



**OPTIKA**<sup>®</sup>  
M I C R O S C O P E S  
I T A L Y



**IM-5MET**

**OPTIKA IM-5MET** is a new inverted research microscope for metallography providing a high-end solution in the field of material science. Brightfield, darkfield, polarized light and DIC - Nomarski technique all-in-one for an extremely valuable instrument able to provide ergonomic handy controls and significant unique features, such as the highest F.O.V. available on an inverted microscope.

# IM-5MET

Plan extra wide field eyepieces  
PL 10x with F.N. of 24 mm

Carrying handle

Sturdy, stable and  
wide-dimensioned body

Trinocular port with light  
distribution (100/0, 0/100)

BF/DF selector  
(Brightfield,  
Darkfield)

Coaxial coarse and fine  
focusing mechanism  
(graduated, 0.002 mm)

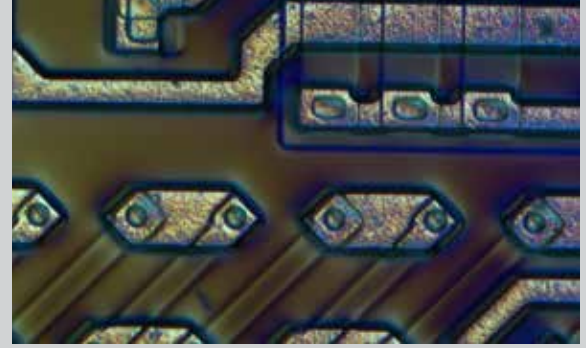
Rackless mechanical stage (240 x 250 mm)  
with double Vernier scale, anti-scratch surface

Choice between two series of  
objectives (BF and DF or BF only)  
with anti-fungus treatment

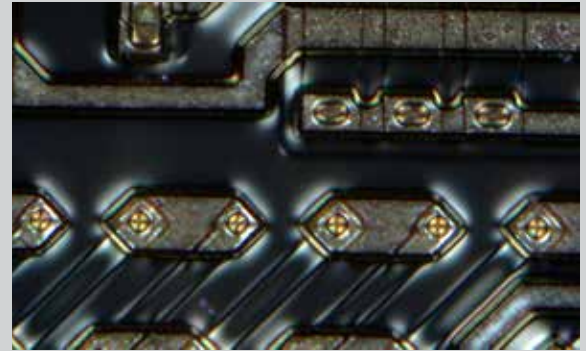
Light intensity control

Right-handed, X/Y controls  
in ergonomic position

Panel with LED illumination indicators and ECO function



Wafer, DIC



Wafer, Polarized Light




Rubber cups, retractable protections  
for a higher comfort

45° inclined Siedentopf tube with  
interpupillary distance from 50 to 75 mm

+/- 5 dioptic compensation, on both eyepieces

Eyepieces with fixing screw

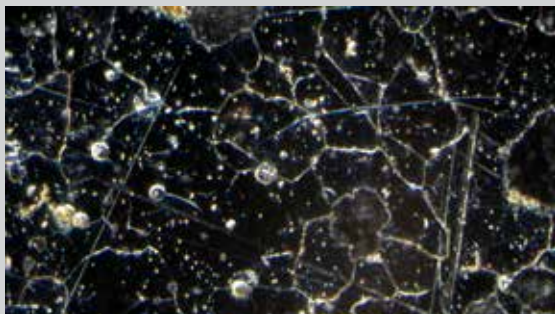


Bi-directional revolving nosepiece,  
ball-bearing, equipped with a wide  
ferrule for an easier use

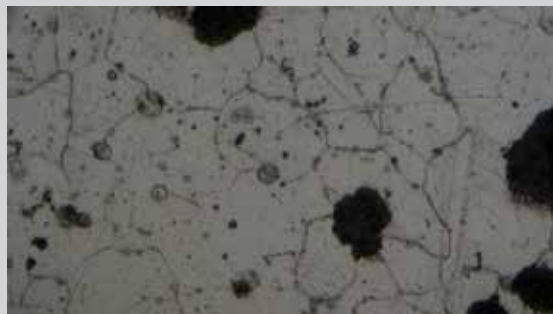
Fixing screw for DIC slider

5-position revolving nosepiece for M-25  
and RMS thread objectives (adapter rings supplied)

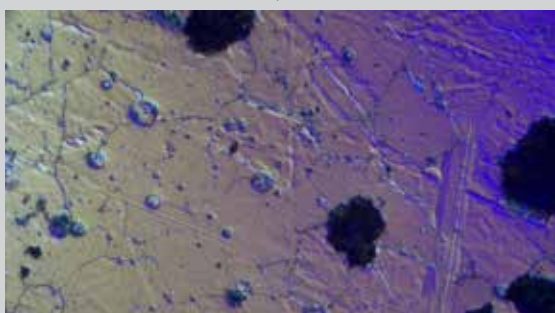
DIC - Nomarski slider for reflected light (optional)



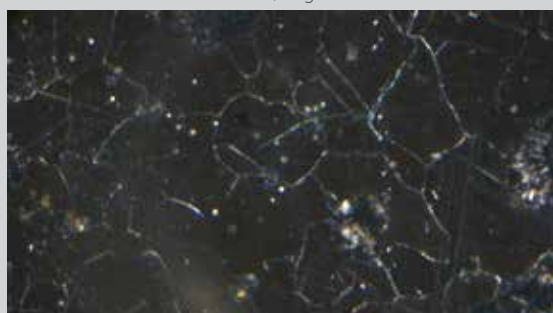
Cast Iron, Darkfield



Cast Iron, Brightfield



Cast Iron, DIC



Cast Iron, Polarized Light



Analyzer, 360° rotatable, and polarizer included

Field and aperture diaphragms, centrable (FS = field stop; AS = aperture stop)

100W 12V halogen lamp, pre-centered

3-position slider complete with blue LBD filter (daylight)

## IM-5MET - Technical Datasheet

Observation Methods	Brightfield, darkfield, polarized light (DIC - Nomarski as optional)
Head	Trinocular, 45° inclined, splitting ratios eyepieces/photo tube: 100% - 0% / 0% - 100%.
Eyepieces	Plan Extra Wide Field, PL 10x/24 (Ø 30 mm), high eyepoint, with dioptic adjustment
Nosepiece	Quintuple, reversed with M25 thread holes and adapter rings (for RMS objectives) slot for DIC
Objectives	Fully modular (see options in the accessories chart)
Stage	Rackless, mechanical, 240x250 mm, 50x50 mm movement range
Focusing	Coaxial coarse & fine (200µm/turn), upper stop, adjustable tension
Incident Illumination	100W halogen, manual brightness control
Incident Light Diaphragms	Aperture and field diaphragm, both centrable
Accessories Included	Polarizer and rotating analyzer filters, slider with blue LBD filter

## Accessories

Included ■ Optional □

M-880	Plan Extra Wide Field, PL 10x/24 (Ø 30 mm), high eyepoint, with dioptic adjustment	■ ■
M-881	Plan Extra Wide Field, PL 10x/24 (Ø 30 mm), with micrometer (10mm/100µm), high eyepoint, with dioptic adjustment	□
M-882	Wide Field, WF 15x/16 (Ø 30 mm), with dioptic adjustment	□
DC-004	TNT dust cover, large - 700(l)x550(h) mm	■
M-870	Slider for DIC	□
VP-IM5	IQ/OQ/PQ validation protocols	□
15104	Cleaning kit	□

## IM-5MET is freely configurable in terms of objectives, by choosing among:

Included ■ Optional □

MET Infinity-corrected Plan-Achromatic, Long Working Distance objectives, field flatness up to F.N. 25:

M-1100	IOS LWD U-PLAN MET objective 5x/0.15	□
M-1101	IOS LWD U-PLAN MET objective 10x/0.30	□
M-1102	IOS LWD U-PLAN MET objective 20x/0.45	□
M-1103	IOS LWD U-PLAN MET objective 50x/0.55	□
M-1104	IOS LWD U-PLAN MET objective 100x/0.80 (dry)	□

MET Infinity-corrected Semi-Apochromatic, Long Working Distance objectives, field flatness up to F.N. 25:

M-1171	IOS LWD U-PLAN F MET objective 5x/0.15	□
M-1172	IOS LWD U-PLAN F MET objective 10x/0.30	□
M-1173	IOS LWD U-PLAN F MET objective 20x/0.50	□
M-1174	IOS LWD U-PLAN F MET objective 50x/0.80	□
M-1179	IOS LWD U-PLAN F MET objective 100x/0.90 (dry)	□

MET Infinity-corrected Plan-Achromatic, Long Working Distance objectives, for brightfield and darkfield, field flatness up to F.N. 25:

M-1094	IOS LWD U-PLAN MET BD objective 5x/0.15	□
M-1095	IOS LWD U-PLAN MET BD objective 10x/0.30	□
M-1096	IOS LWD U-PLAN MET BD objective 20x/0.45	□
M-1097	IOS LWD U-PLAN MET BD objective 50x/0.55	□
M-1098	IOS LWD U-PLAN MET BD objective 100x/0.80 (dry)	□

MET Infinity-corrected Semi-Apochromatic, Long Working Distance objectives, for brightfield and darkfield, field flatness up to F.N. 25:

M-1180	IOS LWD U-PLAN F MET BD objective 5x/0.15	□
M-1181	IOS LWD U-PLAN F MET BD objective 10x/0.30	□
M-1182	IOS LWD U-PLAN F MET BD objective 20x/0.50	□
M-1183	IOS LWD U-PLAN F MET BD objective 50x/0.80	□
M-1184	IOS LWD U-PLAN F MET BD objective 100x/0.90 (dry)	□