

# ML7500

Infinity Corrected Optics

Series

## Metallurgical Microscopes

An infinity optical system for reflected light brightfield, darkfield and simple polarization technique

#### **Features**

#### **Eyepieces:**

Paired DIN KHW10X super wide 20mm field of view eyepieces.

#### Viewing head:

The ML7500 Series Metallurgical Microscope is equipped with either an erect image binocular or non erect image trinocular viewing head inclined at 30° and rotatable through 360° for comfortable viewing. Each eyetube is provided with a graduated diopter adjustment. Interpupillary distance is adjustable between 52mm and 72mm. (Erect image trinocular optional.)

#### **Objective Changer:**

Extra large, revolving quadruple ball-bearing nosepiece.

#### **Objectives:**

Infinity corrected, S.Plan Brightfield / Darkfield objectives. B.D. S.Plan MET 4X, B.D. S.Plan MET 10X, B.D. S.Plan MET 20X, and B.D. S.Plan MET 40X. (Non standard thread.)

#### Stage:

Rectangular mechanical stage 172mm x 130mm top plate with 100mm x 100mm travel. Equipped with precision ball bearing guides and low position drop down coaxial controls for X-Y movement.

#### Illuminator:

Vertical illuminator with full Koehler design equipped with 12V 50W Halogen light source, infinity system lens, field iris, aperture iris and filter slots. Capable of brightfield, darkfield, or simple reflected light polarization techniques. Includes blue, green, yellow and neutral density filters (ND2 and ND8) in mounts. Electronic transformer and variable rheostat control are built in the microscope base.

#### Focusing Movement:

Coaxial low positioned coarse and fine focus controls, graduated to 2 microns per divisions, are fitted with tension adjustment and safety auto stop. The focus range is 35mm. The movement runs in extra wide precision ball-bearing hardened steel tracks.

#### Size and Weight:

ML7520 Binocular 200mm (W) x 410mm (D) x 480mm (H), Net weight 10.75 kg. ML7530 Trinocular 200mm (W) x 410mm (D) x 525mm (H), Net weight 10.73 kg.



ML7520

## Components & Accessories

#### Viewing heads

MA401/05 Binocular Head, erect image, with quartz depolarizer. (Same as MA657/05)

MA603/05 Trinocular Head, non erect image, with quartz depolarizer. A two position beam splitter directs 100% of the light to the

eyepieces or directs 80% of the light to the trinocular tube and 20% of the light to the eyepieces.

MA495/05 Inclined Trinocular Head, erect image, with quartz depolarizer. A two position beam splitter directs 100% of the light to

the eyepieces or directs 100% of the light to the trinocular tube. (Same as MA655/05)

#### **Eyepieces**

MA407 KHW Compensating 10X Eyepiece, Field number 20mm. (Included) MA489

HWF 12.5X Eyepiece, High eyepoint, Field number 15mm. MA408 HWF 15X Eyepiece, High eyepoint, Field number 12.2mm. MA409 HWF 20X Eyepiece, High eyepoint, Field number 9.2mm.

#### Objectives (Infinity corrected)

BD S-Plan MET 4X / 0.10, W.D. 16mm. (Included) MA331 BD S-Plan MET 10X / 0.25, W.D. 7.4mm. (Included) MA332 BD S-Plan MET 20X/ 0.40, W.D. 5.2mm. (Included) MA333 BD S-Plan MET 40X / 0.65, W.D. 0.8mm. (Included) MA334 BD S-Plan MET 60X / 0.85, W.D. 0.3mm. MA335

#### Illuminators (With infinity tube lens, FL =200mm)

MA275/100 Vertical Illuminator 12V 50W Halogen, full Koehler design for brightfield/darkfield illumination and simple polarization techniques. Main

Vertical Illuminator 12V 50W Halogen, full Koehler design for bright-MA275/200

field/darkfield illumination and simple polarization techniques. Main

voltage 220/240V.

Transformer with intensity control and voltmeter for MA275/100, MA275/15

Transformer with intensity control and voltmeter for MA275/200, MA275/20

220/240V.



#### ML7530

#### **Filters**

MA275/25	LB110, Blue filter in mount for MA275.	Accessories	for i
	(Included)	MA414	Filar

MA275/30 G533, Green filter in mount for MA275.

(Included)

Y48, Yellow filter in mount for MA275. MA275/35

(Included)

ND2, Neutral Density filter in mount for MA275/40

MA275. (Included)

MA275/45 ND8, Neutral Density filter in mount for

MA275. (Included)

### Other items

MA275/05 Spare halogen lamp, 12V 50W.

MA327

Fuse 3A.

MA686 Adapter to mount RMS standard thread objec-

tive to BD Nosepiece.

MA709 Dust cover.

#### measurement

MA414 Filar Micrometer Eyepiece with inclined monocular head. Linear micrometer, 10mm divided into 100 MA255

units, 21mm diameter for KHW10X eyepiece.

Linear micrometer, 5mm divided into 100 units, 21mm diameter for KHW10X eyepiece.

Cross-line reticule, 21mm diameter for KHW10X eyepiece.

Cross-line with 0.1mm graduations, 21mm diameter for KHW10X eyepieces.

MA292 Metal stage micrometer, 1mm divided into 100

units, 0.01mm.

#### **ORDERING INFORMATION FOR ML7500 SERIES**

Model	Body	Eyepieces	Objectives	Illuminator
ML7520	Binocular (Erect Image)	KHW10X 20mm field of view.	B.D.S. PLAN MET 4X, MET 10X, MET 20X, MET 40X	Vertical Koehler, 12V 50W brightfield/darkfield and polarization techniques. Includes blue, green, yellow and neutral density ND2 and ND8 filters.
ML7530	Trinocular (Non-erect Image)			

MA256

MA284

MA540

Supplied in Styrofoam case with dust cover and operations manual.

Note: Please specify voltage when ordering.

#### Agent:

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