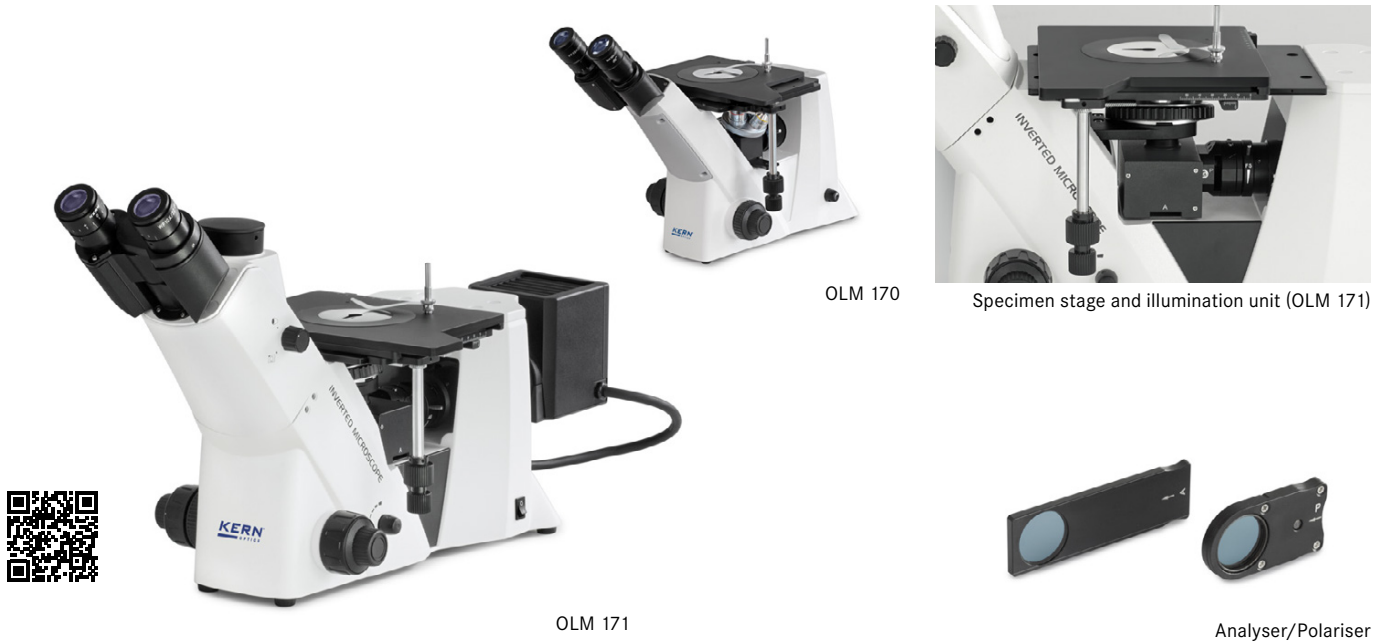


Metallurgical Inverted Microscope KERN OLM-1



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 means that handling is even easier and more flexible for the user, so this model can also be considered for mobile applications. In the same way, the pre-installed C-Mount Adapter (on the back of the microscope) also makes operation easier, as connecting the camera is even easier
- 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

OLM 170

- 4-fold lens revolving unit
- Butterfly 45° angled
- Diopter adjustment: one-sided
- Overall dimensions W×D×H 470×240×330 mm
- Net weight approx. 7 kg

OLM 171

- 5-fold lens revolving unit
- Siedentopf 30° inclined
- Diopter adjustment: both-sided
- Overall dimensions W×D×H 271×379×747 mm
- Net weight approx. 12,5 kg

STANDARD



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



Model outfit	Model KERN		Order number
	OLM 170	OLM 171	
Eyepieces (23,2 mm)	HWF 10×/∅ 20 mm	✓	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
Infinity Plan Semi Apochromatic objectives for long working distance	5x / 0,15 W.D. 21 mm		✓ OBB-A1619
	10x / 0,30 W.D. 20 mm		✓ OBB-A1620
	20x / 0,40 W.D. 15 mm	○	✓ OBB-A1621
	50x / 0,55 W.D. 10 mm		✓ OBB-A1622
	100×/0,85 (dry) W.D. 3,00 mm		○ OBB-A1623
Trinocular tube	<ul style="list-style-type: none"> • Butterfly 45° inclined • Interpupillary distance 48-76 mm • Light distribution 20:80 • Diopter adjustment: One-sided 	✓	
Trinocular tube	<ul style="list-style-type: none"> • Siedentopf 30° inclined • Interpupillary distance 48-76 mm • Light distribution 100:0 • Diopter adjustment: Both-sided 		✓
Mechanical stage	<ul style="list-style-type: none"> • Stage size B×T 155×180 mm • Travel 75×40 mm • Coaxial coarse and fine focusing knobs 	✓	
Mechanical stage	<ul style="list-style-type: none"> • 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	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	Integrated scale In the eyepiece	Battery operation Ready for battery operation. The battery type is specified for each device.
Monocular Microscope For the inspection with one eye	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	SD card For data storage	Battery operation rechargeable Prepared for a rechargeable battery operation
Binocular Microscope For the inspection with both eyes	Phase contrast unit For a higher contrast	USB 2.0 interface For data transmission	Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	Darkfield condenser/unit For a higher contrast due to indirect illumination	USB 3.0 interface For data transmission	Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
Abbe Condenser With high numerical aperture for the concentration and the focusing of light	Polarising unit To polarise the light	WIFI data interface: For transmitting of the picture to a mobile display device	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
Halogen illumination For pictures bright and rich in contrast	Infinity system Infinity corrected optical system	HDMI digital camera For direct transmitting of the picture to a display device	Pallet shipment The time required to manufacture the product internally is shown in days in the pictogram.
LED illumination Cold, energy-saving and especially long-life illumination	Zoom magnification For stereomicroscopes	PC software To transfer the measurements from the device to a PC.	Automatic temperature compensation For measurements between 10 °C and 30 °C
Incident illumination For non-transparent objects	Auto-focus For automatic control of the focus level	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	
Transmitting illumination For transparent objects	Parallel optical system For stereomicroscopes, enables fatigue-proof working		
Fluorescence illumination For stereomicroscopes			

Abbreviations

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