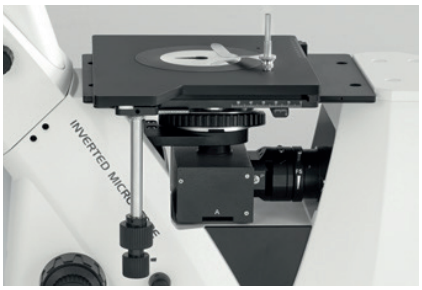
Metallurgical inverted microscope KERN OLM-1

OLM 170

OLM 171



Specimen stage and illumination unit (OLM 171)

Analyser/Polariser

LAB LINE MET

The inverted metallurgical microscope for professional applications

Features

- The KERN OLM range is part of the range of inverted microscopes and stands out through its design which is ergonomic, robust and extremely stable. This range, with its large working distance is, for example, particularly suitable for surface quality testing of raw materials and finished products in industry
- Depending on the application, you can choose from models with a powerful, continuously dimmable 5W LED or a 50W halogen incident light illumination, which ensure optimum illumination of the materials to be tested
- As standard, the OLM range is fitted with a trinocular eyepiece tube
- A simple polarising unit (analyser and polariser) is included with delivery
- The compact design of the OLM 170 allows the user easier and more flexible handling, so that this model can also be considered for mobile use
- A large mechanical stage is included with delivery as standard. The coarse and fine focusing knob on both sides guarantees optimal adjustment and focusing
- Further options such as, for example, a large selection of objectives can be integrated as accessories
- A dust cover as well as user instructions are included with the delivery
- Please find detailed information in the following model outfit list

Scope of application

- Metallurgy, material testing, quality assurance

Applications/Samples

- Opaque and thick samples, workpieces (surfaces, fold lines, coatings)

Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 271×379×747 mm
- Net weight approx. 12,5 kg

STANDARD

TRINO | ABBE | HAL | LED | POLAR | INFINITY | SCALE | 230 V | 1 DAY

OLM-171 OLM-170

Model	Standard configuration				
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination
OLM 170 NEW	Trinocular	HWF 10×/Ø 20 mm	Infinity Plan	LWD5×/LWD10×/ LWD20×/LWD50×	5 W LED (incident)
OLM 171	Trinocular	HWF 10×/Ø 22 mm	Infinity Plan		50 W Halogen (incident)

NEW New model

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Model outfit		Model KERN		Order number
		OLM 170	OLM 171	
Eyepieces (23,2 mm)	HWF 10×/⌀ 20 mm (adjustable)	✓		OBB-A1404
	WF 10×/⌀ 20 mm (reticule 0,1 mm) (adjustable)	✓		OBB-A1532
Eyepieces (30 mm)	HWF 10×/⌀ 22 mm (adjustable)		✓	OBB-A1491
	HWF 10×/⌀ 22 mm (reticule 0,1 mm) (adjustable)		✓	OBB-A1523
Infinity Plan achromatic objectives for long working distance	5×/0,13 W.D. 16,04 mm	✓	✓	OBB-A1525
	10×/0,25 W.D. 18,48 mm	✓	✓	OBB-A1526
	20×/0,40 W.D. 8,35 mm	✓	✓	OBB-A1527
	50×/0,70 (spring-loaded) W.D. 1,95 mm	✓	✓	OBB-A1528
	80×/0,80 (spring-loaded) W.D. 0,85 mm	○	○	OBB-A1530
	100×/0,85 (dry) W.D. 3,00 mm	○	○	OBB-A1623
Trinocular tube	· Butterfly 45° inclined · Interpupillary distance 48-76 mm · Light distribution 20:80 · Diopter adjustment: One-sided	✓		
Trinocular tube	· Siedentopf 30° inclined · Interpupillary distance 48-76 mm · Light distribution 100:0 · Diopter adjustment: Both-sided		✓	
Mechanical stage	· Stage size B×T 155×180 mm · Travel 75×40 mm · Coaxial coarse and fine focusing knobs	✓		
Mechanical stage	· Stage size W×D 210×180 mm · Travel 50×50 mm · Coaxial coarse and fine focusing knobs		✓	
Illumination	5 W LED spare bulb (incident)	✓		OBB-A1589
Illumination	50 W Halogen spare bulb (incident)		✓	OBB-A1207
Reflected illumination unit	Polarising unit (Incl. analyser, polariser and colour filter slide)	✓	✓	
Colour filters for transmitted illumination	Blue		✓	OBB-A1510
	Green		○	OBB-A1511
	Yellow		○	OBB-A1512
	Grey	✓	○	OBB-A1513
C-Mount	0,5× (built-in)	✓		
	0,5×		○	OBB-A1515
	1×		○	OBB-A1514

✓ = Included with delivery ○ = Option

360° rotatable microscope head

Monocular Microscope
For the inspection with one eye

Binocular Microscope
For the inspection with both eyes

Trinocular Microscope
For the inspection with both eyes and the additional option for the connection of a camera

Abbe Condenser
With high numerical aperture for the concentration and the focusing of light

Halogen illumination
For pictures bright and rich in contrast

LED illumination
Cold, energy-saving and especially long-life illumination

Incident illumination
For non-transparent objects

Transmitting illumination
For transparent objects

Fluorescence illumination
For stereomicroscopes

Fluorescence illumination for compound microscopes
With 100 W mercury lamp and filter

Fluorescence illumination for compound microscopes
With 3 W LED illumination and filter

Phase contrast unit
For a higher contrast

Darkfield condenser/unit
For a higher contrast due to indirect illumination

Polarising unit
To polarise the light

Infinity system
Infinity corrected optical system

Zoom magnification
For stereomicroscopes

Auto-focus
For automatic control of the focus level

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

SD card
For data storage

USB 2.0 digital camera
For direct transmitting of the picture to a PC

USB 3.0 digital camera
For direct transmitting of the picture to a PC

WIFI data interface:
For transmitting of the picture to a mobile display device

HDMI digital camera
For direct transmitting of the picture to a display device

PC software
To transfer the measurements from the device to a PC.

Automatic temperature compesation
For measurements between 10 °C and 30 °C

Protection against dust and water splashes IPxx:
The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013

Battery operation
Ready for battery operation. The battery type is specified for each device.

Battery operation rechargeable
Prepared for a rechargeable battery operation

Plug-in power supply
230V/50Hz in standard version for EU. On request GB, AUS or USA version.

Integrated power supply unit
Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

Package shipment
The time required to manufacture the product internally is shown in days in the pictogram.

ABBREVIATIONS

C-Mount	Adapter for the connection of a camera to a trinocular microscope
FPS	Frames per second
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)
LWD	Long Working Distance
N.A.	Numerical Aperture
SLR camera	Single-Lens Reflex camera
SWF	Super Wide Field (Field number at least ⌀ 23 mm for 10× eyepiece)
W.D.	Working Distance
WF	Wide Field (Field number up to ⌀ 22 mm for 10× eyepiece)