Infinity Corrected Optical System

POLARIZING MICROSCOPES

Incident and Transmitted Light models
Transmitted Light models

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MT9200



MT9000 Series Polarizing Microscopes MT9200 & MT9300 Infinity corrected optical systems for transmitted light use.

Meiji Techno's MT9000 Series of Polarizing Microscopes are versatile, modular, ergonomic microscope systems designed for student, advanced educational or routine laboratory use. The MT9000 Series features all new Strain Free Infinity Corrected Optics, large ceramic coated rotatable stages with greater wear resistance, and a newly engineered ergonomically designed frame that is rugged, stable, yet flexible with a slim compact footprint that fits nicely in your workspace. A perfect instrument for geology, petrology, mineralogy, forensics, material science, manufacturing, crystallography, medical research, environmental science, and industrial quality control and quality assurance applications.

Features

Eyepieces:

One KHW10X Focusing eyepiece with cross-line and guide pin, FN20 and one [KHW10X eyepiece, FN 20.

Viewing head:

The MT9000 Series Polarizing Microscope is equipped with either Siedentopf type binocular or Siedentopf type Trinocular viewing head, inclined at 30°, with reticle angle adjustment system. Optional tilting ergonomic binocular head – adjustable vertically from 10° to 50° available.

Nosepiece:

Reverse Facing, quadruple, ball bearing nosepiece with one fixed and three centerable objective positions. Two objective centering tools are included.

Objectives:

Infinity corrected Strain Free Plan 4X/N.A.0.10, W.D.15.3mm, Plan 10X/N.A.0.25, W.D.7.3mm and Plan 40XS/N.A.0.65, W.D.0.72mm.

Intermediate Tube:

Orthoscopic / Conoscopic intermediate tube with a sliding analyzer, rotatable Bertrand lens and a compensator slot designed to accept DIN standard compensator plates.

Compensators:

DIN Standard, 20mm x 6mm, full wavelength retardation plate. (Gypsum, first order red, sensitive tint, 530nm) DIN Standard, 20mm x 6mm, 1/4 wavelength retardation plate. (Mica, 147.3nm)

Polarizer:

Rotatable polarizer in swing-out mount with detent at 0° and 90°.

Stage:

Ceramic coated, 175mm diameter, ball bearing, circular rotating stage.
Graduated 360°, with 1° increments and Vernier reading to 0.1°. Includes
2 stage clips. (Optional attachable mechanical and point counting stages are available.)

Condenser:

Centerable strain-free Abbe condenser, N.A.1.25 with iris diaphragm in dovetail mount. Mounted in a centerable condenser holder with a rack and pinion adjustment.

Illuminator:

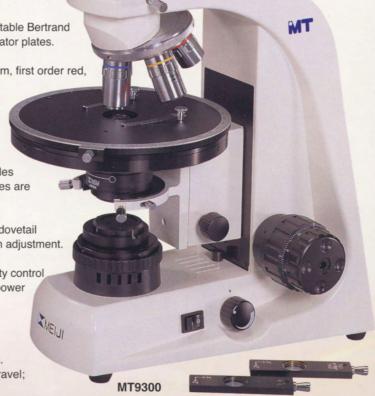
Built-in transmitted Koehler illuminator with continuously variable intensity control and 6V 30W halogen lamp. Automatic voltage (100V to 240V) sensing power supply and variable rheostat control are built into the microscope base.

Filter:

29.8mm diameter daylight-type blue filter for correct color rendition.

Focusing Controls:

Ergonomically low positioned coaxial coarse and fine focusing controls. Coaxial fine focus knob: 0.2mm per rotation; Coarse: 25mm range of travel; Minimum reading 2 microns on right side knob.



MT9400 Series Polarizing Microscopes MT9420 & MT9430 Infinity corrected optical systems for incident and transmitted light use.

Meiji Techno's MT9420 and MT9430 Series of Polarizing Microscopes are equipped with both transmitted and incident (reflected) light illumination systems. Reflected light models are ideally suited for Mineralography and Practical Ore Microscopy. The MT9400 Series is the perfect instrument to assist you in the study, identification and classification of various materials such as ores, sulphides, mineral oxides, and a wide variety of opaque minerals and materials.



illuminator between the intermediate tube and viewing head. Since infinity corrected optical system is adopted, the magnifications remain unchanged even

the incident illuminator is added.

COMPONENTS AND ACCESSORIES AVAILABLE FOR THE MT9000 Series

VIEWING HEAD

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MA952 Binocular head - Siedentopf type, inclined at 30 degrees with reticle angle compensation, I.P.

adjustment 53mm to 75mm, graduated diopter on left eyetube. (23.2.0 mm I.D. eyetube).

(Included in models MT9200 and MT9420)

MA953 Trinocular head - Siedentopf type, inclined at 30 degrees with reticle angle compensation, I.P.

adjustment 53mm to 75mm, graduated diopter on left eyetube. (23.2.0 mm I.D. eyetube).

(Included in models MT9300 and MT9430)

EYEPIECES

MA407CP KHW-10X focusing eyepiece with cross-line and guide pin (each) (21mm reticle mount)

Tube O.D.23.2mm)

MA407 KHW-10X Compensating eyepiece, F.N.20 (each) (Tube O.D.23.2mm)

MA407/05 KHW-10X Compensating Focusing eyepiece, F.N.20 (each) (Tube O.D.23.2mm)

PLANACHROMAT POL OBJECTIVES FOR TRANSMITTED LIGHT WORK

MA935 Strain free Plan objective 4X/N.A.0.10, W.D.17.8mm
MA936 Strain free Plan objective 10X/N.A.0.25, W.D.7.3mm
MA937 Strain free Plan objective 20X/N.A.0.40, W.D.5.0mm
MA938 Strain free Plan objective 40XS/N.A.0.65, W.D.0.72mm
MA939 Strain free Plan objective 60XS/N.A.0.85, W.D.0.2mm
MA940 Strain free Plan objective 100XS/N.A.1.25 oil, W.D.0.14mm

PLANACHROMAT POL OBJECTIVES FOR USE WITHOUT COVER SLIP

MA947 Strain free Plan objective 20X/N.A.0.40, W.D.5.2mm
MA948 Strain free Plan objective 40XS/N.A.0.65, W.D.0.56mm

CONDENSER

MA954 Strain free Abbe condenser, N.A.1.25 with iris diaphragm in dove tail mount

STAGE AND STAGE ACCESSORIES

MA299 Attachable mechanical stage for MT9000 Series, 25mm X 25mm movement.

MA945 Attachable mechanical stage for MT9000 Series with Point Counter. Interchangeable point

counting knobs with intervals of 0.1mm, 0.2mm, 0.5mm. 30mm X 40mm movement.

MA946 Stage Clips (2 pcs)

WAVE PLATES AND COMPENSATORS

MA469/05 1/4 Wave-length test plate for MT9000 Series

MA654/05 Quartz Wedge, 6 order, ungraduated for MT9000 Series
 MA654N/05 Quartz Wedge, 6 order, graduated for MT9000 Series
 MA470/05 First order red compensating plate for MT9000 Series

MA471/05 Analyzer in sliding mount for MT9000 Series

MA904/05 Senarmont compensator (A highly accurate 1/4 wave plate used to measure retardation)

(For use with MA956 rotating analyzer.)

MA956 Rotatable analyzer with 360 degree graduations

COMPONENTS FOR REFLECTED LIGHT MICROSCOPY

MA955 Vertical illuminator attachment, 6V 30W Halogen Koehler

MA927/05 Vertical illuminator table-top transformer in case (Input voltage 100V-240V)

MA679 Polarizer in mount
MA475/05 Blue clear filter in mount

MA198 ND8 Neutral density filter in mount

MISCELLANEOUS

MA289/05 Clear blue filter φ29.8mm

MA196 ND50 Neutral density filter 29.8mm
MA197 ND13 Neutral density filter 29.8mm
MA200 Eyeshield for MA407 KHW10X Eyepiece

MA326 Spare halogen bulb 6V 30W

MA327 Spare fuse 3A MA711 Dust cover

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

MA905 Interference Color Chart



MA299 Mechanical stage



MA945 Point counter



MA654N/05 Quartz wedge MA904/05 Senarmont compensator



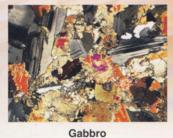
MA956 Rotatable analyzer



MA955 Vertical illuminator

MA927/05 Transformer

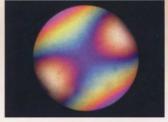






Harzburgite





Biaxial Interferene figures

DIGITAL 35mm SLR CAMERAS

Following three accessories are required for 35mm SLR camera photomicrography

1. Camera Attachment

MA150/50 Camera attachment to fit to photo tube of trinocular models

MA150/60 Camera attachment as above, but with eyepiece finder

2. Photo Eyepiece

MA512 Photo eyepiece 2.5X (Magnifies objective power by 2.5X at the film plane)

MA508 Photo eyepiece 5X (Magnifies objective power by 5X at the film plane)

MA500 Photo eyepiece 3.3X (Magnifies objective power by 3.3X at the film plane, with reticle mount)

3. T-2 Adapter Ring

T2-1 Adapter ring for CANON camera T2-6 Adapter ring for OLYMPUS camera

T2-2 Adapter ring for MINOLTA camera T2-7 Adapter ring for CONTAX, YASHIKA camera

T2-8 Adapter ring for KONICA camera T2-3 Adapter ring for PENTAX K, RICOH-XR camera

T2-4 Adapter ring for PENTAX S camera T2-9 Adapter ring for CANON EOS camera

T2-5 Adapter ring for NIKON camera **T2-10** Adapter ring for MINOLTA α , MAXIM 2000 camera



Photo Eyepiece





MA150/50

CCD VIDEO & USB 2.0 DIGITAL CAMERAS

CK3100N CCD Color TV camera. 1/3" CCD, 450 TV lines of resolution, NTSC system with DC12V adapter

CK3100P CCD Color TV camera. 1/3" CCD, 450 TV lines of

resolution, PAL system with DC12V adapter

CK3900N CCD Color TV camera. 1/2" CCD, 450

TV lines of resolution, NTSC system

with DC12V adapter

CK3900P CCD Color TV camera. 1/2" CCD, 450

TV lines of resolution, PAL system

with DC12V adapter



CK3900

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

MT9000 Series ORDERING INFORMATION

MODEL	BODY	OBJECTIVES	EYEPIECES	STAGE	CONDENSER	ILLUMINATOR
MT9200	Binocular (Siedentopf)	Strain Free Plan 4X Plan 10X Plan 40X	(1) KHW10XCP Focusing with guide pin and crossline reticle (1) KHW10X F.N.20 (O.D. 23.2mm)	Rotatable with 360° graduation with vernier	Strain Free Abbe N.A.1.25	Transmitted light Koehler 6V 30W Halogen
MT9300	Trinocular (Siedentopf)					
MT9420	Binocular (Siedentopf)					Transmitted light Koehler 6V 30W Halogen and Incident light Koehler 6V 30W Halogen
MT9430	Trinocular (Siedentopf)					

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scienc **Feat** Eyepie One KI [KHW1 Viewin The M equipp or Sied

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at 30°,

W.D.7. Interm Orthos lens an Compe DIN Sta sensitiv

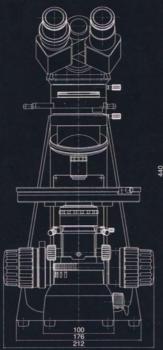
retarda Polariz Rotatal Stage: Ceram Gradua 2 stage availab Conde

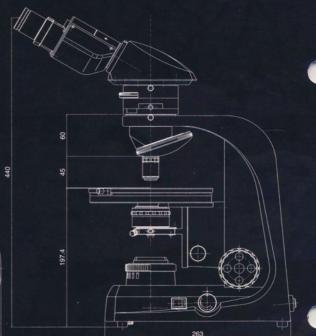
mount. Illumin Built-in and 6V supply

Center

Filter: 29.8mr **Focus** Ergono Coaxia

Minimu





Size and Weight of MT9000 Models

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

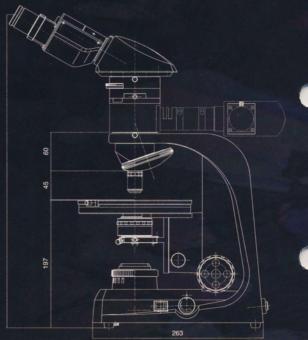
MT9200:

212mm (W) x 263mm (D) x 456mm (H), 9.06Kg

MT9300:

212mm (W) x 263mm (D) x 510mm (H), 9.75Kg





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

MT9420:

212mm (W) x 297mm (D) x 501mm (H), 11.19Kg

MT9430:

212mm (W) x 297mm (D) x 555mm (H), 11.88Kg

Agent:



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