



PROFESSIONAL LINE MET

The fully-equipped reflected and transmitted light microscope for numerous applications in metallurgy

Features

- The KERN OKN and OKO series are professional, versatile, metallurgical microscopes, which are used in testing metals and analysing surfaces
- You can choose between two reflected illumination units: A 50 W halogen reflected illumination unit or a premium illumination unit with stunning 100 W reflected illumination for powerful performance
- A height-adjustable 1,25 Abbe condenser which can be centred as well as a field diaphragm are available for the transmitted light variants (KERN OKO series), for complete professional Koehler illumination
- The KERN OKO transmitted illumination variant is fitted with an open, mechanical stage, as standard. On the other hand, the KERN OKN reflected illumination variant has a closed, mechanical stage, as standard
- A simple polarising unit (analyser and polariser) is included with delivery
- A large selection of accessories, such as, for example, a Butterfly Tube, eyepieces and further objectives are available for longer working distances
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of delivery
- A C-Mount adapter is required to connect a camera. You can select this adapter from the following model outfit list
- 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/360° rotatable
- Diopter adjustment: Both-sided
- Overall dimensions W×D×H 550×200×460 mm
- Net weight basic configuration approx. 14,5 kg

STANDARD




























Model	Standard configuration					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OKN 175	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×	12 V/50 W Halogen (incident)	↓
OKO 176	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×/100×	12 V/50 W Halogen (incident) + 6 V/20 W (transmitted)	↓
OKN 177	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×	12 V/100 W Halogen (incident)	↓
OKO 178	Trinocular	WF 10×/∅ 18 mm	Infinity Plan	5×/10×/LWD20×/LWD40×/100×	12 V/100 W Halogen (incident) + 6 V/20 W (transmitted)	↓

↓ Price reduction

Model outfit		Model KERN				Order number	
		OKN 175	OKO 176	OKN 177	OKO 178		
Eyepieces (23,2 mm)	WF 10×/∅ 18 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1347	
	WF 10×/∅ 18 mm (reticule 0,1 mm) (adjustable)	✓	✓	✓	✓	OBB-A1350	
	WF 5×/∅ 20 mm	○	○	○	○	OBB-A1355	
	WF 12,5×/∅ 14 mm	○	○	○	○	OBB-A1353	
	WF 16×/∅ 13 mm	○	○	○	○	OBB-A1354	
Infinity Plan objectives (no cover glass)	5×/0,11 W.D. 6,73 mm	✓	✓	✓	✓	OBB-A1268	
	10×/0,25 W.D. 4,19 mm	✓	✓	✓	✓	OBB-A1244	
	20×/0,40 (spring) W.D. 2,14 mm	○	○	○	○	OBB-A1251	
	40×/0,65 (spring) W.D. 0,45 mm	○	○	○	○	OBB-A1258	
	100×/1,25 (oil) (spring) W.D. 0,12 mm		✓		✓	OBB-A1241	
Infinity Plan objectives (no cover glass) for long working distance	20×/0,40 W.D. 8,35 mm	✓	✓	✓	✓	OBB-A1252	
	40×/0,65 W.D. 3,90 mm	✓	✓	✓	✓	OBB-A1259	
	50×/0,70 (spring) W.D. 1,95 mm	○	○	○	○	OBB-A1266	
	80×/0,80 (spring) W.D. 0,85 mm	○	○	○	○	OBB-A1271	
Trinocular tube	<ul style="list-style-type: none"> • Siedentopf 30° inclined/360° rotatable • Interpupillary distance 50 – 75mm • Light distribution 100:0 • Diopter adjustment: Both-sided 	✓	✓	✓	✓		
	<ul style="list-style-type: none"> • Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 100:0 • Diopter adjustment: Both-sided 	○	○	○	○	OBB-A1382	
Mechanical stage for reflection	<ul style="list-style-type: none"> • Stage size W×D 200×140 mm • Travel 78×55 mm • Stage fast lowering unit • Stage Up-Down moving range: max. 50 mm 	✓		✓			
Mechanical stage for transmitted illumination	<ul style="list-style-type: none"> • Stage size W×D 175×145 mm • Travel 78×55 mm • Coaxial coarse and fine focusing knobs 		✓		✓		
Stage plate	Plate for sample placement	✓	✓	✓	✓		
Glass plate	Glass plate		○		○	OBB-A1378	
Reflected illumination unit	Polarising unit (Incl. analyser, polariser and blue filter slide)	✓	✓	✓	✓		
Condenser	Abbe N.A. 1,25 (aperture diaphragm)		✓		✓	OBB-A1380	
Illumination	6 V/20 W Halogen spare bulb (transmitted)		✓		✓	OBB-A1370	
	12 V/50 W Halogen spare bulb (incident)	✓	✓			OBB-A1207	
	12 V/100 W Halogen spare bulb (incident)			✓	✓	OBB-A1377	
Polarising unit	for transmitted illumination		✓		✓	OBB-A1470	
Colour filters for transmitted illumination	Blue		✓		✓		
	Green		○		○	OBB-A1188	
	Yellow		○		○	OBB-A1165	
	Gray		○		○	OBB-A1183	
C-Mount	1×	○	○	○	○	OBB-A1140	
	0,57× (focus adjustable)	○	○	○	○	OBB-A1136	

✓ = Included with delivery

○ = Option

 360°	360° rotatable microscope head	 FL-LED	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 WLAN	WLAN data interface: For transmitting of the picture to a mobile display device
 MONO	Monocular Microscope For the inspection with one eye	 PH	Phase contrast unit For a higher contrast	 HDMI	HDMI digital camera For direct transmitting of the picture to a display device
 BINO	Binocular Microscope For the inspection with both eyes	 DF	Darkfield condenser/unit For a higher contrast due to indirect illumination	 SOFTWARE	PC software To transfer the measurements from the device to a PC.
 TRINO	Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	Polarising unit To polarise the light	 AUTO ATC	Automatic temperature compensation For measurements between 10 °C and 30 °C
 ABBE	Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 INFINITY	Infinity system Infinity corrected optical system	 IP	Protection against dust and water splashes IPxx The type of protection is shown by the pictogram.
 HAL	Halogen illumination For pictures bright and rich in contrast	 ZOOM	Zoom magnification For stereomicroscopes	 BATT	Battery operation Ready for battery operation. The battery type is specified for each device.
 LED	LED illumination Cold, energy saving and especially long-life illumination	 PARALLEL	Parallel optical system For stereomicroscopes, enables fatigue-proof working	 RECHARGE	Battery operation rechargeable Prepared for a rechargeable battery operation
 IL	Incident illumination For non-transparent objects	 SCALE	Integrated scale In the eyepiece	 230 V	Mains adapter 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 TL	Transmitting illumination For transparent objects	 SD	SD card For data storage	 230 V	Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 FL	Fluorescence illumination For stereomicroscopes	 USB 2.0	USB 2.0 digital camera For direct transmitting of the picture to a PC	 1 DAY	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 FL-HBO	Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 USB 3.0	USB 3.0 digital camera For direct transmitting of the picture to a PC		

Abbreviations

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

Your KERN specialist dealer: