





Stage OKN



Stage OKO



Illumination unit

PROFESSIONAL LINE MET

The metallurgical model for the flexible and professional user

Features

- The KERN OKN and OKO microscope series are metallurgical microscopes for professional applications.
- They are available with two illumination systems: Standard halogen illumination (50 W) and premium illumination (100 W). They are both suitable for all common routine applications and produce impressive
- · Additional transmitted light halogen illumination is available for some models.
- · These microscope models are equipped with infinity corrected, plan achromatic objectives as standard.
- · A nosepiece for up to 5 objectives, a large stage and a complete polarisation kit are standard on the OKN and OKO models.

- The transmitted light models equipped with Koehler illumination have an additional centerable and height adjustable Abbe condenser and an adjustable aperture diaphragm.
- These binocular microscopes are equipped with diopter adjustment and are available with a variety of eyepieces.
- · A trinocular head is optionally available, allowing a camera to be fitted.
- · The following optional accessories are available: A variety of eyepieces, LWD objectives for long working distances and more.
- One of the central features of this highly variable and simultaneously robust series of microscopes is the stable and precisely adjustable mechanism. This is underlined by the functional and ergonomic design.

Technical data

- Eyepieces: 3x WF 10x18 mm
- Objectives: 5x / 10x / (100x) and LWD 20x/40x
- · Overall dimensions WxDxH 306x200x448 mm
- Net weight basic configuration approx. 12 kg

Please find detailed information in the following charts.

STANDARD

























Model						
Wodei	Standard configuration					
	Optical system	Tube	Illumination			
KERN						
OKN 175	Infinity	Binocular	12V / 50W Halogen (reflecting)			
OKO 176	Infinity	Binocular	12V / 50W Halogen (reflecting) + 6V / 20W (transmitting)			
OKN 177	Infinity	Binocular	12V / 100W Halogen (reflecting)			
OKO 178	Infinity	Binocular	12V / 100W Halogen (reflecting) + 6V / 20W (transmitting)			

Metallurgical microscopes KERN OKN-1 · OKO-1



No. No.	Model outfit			Model KERN				
Experiences		-						
Fyerence		WF 10x/Ø 18 mm					OBB-A1347	
WEST, 5x / 20 mm		WF 10x / Ø 18 mm (reticule 0,1 mm) (adjustable)	•	•	•	•	OBB-A1350	
Infinity Plan objectives 10x / 0,25 W.D. 4,19 mm	Eyepieces	WF 5x / Ø 20 mm	00	00	00	00	OBB-A1355	
Infinity Plan objectives (no cover glass)		WF12,5x / Ø 14 mm	00	00	00	00	OBB-A1353	
Infinity Plan objectives (no cover glass) 20x / 0.40 (spring) W.D. 2,14 mm		5x / 0,11 W.D. 6,73 mm	•	•	•	•	OBB-A1268	
Plan objectives (no cover glass) (20x / 0.40 (spring) W.D. 2,14 mm		10x / 0,25 W.D. 4,19 mm	•	•	•	•	OBB-A1244	
fino cover glass 40x / 0,65 (spring) W.D. 0,45 mm		20x / 0,40 (spring) W.D. 2,14 mm	0	0	0	0	OBB-A1251	
Infinity Plan objectives P	no cover glass)	· · ·	0	0	0	0	OBB-A1258	
Infinity Plan objectives P		100x / 1,25 (oil) (spring) W.D. 0,12 mm	0	•	0	•	OBB-A1241	
Plan objectives	nfinity	· · ·	•	•	•	•	OBB-A1252	
Trinocular tube Siedentopf, 30° inclined, 360° rotatable Siedentopf, 30° inclined, 30° in	Plan objectives		•	•	•	•	OBB-A1259	
Single Stage Sta	no cover glass)		0	0	0	0		
Sidentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 - 75 mm With diopter adjustment (both-sided) Sidentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 - 75 mm User distribution: 100.0 User adjustment (both-sided) Sidentopf, 30° inclined, 360° rotatable Interpupillary distance: 50 - 75 mm User distribution: 100.0 User d		, , , , , , , , , , , , , , , , , , ,						
Trinocular tube Interpupillary distance: 50 – 75 mm Light distribution: 100.0 With diopter adjustment (both-sided)	Binocular tube	Siedentopf, 30°inclined, 360° rotatable Interpupillary distance: 50 – 75 mm	•	•	•	•		
Stage size: WxD 200x140 mm	rinocular tube	Interpupillary distance: 50 – 75mm Light distribution: 100:0	0	o	o	o	OBB-A1344	
Travel: 78x55 mm	Nosepiece	Quintuple	•	•	•	•		
Travel: 78x55 mm		Travel: 78x55 mm Stage fast lowering unit	•		•			
Glass plate Glass plate Glass plate O O O O O O O O O		Travel: 78x55 mm		•		•		
Clip Clip Clip • OBB-A1134	Stage plate	Plate for sample placement	•	•	•	•		
Stage micrometer Specimen slide with scale reticule 0,01 mm O O O O BB-A1224 Polarising unit Polarising / Analyser slide ● ● ● OBB-A1287 Condenser Abbe N.A. 1,25 (aperture diaphragm) ● ● OBB-A1380 Illumination 6V / 20W Halogen (transmitting) ● ● OBB-A1204 12V / 50W Halogen (reflecting) ● ● OBB-A1207 12V / 100W Halogen (reflecting) ● ● OBB-A1376 Field diaphragm ● ● OBB-A1376 Filter Green O O O OBB-A1176 Yellow O O O OBB-A1202 1x O O O OBB-A1361	Glass plate	Glass plate		0		0	OBB-A1378	
Polarising unit Polarising / Analyser slide Polarising / Analyser	Clip	Clip		•		•	OBB-A1134	
Condenser		Specimen slide with scale reticule 0,01 mm	0	o	0	o	OBB-A1224	
Illumination	Polarising unit	Polarising / Analyser slide	•	•	•	•	OBB-A1287	
Illumination	Condenser	Abbe N.A. 1,25 (aperture diaphragm)		•		•	OBB-A1380	
Table Tabl		6V / 20W Halogen (transmitting)		•		•	OBB-A1204	
Field diaphragm Image: Company of the property of the	Illumination	12V / 50W Halogen (reflecting)	•	•			OBB-A1207	
Filter Blue O ● O ● OBB-A1176 Green O O O OBB-A1192 Yellow O O O OBB-A1202 1x O O O OBB-A1361		12V / 100W Halogen (reflecting)			•	•	OBB-A1376	
Filter O O O O OBB-A1192 Yellow O O O OBB-A1202 1x O O O OBB-A1361	Field diaphragm	Field diaphragm		•		•		
Yellow		Blue	0	•	0	•	OBB-A1176	
Yellow O O O OBB-A1202 1x O O O OBB-A1361	Filter	Green	0	0	0	0	OBB-A1192	
1x O O O O OBB-A1361			0	0	0	0		
		1x	0	0	0	0		
C-Mount 0,57x (focus adjustable) 0 0 0 0 OBB-A1136	C-Mount	0,57x (focus adjustable)	0	0	0	0	OBB-A1136	

• = Standard configuration

o = Option

KERN Pictograms:





360° rotatable microscope head



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



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Monocular Microscope

For the inspection with one eye



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



Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram.



Binocular Microscope

For the inspection with both eyes



Phase contrast unit

For a higher contrast



Battery operation

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



Trinocular Microscope

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



Polarising unit

To polarise the light



Rechargeable battery pack

Rechargeable set.



Abbe Condenser

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



Infinity system

Infinity corrected optical system



Mains adapter

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



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



Power supply

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



LED illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Package shipment

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



Incident illumination

For non-transparent objects



Integrated scale

In the eyepiece



Warranty

The warranty period is shown in the pictogram.



Transmitting illumination

For transparent objects



Integrated USB 2.0 digital camera

For direct transmitting of the picture to a PC



LWD

Fluorescence illumination

For stereomicroscopes



N.A.

Integrated 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

High (Super) Wide Field H(S)WF

> (Eyepiece with high eye point for wearers of glasses)

Long Working Distance

SLR Kamera Single-Lens Reflex camera

Numerical Aperture

W.D. Working Distance

WF

Wide Field (Field number up to

Ø22 mm for 10x eyepiece)

SWF Super Wide Field

(Field number at least Ø 23 mm

for 10x eyepiece)

Your KERN specialist dealer: