
MA282	10mm square into 400 parts, 0.5mm square, 19mm diameter
MA283	10mm square into 100 parts, 1.0mm square, 19mm diameter
MA539	Cross-line with 0.1mm graduations, 19mm diameter
MA253	Cross-line with dotted lines, 19mm diameter
MA254	Walton & Beckett reticle, 19mm diameter

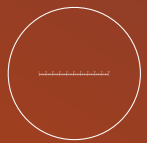
EYEPIECE MICROMETER

for grain sizing in steel (25mm)

MA738



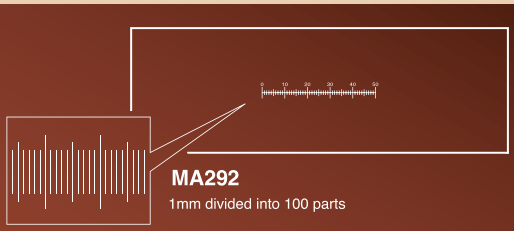
MA523



MA506

MA509

MA542



MA292

1mm divided into 100 parts

COMPONENTS AND ACCESSORIES FOR IM7500 SERIES

The Items marked with a Star (★) are included

VIEWING HEAD (without eyepieces)

MA814/05 ★ Siedentopf type binocular head, inclined at 30°, I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30mm I.D. eyetubes) with depolarizer (*Included in Model IM7100)

MA816/15 ★ Siedentopf type trinocular head, inclined at 30°, I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30mm I.D. eyetubes) with depolarize Includes 80/20 beam splitter (100% to eyetubes or 80% to photo 20% to eyetube) Non-Erect, Inverted image (*Included in Model IM7200)

MA957/20 ★ Ergonomic binocular head, erect image, inclination adjustable vertically from 10° to 50° (With depolarizer) (*Included in IM7100E)

MA1031 Trinocular Siedentopf head, erect image, inclined at 30°, I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30mm I.D. eyetubes) with depolarizer (Optional viewing head) Includes 0/100 beam splitter (100% to eyetubes or 100% to phototube)

EYEPIECES

MA817 ★ SWH 10X, widefield, high eyepoint eyepiece (each) Field No. 22 (MA817 accepts 25mm diameter reticle)

MA818 SWH 15X, widefield, high eyepoint eyepiece (each) Field No. 16 (MA818 accepts 19mm diameter reticle)

MA819 SWH 20X, widefield, high eyepoint eyepiece (each) Field No. 12 (MA819 accepts 19mm diameter reticle)

MA859 SWF 10X-F, focusing widefield, high eyepoint eyepiece (each) Field No. 22 (MA859 accepts 25mm diameter reticle)

BRIGHTFIELD/DARKFIELD PLAN EPI OBJECTIVES

MA923 ★ Plan Semi Apo Epi BD 5X ∞ objective N.A. 0.10, F.L. 40.0, W.D. 17.00

MA924 ★ Plan Semi Apo Epi BD 10X ∞ objective N.A. 0.25, F.L. 20.0, W.D. 07.48

MA925 ★ Plan Semi Apo Epi BD 20X ∞ objective N.A. 0.40, F.L. 10.0, W.D. 04.30

MA995 ★ Plan Semi Apo Epi BD 50X LWD ∞ objective N.A. 0.50, F.L. 04.0, W.D. 05.00

ADAPTER RING

MA686/05 Adapter ring to mount RMS thread objectives to BF/DF nosepiece

ILLUMINATOR

MA686/05 ★ Lamp House for use with 12V/50W Halogen Lamp. (Included in 50W models)

FILTERS

MA275/25 ★ LB100 Blue clear 20mm diameter filter in metal mount, fits 25mm filter slot

MA275/30 ★ G533 Green clear 20mm diameter filter in metal mount, fits 25mm filter slot

MA275/50 ★ ND 50 Neutral density filter, 20mm diameter filter in metal mount, fits 25mm filter slot

MA959 ★ Polarizing Filter, 20mm diameter filter in metal mount, fits 25mm filter slot

X – Y MECHANICAL STAGE IS INCLUDED WITH STAND (NOT SOLD SEPARATELY)

Dimension of top plate: 240mm (X) x 184mm (Y) with 50mm (X) x 40mm (Y) movement and drop down coaxial X – Y controls

MA593 ★ Stage Clips, 4mm pin diameter, 75mm long (Paired)

STAGE MICROMETER (GLASS AND METAL)

MA285 1mm divided into 100 units, 0.01mm (Glass), 1" x 3" slide

MA286 0.04" divided into 40 units, 0.001" (Glass), 1" x 3" slide

MA287 Ruling 0.01mm square (20 horizontal lines of 1mm long with 20 vertical lines of 1mm long crossed perpendicularly constructing a square of 0.2mm at the center with distance of 0.01mm between lines) (Glass)

MA292 Metal stage micrometer, 0.01mm, for reflected light (Metal)

MA186 Stage micrometer for checking alignment of stereo microscopes (Glass/Acrylic)

MA187 Stage micrometer 10mm divided into 100 units, 0.1mm (Glass)

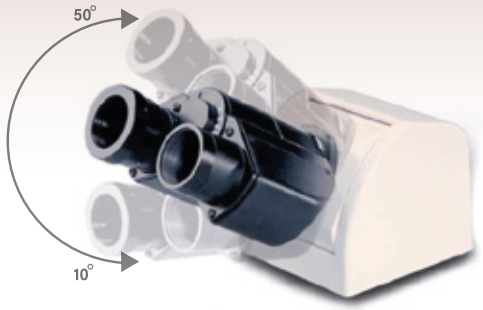
POWER CORDS

MA809/10 ★ Removable AC Electric cord with plug for 115V models (Included in all 115V models)

MA809/20 ★ Removable AC Electric cord with plug for 220V models (Included in all 220V models)

DUST COVER

MA809/20 ★ Anti-static and washable dust cover for IM7000, IM7500, TC5100, TC5500 and MC systems, 11" x 25" x 26", blue color



MA957/20
ERGONOMIC HEAD (Tilts 10° to 50°)

MA816/15
TRINOCULAR HEAD INCLINED AT 30°

MA859
SWF 10X-F, FOCUSING WIDEFIELD

MA995
PLAN SEMI APO EPI BD 50X (W.D. 0.5.00)

For further information about the IM7000 Series, scan this QR code.

100% MADE IN JAPAN

CUSTOMER SUPPORT **(U.S.A Based)** ***1-(800) 832-0060*** **(P.S.T.)**

• **Weight:** 33lbs (9.06kg) • **Box Size:** 16 x 14 x 21 inches • **Footprint:364mm (D) x 220mm (W)** · **Manufactured:** 100% MADE IN JAPAN

IM7500 SERIES MICROSCOPES

"Your trusted tool for metallurgical laboratories and industrial inspection facilities worldwide."

Specifications and design subject to change without notice for improvements

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