

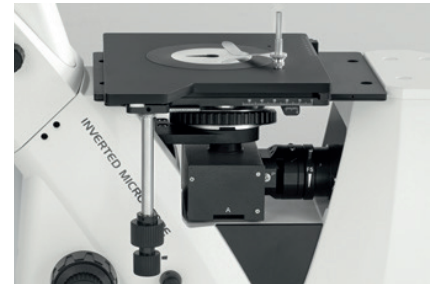
### Metallurgical inverted microscope KERN OLM-1



OLM 171



OLM 170



Specimen stage and illumination unit (OLM 171)



Analysing/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



OLM-171 OLM-170

#### Model

Standard configuration

	Tube	Eyepiece	Objective quality	Objectives	Illumination
<b>KERN</b>					
<b>OLM 170</b> <small>NEW</small>	Trinocular	HWF 10×/ø 20 mm	Infinity Plan	LWD5×/LWD10×/ LWD20×/LWD50×	5 W LED (incident)
<b>OLM 171</b>	Trinocular	HWF 10×/ø 22 mm	Infinity Plan		50 W Halogen (incident)

































NEW New model

## Metallurgical inverted microscope KERN OLM-1

Model outfit		Model KERN		Order number
		OLM 170	OLM 171	
<b>Eyepieces</b> (23,2 mm)	HWF 10×/∅ 20 mm (adjustable)	✓		OBB-A1404
	WF 10×/∅ 20 mm (reticule 0,1 mm) (adjustable)	✓		OBB-A1532
<b>Eyepieces</b> (30 mm)	HWF 10×/∅ 22 mm (adjustable)		✓	OBB-A1491
	HWF 10×/∅ 22 mm (reticule 0,1 mm) (adjustable)		✓	OBB-A1523
<b>Infinity Plan achromatic objectives</b> 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
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• Butterfly 45° inclined</li> <li>• Interpupillary distance 48-76 mm</li> <li>• Light distribution 20:80</li> <li>• Diopter adjustment: One-sided</li> </ul>	✓		
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• Siedentopf 30° inclined</li> <li>• Interpupillary distance 48-76 mm</li> <li>• Light distribution 100:0</li> <li>• Diopter adjustment: Both-sided</li> </ul>		✓	
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>• Stage size B×T 155×180 mm</li> <li>• Travel 75×40 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> </ul>	✓		
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>• Stage size W×D 210×180 mm</li> <li>• Travel 50×50 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> </ul>		✓	
<b>Illumination</b>	5 W LED spare bulb (incident)	✓		OBB-A1589
<b>Illumination</b>	50 W Halogen spare bulb (incident)		✓	OBB-A1207
<b>Reflected illumination unit</b>	Polarising unit (Incl. analyser, polariser and colour filter slide)	✓	✓	
<b>Colour filters</b> for transmitted illumination	Blue		✓	OBB-A1510
	Green		○	OBB-A1511
	Yellow		○	OBB-A1512
	Grey	✓	○	OBB-A1513
<b>C-Mount</b>	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 compensation**  
 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  $\varnothing$  23 mm for 10 $\times$  eyepiece)
- W.D.** Working Distance
- WF** Wide Field (Field number up to  $\varnothing$  22 mm for 10 $\times$  eyepiece)