



Microscopes

product datasheet

EMZ SERIES ZOOM STEREO MICROSCOPE BODIES

The body is the heart of the Meiji modular stereo microscope design. It contains the objectives and prisms that capture the image of the specimen, magnify it, and direct it to the eyetubes. The body by itself cannot be used to view an object; it needs eyepieces that further magnify the image and allow the viewer to see, and it must be mounted on a stand that has a mechanism for raising and lowering the body to bring the specimen into focus.

Zoom stereo bodies are the most flexible because they offer a wider range of magnification than turret (EMT) or fixed (EMF) bodies. Much like the zoom lens on a camera, zoom objectives increase and decrease magnification progressively, causing the specimen to grow or shrink smoothly in the eyes of the viewer.

Meiji Techno offers 8 different zoom stereo bodies. All EM bodies come with dust covers and rubber eyeshields.

EMZ-5

Body: Binocular, rotatable 360°
Zoom Ratio: 6.5:1
Zoom Range: 0.7x – 4.5x
Zoom Control: Dual, graduated, bilateral mount
Magnification: 7x – 45x (with 10x eyepieces)
Field of View: 32mm – 5.1mm
Working distance: 93mm
Eyetube Inclination: 45°
Interpupillary Distance Adjustment: 54mm – 75mm
Dioptric Adjustment: Dual (+/- 5 diopters)
Extended Magnification Range: 2.1x – 270x
Extended Working Distances: 34mm – 251mm
(with supplemental objectives and eyepieces)



EMZ-5TR

Body: Trinocular, rotatable 360°
Zoom Ratio: 6.5:1
Zoom Range: 0.7x – 4.5x
Zoom Control: Dual, graduated, bilateral mount
Magnification: 7x – 45x (with 10x eyepieces)
Field of View: 32mm – 5.1mm
Working distance: 93mm
Eyetube Inclination: 45°
Interpupillary Distance Adjustment: 54mm – 75mm
Dioptric Adjustment: Dual (+/- 5 diopters)
Extended Magnification Range: 2.1x – 270x
Extended Working Distances: 34mm – 251mm
(with supplemental objectives and eyepieces)





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FOCUSING RINGS/BLOCKS HOLDERS FOR EM SERIES STEREO MICROSCOPES

Focusing holders hold the microscope body and contain the mechanism that raises or lowers the body to focus on a specimen. Complete stands include their own focusing holders. For many applications, however, it is necessary to mount the microscope body directly onto a machine or some other surface. The focusing holders below offer a range of options for such applications.

F HOLDER



Focus holder with rack and pinion mount that allows smooth, precise focusing over 55mm of travel. Coarse focus mechanism incorporates a slip clutch and tension adjustment. Fits 20mm diameter, 71mm long mounting post. 84.2mm diameter opening accepts all EM Series stereo bodies.

FX HOLDER



Focus holder with integral, adjustable illuminator port. Rack and pinion mount allows smooth, precise focusing over 55mm of travel. Coarse focus mechanism incorporates a slip clutch and tension adjustment. Fits 20mm diameter, 71mm long mounting post. 84.2mm diameter opening accepts all EM Series stereo bodies.

FS HOLDER



Tilting focus holder with integral, adjustable illuminator port. Rack and pinion mount allows smooth, precise focusing over 55mm of travel. Coarse focus mechanism incorporates a slip clutch and tension adjustment. Uses 15.8mm (5/8") diameter, 34.5mm long mounting pin. 84.2mm diameter opening accepts all EM Series stereo bodies.

FC HOLDER



Focus holder with coaxial coarse and fine focus for high magnification applications where precise fine focus adjustment is required. Rack and pinion mount allows smooth, precise focusing over 33mm of travel. Coarse and fine focus mechanism incorporates a slip clutch and tension adjustment. Fits 20mm diameter, 82mm long mounting post (FC11 adapter allows mounting to 71mm long posts). 84.2mm diameter opening accepts all EM Series stereo bodies.

POLE STANDS FOR STEREO MICROSCOPES

P Stand



Pole stand with F focusing holder mounted on a plain base. Supplied with one 94.5mm diameter reversible black and white stage plate and two stage clips.

PL Stand



Pole stand with FX focusing holder and integrated incident illuminator port, mounted on a plain base. Supplied with one 94.5mm diameter reversible black and white stage plate and two stage clips.

PX Stand



Extended working distance pole stand with FX focusing holder and integrated incident illuminator port, mounted on a plain base. Supplied with one 94.5mm diameter reversible black and white stage plate and two stage clips. (Designed for use with EMX-1 extended working distance stereo body.)

PC Stand



Pole stand with FC coaxial coarse and fine focusing holder and integrated incident illuminator port, mounted on a plain base. Supplied with one 94.5mm diameter reversible black and white stage plate and two stage clips.

PB Stand



Pole stand with F focusing holder. Provides both transmitted and incident tungsten illumination. Supplied with 94.5mm diameter clear glass stage plate, reversible black and white stage plate and two stage clips. Illuminators may be operated independently or simultaneously. 6V 7.2W

PBM Stand



Pole stand with F focusing holder. Provides both transmitted and incident tungsten illumination. Supplied with 94.5mm diameter clear glass stage plate, reversible black and white stage plate and two stage clips. Illuminators may be operated independently or simultaneously. 115V 15W

PBH Stand



Pole stand with F focusing holder. Provides both transmitted and incident halogen illumination with variable intensity control. Supplied with 94.5mm diameter clear glass stage plate, reversible black and white stage plate and two stage clips. Illuminators may be operated independently or simultaneously. 6V 10W

BX Stand



Pole stand with FX focusing holder and integrated incident and transmitted light illuminator ports. Transmitted light base includes a fully rotatable mirror for brightfield or pseudo-darkfield work. 25mm illuminator ports accept versatile illuminators MA264 or MA264H. Supplied with 94.5mm diameter clear glass stage plate and two stage clips.



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UHM Universal Stands

UK manufactured long-arm stands for use with Meiji Stereo Microscopes, require F focussing ring/block and external illumination of specimens (see GX Microscope's illumination systems).

UHM Universal stand with heavy base 8in x 10 in and SWIV 20mm swivel spigot mount to accept F focussing ring. Includes 40cm vertical pole with 40 cm horizontal arm.

UHMFL Universal stand with bolt-mounting table flange and SWIV 20mm swivel spigot mount to accept F focussing ring. Includes 40cm vertical pole with 40 cm horizontal arm.

UHMSBU Universal stand with 600mm deep x 400mm wide base-board and SWIV 20mm swivel spigot mount to accept F focussing ring. Includes 40cm vertical pole with 40 cm horizontal arm.

UHMCB Universal stand with heavy circular 9in base and counter balance arm



UHM

Eyepieces, Reticules and Objectives

- You can add additional **eyepieces**, the following are available x5, x10, x12.5, x15, x20, x30
- You can add additional **objectives**, the following are available: x0.5, x0.75, x1.5, x2.0 (EMT-2 requires an adapter)
- The following **reticules** can be fitted to reticule receptive eyepieces: crosshair, 5mm or 10mm scales, 10mm grid box
- Other accessories** include protective covers, boxes, rubber eyecups and spare lamps



Magnification Table for EMZ Zoom Bodies

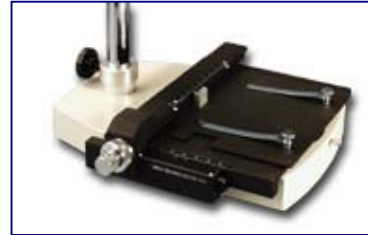
Model	Zoom Range	Auxiliary Lens	Working Distance (mm)	SWF10X Eyepieces		SWF12.5X Eyepieces		SWF15X Eyepieces		SWF20X Eyepieces		SWF30X Eyepieces	
				Total Mag.	Field Diameter (mm)	Total Mag.	Field Diameter (mm)	Total Mag.	Field Diameter (mm)	Total Mag.	Field Diameter (mm)	Total Mag.	Field Diameter (mm)
EMZ-1	1X-3X	none	93	10X ~ 30X	23 ~ 7.7	12.5X ~ 37.5X	20 ~ 6.6	15X ~ 45X	15.4 ~ 5.1	20X ~ 60X	11.5 ~ 3.8	30X ~ 90X	7.7 ~ 2.5
		0.3X	251	3X ~ 9X	76 ~ 25.6	3.75X ~ 11.25X	66 ~ 22	4.5X ~ 13.5X	51.3 ~ 17	6X ~ 18X	38 ~ 12.6	9X ~ 27X	25.5 ~ 8.3
		0.44X	181	4.4X ~ 13.2X	52 ~ 17.5	5.5X ~ 16.5X	45 ~ 15	6.6X ~ 19.8X	35 ~ 11.5	8.8X ~ 26.4X	26 ~ 8.6	13.2X ~ 39.6X	17.5 ~ 5.6
		0.5X	150	5X ~ 15X	46 ~ 15.3	6.25X ~ 18.75X	40 ~ 13.2	7.5X ~ 22.5X	30.6 ~ 10.2	10X ~ 30X	23 ~ 7.6	15X ~ 45X	15.4 ~ 5
		0.75X	97	7.5X ~ 22.5X	30.6 ~ 10.2	9.37X ~ 28.1X	26.6 ~ 8.8	11.25X ~ 33.75X	20.5 ~ 6.8	15 ~ 45X	15 ~ 5.0	22.5X ~ 67.5X	10.2 ~ 3.3
		1.5X	49	15X ~ 45X	15.3 ~ 5.1	18.75X ~ 56.25X	13.3 ~ 4.4	22.5X ~ 67.5X	10.2 ~ 3.4	30X ~ 90X	7.7 ~ 2.5	45X ~ 135X	5.1 ~ 1.6
		2.0X	34	20X ~ 60X	11.5 ~ 3.8	25X ~ 75X	10 ~ 3.3	30X ~ 90X	7.7 ~ 2.6	40X ~ 120X	5.7 ~ 1.9	60X ~ 180X	3.8 ~ 1.2
EMZ-2 EMZ-2TR EMZ-5 5TR EMZ-9	0.7X~4.5X	none	93	7X ~ 45X	32.8 ~ 5.1	8.75X ~ 56.25X	28.5 ~ 4.4	10.5X ~ 67.5X	22 ~ 3.4	14X ~ 90X	16.4 ~ 2.5	21X ~ 135X	11 ~ 1.7
		0.3X	251	2.1X ~ 13.5X	109 ~ 17	2.62X ~ 16.87X	95 ~ 14.6	3.15X ~ 20.25X	73 ~ 11.4	4.2X ~ 27X	54.7 ~ 8.5	6.3X ~ 40.5X	36.6 ~ 5.7
		0.44X	171	3.08X ~ 19.8X	74.5 ~ 11.5	3.85X ~ 24.75X	64.7 ~ 10	4.62X ~ 29.7X	50 ~ 7.7	6.16X ~ 39.6X	37.2 ~ 5.9	9.24X ~ 59.4X	25 ~ 3.8
		0.5X	148	3.5X ~ 22.5X	65.7 ~ 10.2	4.37X ~ 28.12X	57 ~ 8.8	5.25X ~ 33.75X	44 ~ 6.8	7X ~ 45X	32.8 ~ 5.1	10.5X ~ 67.5X	22 ~ 3.4
		0.75X	97	5.25X ~ 33.75X	43.8 ~ 6.8	6.56X ~ 42.18X	38 ~ 5.8	7.87X ~ 50.62X	29.3 ~ 4.5	10.5X ~ 67.5X	21.9 ~ 3.4	15.75X ~ 101.25X	14.6 ~ 2.2
		1.5X	49	10.5X ~ 67.5X	21.9 ~ 3.4	13.12X ~ 84.37X	19 ~ 2.9	15.75X ~ 101.25X	14.6 ~ 2.2	21X ~ 135X	10.9 ~ 1.7	31.5X ~ 202.5X	7.3 ~ 1.1
		2.0X	33	14X ~ 90X	16.4 ~ 2.5	17.5X ~ 112.5X	14.2 ~ 2.2	21X ~ 135X	11 ~ 1.7	28X ~ 180X	8.2 ~ 1.2	42X ~ 270X	5.5 ~ 0.8

Mechanical, Gliding & Measuring Stages for use with table stands

The addition of a mechanical stages allow you to move specimens smoothly under the microscope, and also helps to protect specimens from damage and contamination. Meiji Techno offers both graduated and un-graduated stages for our pole and rigid-arm stands, as well as larger sliding stages for use with our boom and wide surface stands

MA564 Graduated Mechanical Stage

This stage has 0.1mm graduations and coaxial controls for precise movement of mounted specimens. Features a 116mm x 137mm work surface with stage clips. 50mm x 75mm x-y travel.



MA564/05 Graduated Mechanical Stage for Transmitted Light

This stage has 0.1mm graduations and coaxial controls for precise movement of mounted specimens. Features a 116mm x 137mm work surface with stage clips and 74mm x 96mm clear glass plate for use with transmitted light stands. 50mm x 75mm x-y travel.



MA565 Ungraduated Mechanical Stage

This stage features a 125mm x 170mm work surface with stage clips. Roller-bearing mount allows smooth, easy, fingertip control over 100mm x 100mm x-y travel.



MA565/05 Un-graduated Mechanical Stage for Transmitted Light

This stage features a 125mm x 170mm work surface with stage clips and a 94.5mm diameter clear glass stage plate for use with transmitted light stands. Roller-bearing mount allows smooth, easy, fingertip control over 100mm x 100mm x-y travel.



Other Stages Include:

- MT.50.50 50x50mm XY measuring stage to take digital micrometers
- MT.50.50T 50x50mm XY measuring stage to take digital micrometers (allows transmitted light)

Gemological Accessories

Meiji Stereo microscopes can also be supplied with a range of accessories designed specifically for the photography and manipulation of gems, diamonds and fine jewellery. These include

- **MA555 (and MT variant)** -Gem Clamp with jaws to fit stage clip holes (not MT). Allows gem positioning and rotation.
- **MA556** - Darkfield attachment (requires MA557/01)
- **MA557/01** - Iris Diaphragm and adapter to fit darkfield attachment MA556.

Polarising Accessories

Meiji Stereo microscopes with transmitted light bases can be fitted with high quality polarisers consisting of a polarising plate near the light source and a rotatable filter in the optical path.

- **MA550** Polarising filter for EMZ microscopes
- **MA550/05** Polarising filter for EMT-1, EMTR-1, EMT-2, EMTR-2, EMF-1 and EMF-2 stereo bodies
- **MA550/10** Polarising filter for EMT-3, EMTR-3, EMT-4 and EMTR-4 stereo bodies
- **MA667** Polarising Plate for use with PB, PBH, PBM, AB, ABH, ABZH, ABE transmitted light stands

