## Infinity Corrected Optical System

## **METALLURGICAL MICROSCOPES**

For Brightfield / Darkfield Observation

MT

Series

Newly designed Plan EPI BD Optics provide bright, crisp images with color rendition and superior flat field of view.



XMEIJI

MT7520



### MT7500 Series METALLURGICAL MICROSCOPES For Brightfield/Darkfield Observation

A versatile, modular, ergonomic metallurgical microscope system. Newly designed Plan EPI BD optics provides exceptionally bright, crisp images with good color rendition and superior flat field of view.

#### Features

#### Eyepieces:

Super Widefield 10X, High Eyepoint Eyepieces, F.N. 22 are standard.

#### Viewing head:

The MT7500 Series Metallurgical microscopes is equipped with either Siedentopf type binocular or Siedentopf type trinocular viewing head Inclined at 30° and rotatable through 360° for comfortable viewing.

Optional tilting ergonomic binocular head-

Adjustable vertically from  $10^{\circ} \sim 50^{\circ}$  is available.

#### Nosepiece:

Large smooth operating Ergonomic Quadruple nosepiece with mounting threads of 26.0mm.

#### **Objectives:**

Infinity corrected, Plan EPI Brightfield/darkfield Objectives, Plan EPI BD5X/0.10, W.D. 17.0mm, Plan EPI BD10X/0.25, W.D. 7.48mm, Plan EPI BD20X/0.40, W.D. 5.20mm, Plan EPI BD50X/0.75, W.D. 0.38mm.

#### Stage:

Ceramic coated, flat-top stage, 191mm x 126mm with 100mm x 100mm travel. Equipped with precision ball bearing guides and low positioned drop down coaxial controls for X-Y movement.

#### Illuminator:

Vertical illuminator with full Koehler design equipped with 12V 50W Halogen light source, field iris, aperture iris and filter slots. Capable of brightfield, darkfield, or simple reflected polarization technique.

Includes blue clear, Green clear, Neutral density (ND 50) filters in mounts. Automatic voltage (100V ~ 240V) sensing power supply and variable rheostat control are built in the microscope base.

#### **Focusing Controls:**

Ergonomically low positioned focusing controls allow the operator to work their forearms relaxed on the working surface. Range of travel is 23mm. Rotation of fine focus is 0.2mm per revolution.

#### Size and weight:

Footprint : 263 mm(D) x 176mm(W) Weight & Overall Dimension : Binocular head type 477.5 mm(D) x 471 mm(H) x 210 mm(W), 8.9kg Trinocular head type 477.5 mm(D) x 526 mm(H) x 210 mm(W), 9.6kg

MT7530

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# The items marked with an asterisk (\*) are included in the Models MT7520 & MT7530. **MEIJI TECHNO**

#### COMPONENTS AND ACCESSORIES FOR MT7500 Series

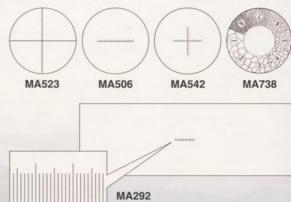
VIEWING H	IEAD
MA815	Binocular head (Siedentopf type), I.P. adjustment 53mm to 75mm graduated diopter on left
MA816	eyetube (30.0mm I.D. eyetubes). Inclined at 30°(*Included in Model MT7520) Trinocular head (Siedentopf type), I.P. adjustment 53mm to 75mm graduated diopter on let
	eyetube (30.0mm I.D.eyetubes). Inclined at 30°(*Included in Model MT7530).
MA957	Tilting ergonomic binocular head, adjustable vertically from 10° to 50°, I.P. adjustment 53mm to 75mm, graduated diopter on left eyetube (30.0mm I.D. eyetubes)
EYEPIECE	S (30.0mm O.D.Eyetube)
MA817*	SWH10X, Widefield high eyepoint eyepiece, Field No. 22, Tube O.D. 30.0mm
	(MA817 accepts optional 25mm diameter reticle)
MA818	SWH15X, Widefield high eyepoint eyepiece, Field No. 16.0, Tube O.D. 30.0mm
	(MA818 accepts optional 19mm diameter reticle)
MA819	SWH20X, Widefield high eyepoint eyepiece, Field No. 12.0, Tube O.D. 30.0mm
	(MA819 accepts optional 19mm diameter reticle)
MA859	SWH10X-F Focusing eyepiece with reticle mount (without reticle), Tube O.D. 30.0mm
	(MA859 accepts optional 25mm diameter reticle)
PLAN EPI	OBJECTIVES
MA923*	Plan Epi Objective BD5X, NA 0.10, W.D. 17.0mm, F.N.22
MA924*	Plan Epi Objective BD10X, NA 0.25, W.D. 7.48mm, F.N.22
MA925*	Plan Epi Objective BD20X, NA 0.40, W.D. 5.20mm, F.N.22
MA926*	Plan Epi Objective BD50X, N.A.0.75, W.D. 0.38mm, F.N.22
ILLUMINAT	TOR
MA928*	Vertical Koehler illuminator, 12V 50W Halogen lamp, with clear blue, clear green,
	ND50 Neutral density filter and polarizing filters in metal mount.
FILTERS	
MA475/05*	Blue clear filter, 20mm diameter in metal mount
MA476*	Green clear filter, 20mm diameter in metal mount
MA774*	ND50 Neutral density filter, 20mm diameter in metal mount
MA497*	Polarizing filter 20mm diameter in metal mount
STAGE	
MA941*	Ceramic coated flat-top stage, 191mm X 126mm, 100mm X100mm, X-Y movement
	with right hand drop-down controls.
EYEPIECE	MICROMETERS
	meter for use with MA817 or MA859 eyepieces)
MA523	Eyepiece micrometer, Cross-line reticle, 25mm diameter
MA506	Evepiece micrometer, 10mm divided into 100 units, 25mm diameter
MA509	Eyepiece micrometer, 5mm divided into 100 units, 25mm diameter
MA510	Eyepiece micrometer, 10mm square into 100 parts, 1.0mm square, 25mm diameter
MA542	Eyepiece micrometer, Cross-line reticle with 0.1mm graduations, 25mm diameter
MA738	Eyepiece micrometer for grain sizing in steel, 25mm diameter
EYEPIECE	MICROMETERS
(19mm diar	meter for use with MA818 or MA819 eyepieces)
MA279	Eyepiece micrometer, Cross-line reticle, 19mm diameter
MA280	Eyepiece micrometer, 10mm divided into 100 units, 19mm diameter
MA281	Eyepiece micrometer, 5mm divided into 100 units, 19mm diameter
MA283	Eyepiece micrometer, 10mm square into 100 parts, 1.0mm square, 19mm diameter
MA539	Eyepiece micrometer, Cross-line reticle with 0.1mm graduations, 19mm diameter
STAGE MIC	CROMETER
MA292	Metal stage micrometer, 0.01mm, for reflected light
MISCELLA	NEOUS
MA906*	Eyeshield for MA817 SWH10X Eyepiece (each)
MA275/05	Spare bulb 12V 50W halogen
MA327	Spare Fuse 3A
MA809/10	Removable AC Electric cord with UL plug for 115V Models
MA809/20	Removable AC Electric cord with European plug for 220V Models
MA809/30	Removable AC Electric cord with UK plug for 240V Models
MA701	Dust cover for MT7520 & MT7530



MA957 ERGONOMIC TILTING BINOCULAR HEAD (SIEDENTOPF TYPE)



#### PLAN EPI OBJECTIVES



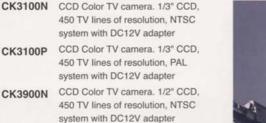
1mm divided into 100 parts

#### CCD VIDEO & USB 2.0 DIGITAL CAMERAS

DK3000 3.0 megapixel, color digital video microscopy camera with high speed USB 2.0 interface, 1/2 format 6.5mm x 4.9mm image sensor with 2048 x 1536 resolution.



DK3000



CK3900P CCD Color TV camera. 1/2" CCD, 450 TV lines of resolution, PAL system with DC12V adapter



CK3900

MA958 Photo/Video attachment with sliding 80/20 beam-splitter for attaching video or digital camera to MT Series when MA957 Ergonomic tilting head is used.

#### 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
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- 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.





MA150/60 Camera attachment

MA150/50 Camera attachment

#### MT7500 Series ORDERING INFORMATION

MODEL	BODY	OBJECTIVES	EYEPIECES	POWER SUPPLY	ILLUMINATOR
MT7520	Binocular (Siedentopf)	Plan Epi BD5X Plan Epi BD10X Plan Epi BD20X Plan Epi BD50X	SWH10X F.N. 22 (O.D. 30mm)	Automatic Voltage Sensing Power Supply	Vertical Koehler 12V 50W Halogen BF/DF and POL
MT7530	Trinocular (Siedentopf)				



Specifications and design subject to change without notice for improvements.

'08. 03. 324. 5,000 V1 Printed in Japan