Infinity Corrected Optical System

# METALLURGICAL MICROSCOPES

For Reflected Light Observation

MT

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



**XMEIJI** 

MT7000



# MT7000 Series METALLURGICAL MICROSCOPES For Reflected Light Observation

A versatile, modular, ergonomie metallurgical microscope system. Newly designed Epi-Plan Optics provides exceptionally bright, crisp images with good color rendition and superior fiat field of view.

# **Features**

# **Eyepieces:**

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

# Viewing head:

The MT7000 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 ergonomie binocular head-Adjustable vertically from 10° - 50° is available.

# Nosepiece:

Smooth Operating Ergonomie Quintuple Nosepiece.

#### **Objectives:**

Infinity corrected, Planachromat EPI Objectives, Plan EPI 5X/0.10, W.O. 20.0mm, Plan EPI 10X/0.25, W.D. 7.48mm, Plan EPI 20X/0.40, W.O. 5.20mm, Plan EPI 50X/0.75, W.D. 0.38mm.

# Stage:

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

#### Illuminator:

Vertical illuminator with full Koehler design equipped with 6V 30W Halogen light source, field iris, aperture iris and filler slots. Capable of brightfield or simple reflected polarization technique. Includes blue elear, Green elear, Neutral density (ND 50) filters in mounts. Automatic voltage (1 00V - 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.

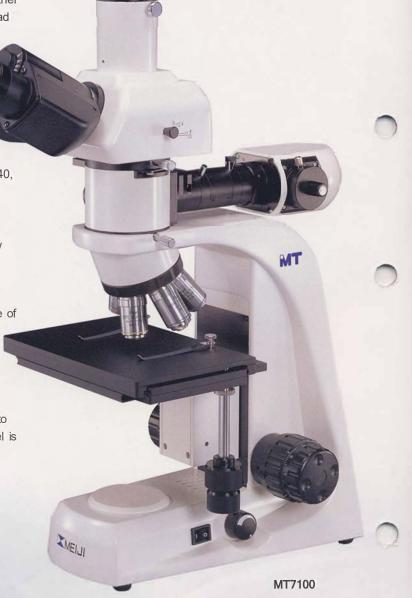
Rotation of fine focus is 0.2mm per revolution.

#### Size and weight:

Footprint: 263 mm(D) x 176mm(W)

Weight & Overall Dimension

Binocular head type 424.5 mm(D) x 471 mm(H) x 210 mm(W), 8.5kg Trinocular head type 424.5 mm(D) x 526 mm(H) x 21 Omm(W), 9.2kg



# COMPONENTS AND ACCESSORIES FOR MT7000 Series

The items marked with an asterisk (\*) are included in the Model MT7000 & MT7100.

#### VIEWING HEAD

MA815 Binocular head (Siedentopf type), I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30.0mm I.O. eyetubes). Inclined at 30'('Included in Model MT7000)

MA816 Trinocular head (Siedentopf type), I.P. adjustment 53mm to 75mm graduated diopter on left eyetube (30.0mm I.D.eyetubes). Inclined at 30'("Included in Model MT7100).

MA957 Ergonomie tilting binocular head (Siedentopf type), adjustable from 10:10 50', I.P. adjustment 53mm to 75mm, graduated diopter on left eyetube (30.mm I.O. eyetubes)

#### EYEPIECES (30.0mm O.D.Eyetube)

MA817\* SWH10X, Widefield high eyepoint eyepiece, Field No. 22, Tube O.O. 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 0.D. 30.0mm (MA819 accepts optional 19mm diameter reticle)

MA859 SWH10X-F Focusing eyepiece with reticle mount (without reticle), Tube O.O. 30.0mm (MA859 accepts optional 25mm diameter reticle)

#### PLAN EPI OBJECTIVES

 MA870\*
 Plan Epi Objective
 5X, NA 0.10, W.O. 20.0mm, F.N.24

 MA871\*
 Plan Epi Objective
 10X, NA 0.25, W.O. 7.48mm, F.N.24

 MA872\*
 Plan Epi Objective
 20X, NA 0.40, W.O. 5.20mm, F.N.24

 MA873\*
 Plan Epi Objective
 50X, N.A.0.75, W.O. 0.38mm, F.N.24

 MA874
 Plan Epi Objective
 100X, N.A.0.90, W.O. 0.37mm, F.N.24

# LWD PLAN EPI OBJECTIVES (LONG WORKING DISTANCE)

MA920 LWD Plan Epi Objective 20X, NA. 0.40, W.O. 11.0mm, F.N.24
MA921 LWO Plan Epi Objective 50X , NA. 0.55, W.O. 7.5mm, F.N.24

# **ILLUMINATOR**

MA927\* Vertical Koehler illuminator, 6V 30W Halogen lamp, with elear blue, elear green, NCSO Neutral density filler and polarizing filters in metal mount. (transformer is built in microscope stand.)

#### **FILTERS**

MA475/05\* Blue elear filler, 20mm diameter in metal mount
MA476\* Green elear filler, 20mm diameter in metal mount
MA774\* NOSO Neutral density filler, 20mm diameter in metal mount

MA497\* Polarizing filler 20mm diameter in metal mount

#### STAGE

MA941\* Ceramic coated fiat-top stage, 191mm X 126mm, 100mm X100mm, X-Y movement with right hand drop-down controls.

# EYEPIECE MICROMETERS

#### (25mm diameter for use with MA817 or MA859 eyepieces)

MA523 Eyepiece micrometer, Cross-line reticle, 25mm diameter
MA506 Eyepiece micrometer, 10mm divided inio 100 units, 25mm diameter
MA509 Eyepiece micrometer, 5mm divided inio 100 units, 25mm diameter

MA510 Eyepiece micrometer, 10mm square inio 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 diameter for use with MA818 or MA819 eyepieces)

MA279 Eyepiece micrometer, Cross-line reticle, 19mm diameter

MA280 Eyepiece micrometer, 10mm divided inio 100 units, 19mm diameter
MA281 Eyepiece micrometer, 5mm divided inio 100 units, 19mm diameter

MA283 Eyepiece micrometer, 10mm square inio 100 parts, 1.0mm square, 19mm diameter

MA539 Eyepiece micrometer, Cross-line reticle with 0.1mm graduations, 19mm diameter

# STAGE MICROMETER

MA292 Metal stage micrometer, 0.01 mm, for reflected light

#### **MISCELLANEOUS**

MA906\* Eyeshield for MA817 SWH10X Eyepiece (each)

MA326 Spare bulb 6V 30W halogen

MA327 Spare Fuse 3A

MA809/1 O Removable AC Electric cord with U1 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 Dusi cover for MT7000 & MT7100





MA957 ERGONOMIC TILTING BINOCULAR HEAD (SIEDENTOPF TYPE)

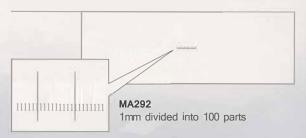


PLAN EPI OBJECTIVES



LWD (LONG WORKING DISTANCE) PLAN EPI OBJECTIVES

MA523 MA506 MA542 MA738



# 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

T2-4

CK31 CON CCD Color TV camera. 1/3" CCD,

450 TV lines of resolution, NTSC system with DC12V adapter

CCD Color TV camera. 1/3" CCD, CK31 COP

450 TV lines of resolution, PAL system with DC12Vadapter

CCD Color TV camera. 1/2" CCD, CK3900N

450 TV lines of resolution, NTSC system with DC12V adapter

CCD Color TV camera. 1/2" CCD, CK3900P

450 TV lines of resolution, PAL system with DC12V adapter



CK3900

**MA958** PhotoNideo attachment with sliding 80/20 beam-splitter for attaching

video or digital camera to MT Series when MA957 Ergonomie 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:

T2-6 Olympus T2-2 Minolta T2-7 Contax, Yashika Pentax K T2-8 Konica

T2-5 T2-1 O Minolta Alpha / Maxim 2000

T2-9 Canon Eos

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

Pentax S

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 piane of the film).

#### 3. One of two MA150 series camera attachments:

MA 150/50 Straight-tube camera attachment

MA 150/60 Camera attachment with built-in focusing eyepiece

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



MA150/60 Camera attachment



MA150/50 Camera attachment

# MT7000 Series ORDERING INFORMATION

MODEL	BODY	OBJECTIVES	EYEPIECES	POWER SUPPLY	ILLUMINATOR
MT7000	Binocular (Siedentopf)	Plan Epi 5X Plan Epi 10X Plan Epi 20X Plan Epi 50X	SWH10X F.N. 22 (O.O. 30mm)	Automatic Voltage Sensing Power Supply	Vertical Koehler 6V 30W Halogen Power Supply
MT7100	Trinocular (Siedentopf)				

301 O Olcott Street, Santa Ciara, CA 95054, USA

Tel: 408-970-4799 Fax: 408-970-5054

Ton free: 800-832-0060

E-mail: sales@meijitechno.com

# Agent:

http://www.meijitechno.com

'08. 03. 323. 10,000 V1 Printed in Japan



# MEIJI TECHNO CO.,LTO.

322-1, Chikumazawa Miyoshi-machi, Iruma-gun Saitama 354-0043, Japan Tel: (0)49-259-0111 Fax: (0)49-259-0113 E-mail: meiji@meijitechno.co.jp http://www.meijitechno.co.jp

MERAZET

Aparatura kontrolno-pomiarowa

www.merazet.pl facebook.com/merazetsa

# **KONTAKT**

Aparatura Laboratoryjna

E: laboratorium@merazet.pl

T: +48 61 8644 622, centrala: +48 61 8644 600