

MODULAR Series



Advanced Modular Stereozoom Microscopes



Modular Series

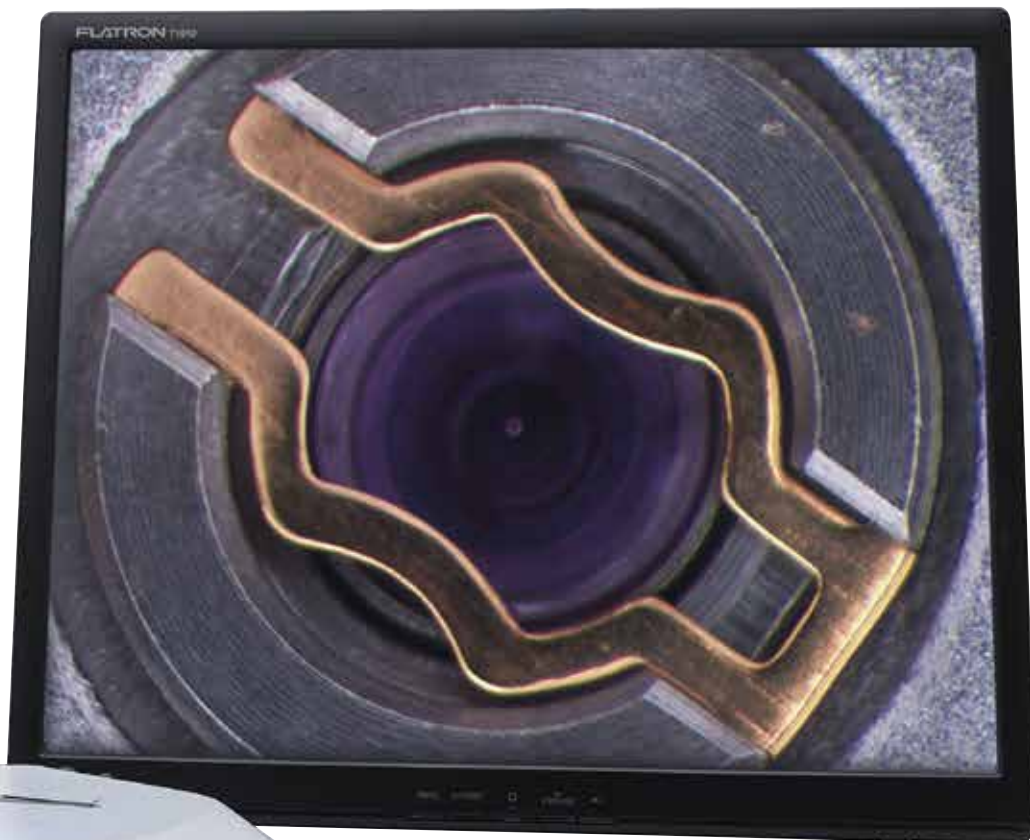
Identify The Most Suitable Heads For Your Needs

OPTIKA provides three series of stereomicroscope heads based on different field number, zoom level (and consequently, zoom ratio), inclination, and working distance.

An even more substantial differentiating element is also the optical system: choose between Greenough or Galilean.

Multiple Mounting Stands and Configurations

An extremely wide stand selection gives you the chance to create your tailored stereomicroscope! Choose among the several models available to virtually cover every customers' needs, in terms of illumination, arm extension, and focusing system.



Modular Stereozoom Microscopes

Overhanging Stand, In Case Of Large Samples

This stand is recommended for efficient, quick and precise observation and digital imaging of large samples, that cannot be processed with regular stands. Achieve 360° rotation and smooth movement with no limits, as the mechanism can be tilted from right to left, backward to forward.

ST-172

Get the most out of our accessories

ST-172 - Iris diaphragm module

With this accessory, the depth of field of the final image can be adjusted, for applications where different planes all in focus are needed.



OUT-OF-FOCUS AREA

With iris diaphragm open

FOCUS PLANE



IN-FOCUS AREA

With iris diaphragm close

Soldered Led Pin - SZP-8 with iris diaphragm module and ST-156 stand.



Applications

Some application examples demonstrating the versatility of stereomicroscopes with SZM, SZO and SZP heads. Applications in industrial and research are extremely facilitated by the advanced functionality offered.

Legend

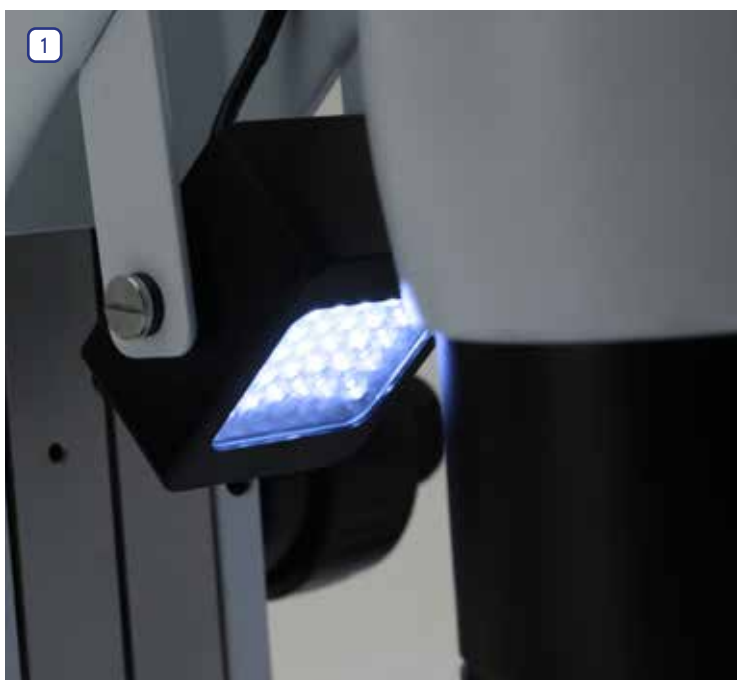
1. Matrix LED adjustable incident illuminator on ST-156.
2. SZ-STL2H overhanging stand, SZO-T head and CL-41 flexible arm LED illuminator.
3. Sample of copper-brass weld interface.
4. CL-16.1 LED ring illuminator.
5. Oblique illumination using a CLD-01 cold light generator.
6. Inspection of a steel blade.
7. Applications in electronics manufacturing.
8. CLD-01 LED illuminator with CL-11.1 double-arm optical fiber guide.

Modular Series

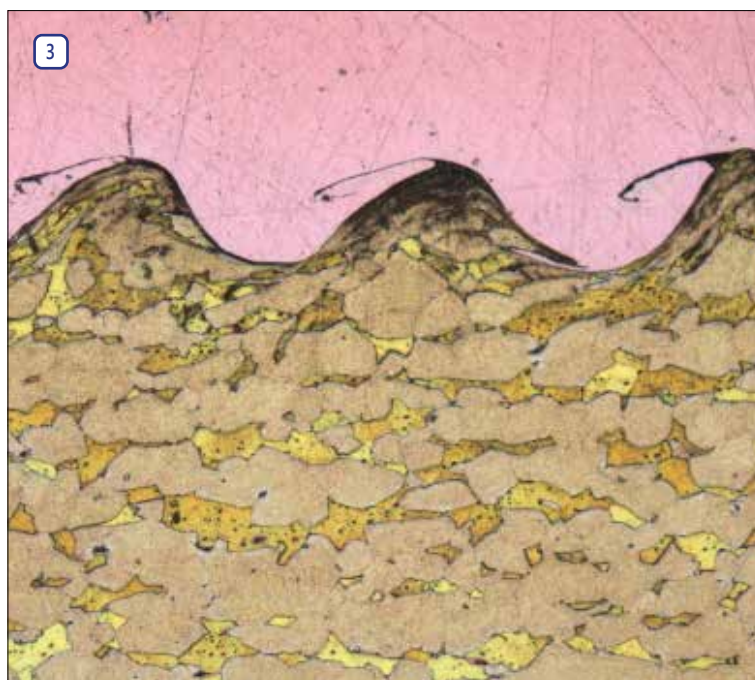
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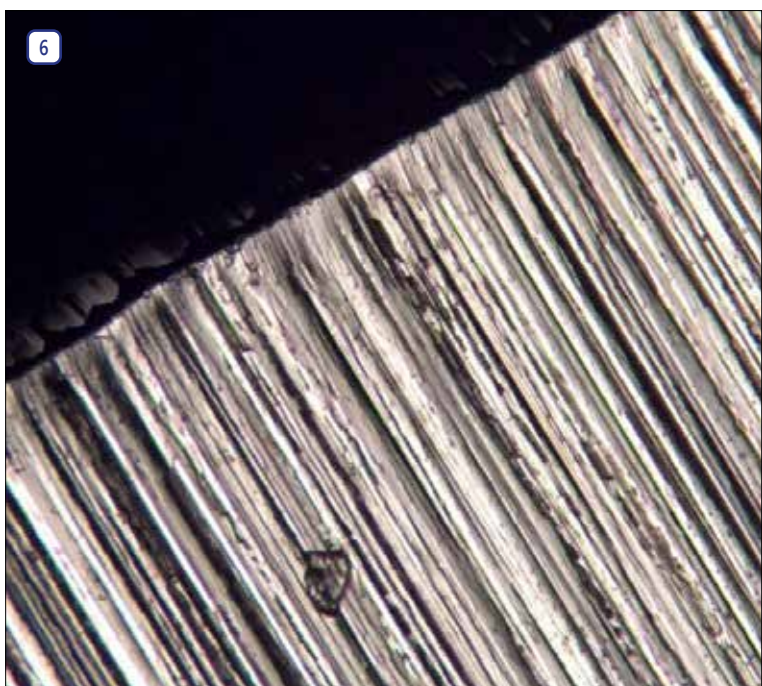
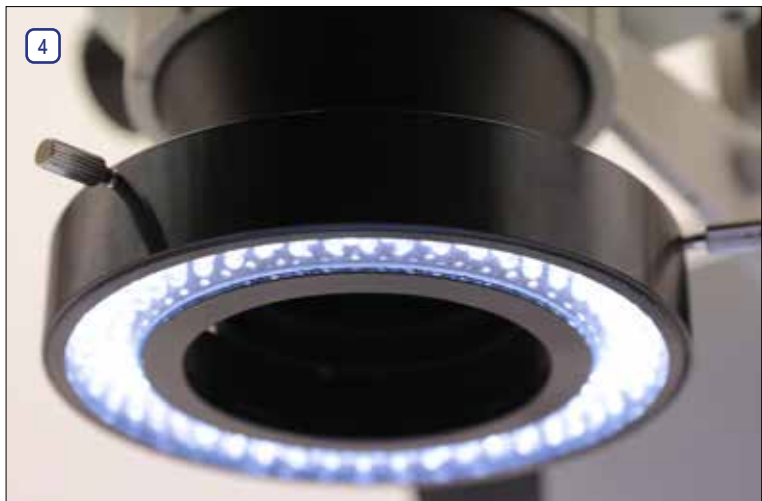


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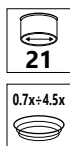


MODULAR Series - Heads

OPTIKA provides three series of stereomicroscope heads based on different field number, zoom level (and consequently, zoom ratio), inclination, and working distance. An even more substantial differentiating element is also the optical system: choose between Greenough or Galilean, according to the application.

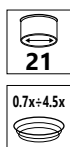


SZM-B



Part	Description
Head:	Binocular, 360° rotating on all stands and 45° inclined.
Interpup. distance:	Adjustable between 51 and 75 mm.
Dioptric adjustment:	On both eyepiece tubes.
Eyepieces:	WF10x/21 mm, high eye-point.
Objective:	Parfocal achromatic zoom 0.7x...4.5x (zoom factor 6.43:1).
Working distance:	100 mm
Optical system:	Greenough (15° inclined)

SZM-T



Part	Description
Head:	Trinocular, 360° rotating on all stands and 45° inclined. 2-position photo port: 100/0 and 0/100 (on right eyepiece tube).
Interpup. distance:	Adjustable between 51 and 75 mm.
Dioptric adjustment:	On both eyepiece tubes.
Eyepieces:	WF10x/21 mm, high eye-point.
Objective:	Parfocal achromatic zoom 0.7x...4.5x (zoom factor 6.43:1).
Working distance:	100 mm
Optical system:	Greenough (15° inclined)

MODULAR Series - Heads

SZO-B



Part	Description
Head:	Binocular, 360° rotating on all stands and 45° inclined.
Interpup. distance:	Adjustable between 51 and 75 mm.
Dioptric adjustment:	On both eyepieces.
Eyepieces:	WF10x/23 mm, high eye-point.
Objective:	Parfocal achromatic zoom 0.67x...4.5x (zoom factor 6.72:1) with click-stop detents.
Working distance:	110 mm
Optical system:	Greenough (15° inclined)

SZO-T



Part	Description
Head:	Trinocular (fixed photo port 70/30), 360° rotating on all stands and 45° inclined.
Interpup. distance:	Adjustable between 51 and 75 mm.
Dioptric adjustment:	On both eyepieces.
Eyepieces:	WF10x/23 mm, high eye-point.
Objective:	Parfocal achromatic zoom 0.67x...4.5x (zoom factor 6.72:1) with click-stop detents.
Working distance:	110 mm
Optical system:	Greenough (15° inclined)

MODULAR Series - Heads

SZP-6, SZP-8, SZP-10



Part	Description
Head:	Binocular, 360° rotating on all stands and 30° inclined.
Interpup. distance:	Adjustable between 52 and 75 mm.
Dioptric adjustment:	On both eyepieces.
Eyepieces:	WF10x/24 mm, high eye-point.
SZP-6 zoom body:	Parfocal achromatic zoom 0.8x...5.0x (zoom factor 6.25:1).
SZP-8 zoom body:	Parfocal achromatic zoom 0.8x...6.4x (zoom factor 8:1).
SZP-10 zoom body:	Parfocal achromatic zoom 0.8x...8.0x (zoom factor 10:1).
Objective lens:	Plan Achromatic 1x.
Working distance:	80 mm.
Optical system:	Galilean (Parallel, infinity corrected).



SZP-6e, SZP-8e, SZP-10e



Part	Description
Head:	Ergonomical binocular, 360° rotating on all stands and freely inclinable from 0° to 35°.
Interpup. distance:	Adjustable between 55 and 80 mm.
Dioptric adjustment:	On both eyepieces.
Eyepieces:	WF10x/24 mm, high eye-point.
SZP-6e zoom body:	Parfocal achromatic zoom 0.8x...5.0x (zoom factor 6.25:1).
SZP-8e zoom body:	Parfocal achromatic zoom 0.8x...6.4x (zoom factor 8:1).
SZP-10e zoom body:	Parfocal achromatic zoom 0.8x...8.0x (zoom factor 10:1).
Objective lens:	Plan Achromatic 1x.
Working distance:	80 mm.
Optical system:	Galilean (Parallel, infinity corrected).



MODULAR Series - Optical Performance

SZM Heads

Eyepiece	10x (ST-081)		15x (ST-082)		20x (ST-083)	
Field number (mm)	21		15		10	
Objective	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)
0.5x (W.D. 165 mm)	3.5x-22.5x	60.00-9.23	5.25x-33.75x	42.86-6.67	7x-45x	28.57-4.44
0.75x (W.D. 117 mm)	5.25x-33.75x	40.00-6.22	7.875x-50.625x	28.57-4.44	10.50x-67.5x	19.05-2.96
1x (W.D. 100 mm)	7x-45x	30.00-4.66	10.5x-67.5x	21.43-3.33	14x-90x	14.29-2.22
1.5x (W.D. 47 mm)	10.50x-67.5x	20.00-3.11	15.75x-101.25x	14.29-2.22	21x-135x	9.52-1.48
2x (W.D. 33 mm)	14x-90x	15.00-2.33	21x-135x	10.71-1.67	28x-180x	7.14-1.11

SZO Heads

Eyepiece	10x (ST-301)		15x (ST-302)		20x (ST-303)		25x (ST-144)	
Field number (mm)	23		16		12		9	
Objective	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)
0.3x (W.D: 287 mm)	2.01x-13.5x	114.43-17.04	3.02x-20.25x	79.60-11.85	4.02x-27x	59.70-8.89	5.025x-33.75x	44.78-6.67
0.5x (W.D: 177 mm)	3.35x-22.5x	68.66-10.22	5.02x-33.75x	47.76-7.11	6.7x-45x	35.82-5.33	8.375x-56.25x	26.87-4.00
0.75x (W.D: 120 mm)	5.02x-33.75x	45.77-6.81	7.54x-50.63x	31.84-4.74	10.05x-67.5x	23.88-3.56	12.5625x-84.375x	17.91-2.67
1x (W.D: 110 mm)	6.7x-45x	34.33-5.11	10.05x-67.50x	23.88-3.56	13.4x-90x	17.91-2.67	16.75x-112.5x	13.43-2.00
1.5x (W.D: 47 mm)	10.05x-67.5x	22.89-3.41	15.08x-101.25	15.92-2.37	20.1x-135x	11.94-1.78	25.125x-168.75x	8.96-1.33
2x (W.D: 26 mm)	13.4x-90x	17.16-2.56	20.10x-135.00x	11.94-1.78	26.8x-180x	8.96-1.33	33.5x-225x	6.72-1.00

SZP Heads

Optical performance SZP-6 / SZP-6e

Eyepiece	10x (ST-160)		15x (ST-161)		20x (ST-162)	
Field number (mm)	24		15		10	
Objective	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)
0.3x (W.D: 280 mm)	2.4x-15x	100.00-16.00	3.6x-22.5x	62.50-10.00	4.8x-30x	41.67-6.67
0.5x (W.D: 165 mm)	4x-25x	60.00-9.60	6x-37.5x	37.50-6.00	8x-50x	25.00-4.00
1x (W.D: 80 mm)	8x-50x	30-4.80	12x-75x	18.75-3.00	16x-100x	12.50-2.00
2x (W.D: 32.5 mm)	16x-100x	15-2.40	24x-150x	9.38-1.50	32x-200x	6.25-1.00

Optical performance SZP-8 / SZP-8e

Eyepiece	10x (ST-160)		15x (ST-161)		20x (ST-162)	
Field number (mm)	24		15		10	
Objective	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)
0.3x (W.D: 280 mm)	2.4x-19.2x	100.00-12.50	3.6x-28.8x	62.50-7.81	4.8x-38.4x	41.67-5.21
0.5x (W.D: 165 mm)	4x-32x	60.00-7.50	6x-48x	37.50-4.69	8x-64x	25.00-3.13
1x (W.D: 80 mm)	8x-64x	30.00-3.75	12x-96x	18.75-2.34	16x-128x	12.50-1.56
2x (W.D: 32.5 mm)	16x-128x	15.00-1.88	24x-192x	9.38-1.17	32x-256x	6.25-0.78

Optical performance SZP-10 / SZP-10e

Eyepiece	10x (ST-160)		15x (ST-161)		20x (ST-162)	
Field number (mm)	24		15		10	
Objective	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)	Total magnification	Field of View (mm)
0.3x (W.D: 280 mm)	2.4x-24x	100.00-10.00	3.6x-36x	62.50-6.25	4.8x-48x	41.67-4.17
0.5x (W.D: 165 mm)	4x-40x	60.00-6.00	6x-60x	37.50-3.75	8x-80x	25.00-2.50
1x (W.D: 80 mm)	8x-80x	30.00-3.00	12x-120x	18.75-1.88	16x-160x	12.50-1.25
2x (W.D: 32.5 mm)	16x-160x	15.00-1.50	24x-240x	9.38-0.94	32x-320x	6.25-0.63

MODULAR Series - Accessories for Heads

ACCESSORIES FOR SZM HEADS

Eyecups & Eyepieces

ST-036	Eyecups (pair), curved
ST-081	WF10x/21 eyepieces (pair), high eyepoint, with rubber cup
ST-082	WF15x/15 eyepieces (pair), high eyepoint
ST-083	WF20x/10 eyepieces (pair), high eyepoint
ST-084	WF10x/21 micrometric eyepiece, high eyepoint, with rubber cup

Objectives & Additional Lenses

ST-091	Additional lens 0.75x (w.d. 105mm)
ST-087	Additional lens 2x (w.d. 33mm)

Camera Adapters

M-113.1	Ring adapter, 30mm (for monocular and binocular microscopes)
M-115	0.35x C-Mount projection lens
M-114	0.5x C-Mount projection lens
M-118	0.75x C-Mount projection lens
M-173	C-Mount projection lens for APS-C/full frame reflex cameras (trino)
M-699	Universal adapter for C-Mount projection lens (trino)
ST-090	0.35x focusable C-Mount adapter (stereomicroscopes)
ST-090.1	0.5x focusable C-Mount adapter (stereomicroscopes)
ST-090.2	0.65x focusable C-Mount adapter (stereomicroscopes)
M-620.3	1x focusable C-Mount adapter (biological & stereomicroscopes)

Miscellaneous

15104	Cleaning kit
DC-002	Plastic dust cover, medium, 490(l)x490(h) mm
M-005	Micrometric slide, 26x76mm, with 2 scales (1mm/100 & 10mm/100)
ST-092	Protective glass for stereohead
VP-SZM	IQ/OQ/PQ manual for SZM series

ACCESSORIES FOR SZO HEADS

Eyecups & Eyepieces

ST-144	WF25x/9 eyepieces (pair), high eyepoint, focusable, with rubber cup
ST-301	WF10x/23 eyepieces (pair), high eyepoint, focusable, with rubber cup
ST-302	WF15x/16 eyepieces (pair), high eyepoint, focusable, with rubber cup
ST-303	WF20x/12 eyepieces (pair), high eyepoint, focusable, with rubber cup
ST-305	WF10x/23 micrometric eyepiece, high eyepoint, focusable, rubber cup

Objectives & Additional Lenses

ST-102	Additional lens 0.3x (w.d. 287mm)
ST-103	Additional lens 0.5x (w.d. 177mm)
ST-104	Additional lens 0.75x (w.d. 120mm)
ST-105	Additional lens 1.5x (w.d. 47mm)
ST-106	Additional lens 2x (w.d. 26mm)
SZ-EXT	Spacer for negative additional lenses

Camera Adapters

M-113.1	Ring adapter, 30mm (for monocular and binocular microscopes)
M-115	0.35x C-Mount projection lens
M-114	0.5x C-Mount projection lens
M-118	0.75x C-Mount projection lens
M-173	C-Mount projection lens for APS-C/full frame reflex cameras (trino)
M-699	Universal adapter for C-Mount projection lens (trino)
ST-090	0.35x focusable C-Mount adapter (stereomicroscopes)
ST-090.1	0.5x focusable C-Mount adapter (stereomicroscopes)
ST-090.2	0.65x focusable C-Mount adapter (stereomicroscopes)
M-620.3	1x focusable C-Mount adapter (biological & stereomicroscopes)

Miscellaneous

15104	Cleaning kit
DC-002	Plastic dust cover, medium, 490(l)x490(h) mm
DC-004	TNT dust cover, large, 700(l)x550(h) mm
M-005	Micrometric slide, 26x76mm, with 2 scales (1mm/100 & 10mm/100)
ST-092	Protective glass for stereohead
VP-SZ	IQ/OQ/PQ manual for SZ series

ACCESSORIES FOR SZP HEADS

Eyecups & Eyepieces

ST-160	WF10x/24 eyepiece, high eyepoint, focusable, with rubber cup
ST-161	WF15x/16 eyepieces (pair), focusable, with rubber cup
ST-162	WF20x/12 eyepieces (pair), focusable, with rubber cup
ST-163	WF10x/24 micrometric eyepiece, high eyepoint, focusable, rubber cup

Objectives & Additional Lenses

ST-165	0.3x objective (w.d. 280mm)
ST-166	0.5x objective (w.d. 118mm)
ST-167	2x objective (w.d. 32.5mm)

Camera Adapters

M-113.1	Ring adapter, 30mm (for monocular and binocular microscopes)
M-115	0.35x C-Mount projection lens
M-114	0.5x C-Mount projection lens
M-118	0.75x C-Mount projection lens
M-173	C-Mount projection lens for APS-C/full frame reflex cameras (trino)
M-699	Universal adapter for C-Mount projection lens (trino)
ST-090	0.35x focusable C-Mount adapter (stereomicroscopes)
ST-090.1	0.5x focusable C-Mount adapter (stereomicroscopes)
ST-090.2	0.65x focusable C-Mount adapter (stereomicroscopes)
M-620.3	1x focusable C-Mount adapter (biological & stereomicroscopes)

Miscellaneous

15104	Cleaning kit
DC-002	Plastic dust cover, medium, 490(l)x490(h) mm
M-005	Micrometric slide, 26x76mm, with 2 scales (1mm/100 & 10mm/100)
M-151	HBO 100W high-pressure mercury bulb for fluorescence
ST-098	Polarising set (filters and rotating stage - specify stand diameter)
ST-170	Photo/Video beam splitter - 1 port
ST-171	Photo/Video beam splitter - 2 port
ST-172	Iris diaphragm module
ST-176	Protective glass for stereohead
SZP-FL-EU	HBO fluo attachment, 3-pos. (B & G filter set), EU
SZP-FL-UK	HBO fluo attachment, 3-pos. (B & G filter set), UK
SZP-FL-US	HBO fluo attachment, 3-pos. (B & G filter set), US
SZP-FL-SW	HBO fluo attachment, 3-pos. (B & G filter set), CH
VP-SZP	IQ/OQ/PQ manual for SZP series



ST-172



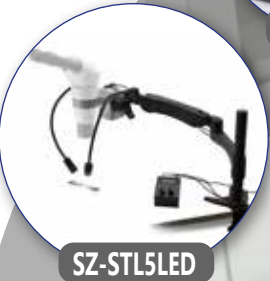
ST-170



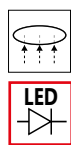
ST-171

MODULAR Series - Stands

An extremely wide stand selection gives you the chance to create your tailored stereomicroscope! Choose among the several models available to virtually cover every customers' needs, in terms of illumination, arm extension, and focusing system.



ST-150



Large, simple plain stand with head holder and focusing mechanism. **Pillar type.**

Base size: 320x290 mm. Pillar size: Ø32x360 mm.

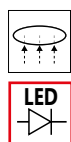
ST-151



Large plain stand with **LED transmitted illumination** and adjustable intensity control, head holder and focusing mechanism. **Pillar type.**

Base size: 320x290 mm. Pillar size: Ø32x360 mm.

ST-152



Large, simple plain stand with head holder and focusing mechanism. **Fixed arm type.**

Base size: 320x280 mm. Fixed arm height: 360 mm.

ST-153



Large plain stand with **LED transmitted illumination**, and adjustable intensity control, head holder and focusing mechanism. **Fixed arm type.**

Base size: 320x290 mm. Fixed arm height: 360 mm.

MODULAR Series - Stands

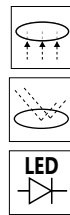
ST-155



ST-155 with SZP-8 head

Modern, large plain stand equipped with **LED transmitted and incident illumination**, both with **intensity control**. It comes complete of head holder and focusing mechanism.
 Base size: 330x290 mm. Height: 40 mm. Fixed arm height: 340 mm.
 Head not included.

ST-156



ST-156 with -8 head

Modern, large plain stand equipped with **LED transmitted and incident illumination**, both with **intensity control**. It comes complete of head holder and **coaxial coarse and fine focusing system**. Base size: 330x290 mm. Height: 40 mm.
 Fixed arm height: 340 mm. Head not included.

SZ-STL8



X-LED³: 60-LED illuminator for transmitted light

Modern stand equipped with the **exclusive X-LED³ lighting system** located in two flexible arms and extra-large **settable X-LED³ transmitted illumination** for enhanced brightness and improved sample observation.
Incident illuminator: Two X-LED3 (single LED, 3.6W) on flexible gooseneck. Illuminance: 170,000 lux (at 10 cm distance).
Transmitted illuminator: X-LED³ (60 LEDs).
 Base size: 270x210 mm. Height: 30 mm. Pillar: Ø32x315 mm.
 Multi-plug 100-240Vac/12Vdc external power supply.

SZ-STL1H



Extremely stable overhanging stand **complete of head holder and focusing system** for perpendicular observation of particularly large specimens. **Smooth horizontal and vertical movements** are ensured. In case illumination is needed, choose from the wide choice of **external illuminators** available.

Base dimensions: 230x230 mm.
Pillar: Ø32x420 mm.
Horizontal arm: 430 mm.

SZ-STL2H



Extremely stable, hinged and long overhanging stand complete of head holder and focusing system for observation of particularly large specimens. The head can be easily tilted for inspection at **oblique angles** ideal e.g. for stone setters. **Smooth horizontal and vertical movement** are ensured. In case illumination is needed, choose from the wide choice of **external illuminators** available.

Base dimensions: 255x210 mm.
Pillar: Ø32x420 mm.
Horizontal arm: 670 mm.

3 MODULAR Series - Stands

SZ-STL5



SZ-STL5L with SZO-T head



Wall mount & table clamp, both included

Highly versatile flexible arm stand, 360°rotating, ideal for industrial applications. It comes complete of **head holder with focusing system** and all the supports for **table clamp and wall mount**. **Small footprint** is ensured when not in use, saving valuable space on the bench. Head not included.

SZ-STL5LED



Mechanical component SZ-STL5LED and SZM-T



SZ-STL5LED with SZP-8 head

Highly versatile flexible arm stand, 360°rotating, ideal for industrial applications. It comes complete of the settable and **exclusive X-LED³ incident illumination system**, head holder with focusing system and all the supports for **table clamp and wall mount**. **Small footprint** is ensured when not in use, saving valuable space on the bench. Head not included. Multi-plug 100-240Vac/6Vdc external power supply.

SZ-STLX



Extremely stable, long overhanging stand complete of head holder and focusing system for observation of particularly large specimens. The head can be easily **swivelled** and **tilted** for inspection at **oblique angles**. **Smooth horizontal and vertical movements** are ensured. In case illumination is needed, choose from the wide choice of **external illuminators** available.

Base dimensions: 210×255 mm.
Pillar: Ø32×425 mm.
Horizontal arm: 790 mm (movement range 330 mm).
Swivel: 360°
Tilt: 180°
Weight: 16.25 kg
Head not included.

SZ-STLX with SZN-B head



SZ-STLX with SZ0-B head and CLD-01 + CL11.1

MODULAR Series - Accessories

Most of the time, it is of fundamental importance to combine a stereomicroscope with the right accessories, such as attachments, illuminators, and moving or heating stages are necessary for some specific applications.



ST-666



M-666



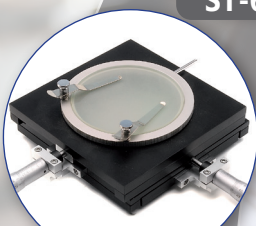
SZP-FL



CLD-01



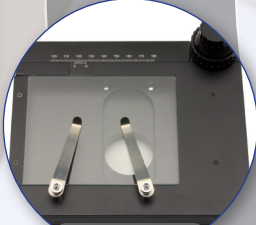
CL-30



ST-111



CL-31



ST-110



CL-41



ST-100



CL-11.1



CL-12



CL-18



CL-16.1

SZP-FL - Epi-Fluorescence Attachment

Attachment for fluorescence applications for SZP stereomicroscopes only.

Used in many applications like biology, botany, electronics, materials, forensics. Equipped with HBO 100W mercury lamp illuminator.
To be combined with ST-150 or ST-151 stand.



FL



ST-150

ST-151

Name	Excitation filter (nm)	Dichroic mirror cut-off (nm)	Emission filter (nm)
B Blue	460 - 500	505	510LP
G Green	510 - 550	570	575LP

SZP-FL	HBO fluorescence attachment for SZP heads
Description:	SZP fluorescence attachment for biology, industrial inspection, criminal justice, etc. Essential tool for security printing and mineral research.
Illumination:	100W HBO high-pressure mercury bulb. Average lamp lifetime: 400 hours. Input voltage: 110/240Vac, 50/60Hz, 1A ; Fuse: F8AL 250V. Maximum input power: 125W. Current and time counter LED displays.
Photo Attachment:	Trinocular output Photo/Video port.

MODULAR Series - Illuminators

CLD-01



Flexible and professional cold light illuminator with high power, extra-efficiency 14W LED system, extremely bright and uniform. Optical power: >1000 lumen. Color temperature: pure white 6,300 K. Brightness control potentiometer, external power supply.

CLD-01 with CL-11.1



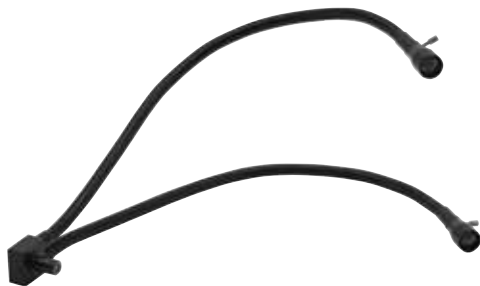
CL-17.1: Additional polarizing filters for CL-11.1

CLD-01 Accessories

The output can be coupled to the following accessories:

- CL-11.1: Double-arm optical fiber guide with focusing lenses. Arm length 500 mm.
- CL-17.1: Polarizing filters (pair) for CL-11.1.
- CL-12: Ring optical fiber guide (length 700 mm).
Guide diameter 16 mm.
Diameter of the fixing ring: 55mm.
The circular end is suitable for all stereo series.

CL-11.1



Double-arm guide for CLD-01, with focusing lenses.
Arm length 500 mm. Each arm fitted with focusable lens adapter.
Illuminance (at 10 cm distance): 100.000 lux.
Optional accessory:
CL-17.1: Polarizing filters (pair) for CL-11.1.

CL-12



Ring optical fiber guide for CLD-01.
Length 700 mm, diameter 16 mm.
The circular end is suitable for all series, by using the three locking screws. Diameter of the fixing ring: 55 mm.
Illuminance (at 10 cm distance): 40,000 lux.

CL-30



Double-arm Led illuminator.

Light sources: LED (x2); With 2W high efficiency LEDs.

Color temperature: pure white 6,300 K;

Luminous flux: 80 lm each arm;

Illuminance: 50,000 lux (at 10 cm distance).

Multi-plug 100-240Vac/12Vdc external power supply.

CL-31



Double-arm Led illuminator, with brightness control.

Light sources: LED (x2); With 2W high efficiency LEDs.

Color temperature: pure white 6,300 K;

Luminous flux: 80 lm each arm.

Illuminance: 50,000 lux (at 10 cm distance).

Multi-plug 100-240Vac/12Vdc external power supply.

CL-41



Double-arm X-LED³ illuminator, with brightness control.

Light sources: With 3,6 W high efficiency X-LED³.

Color temperature: pure white 6,300 K;

Luminous flux: 400 lm each arm;

Illuminance: 170,000 lux (at 10 cm distance).

Multi-plug 100-240Vac/12Vdc external power supply.

CL-14



56-LED ring light illuminator, with brightness control.

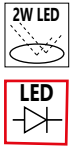
Compact, with 360° rotating ring connector.

Illuminance (at 10 cm distance): >8,000 lux.

Suitable for LAB, SZM and SZO.

MODULAR Series - Illuminators

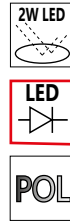
CL-16.1



Professional lighting system including 144 LEDs (2W total power) for enhanced light uniformity and brightness. The ring light illumination is divided into 4 different zones, individually adjustable for **selectable light zones**. The **separated, external control panel** prevents interferences during use, whilst the sturdy metal structure makes it **more durable and resistant**.

Diameter of the fixing ring: 60mm.
Color temperature: pure white 6,300 K.
Illuminance: 6,000 lux (at 10 cm distance).

CL-18



Professional lighting system including 96 LEDs for enhanced light uniformity and brightness, and **built-in rotating polarizing filter** and analyzer filters for complete polarization, ideal to reduce glares and reflections when viewing metallic parts.

Provided with **on-board intensity level adjustment**.
Diameter of the fixing ring: 60mm.
Color temperature: pure white 6,300 K.
Illuminance: 9,000 lux (at 10 cm distance).

MODULAR Series - Stages

ST-100 & ST-100.1



Hand moving stage

Dimensions: 185x145mm.
 Range: 56mm (X) x 35mm (Y).
 > ST-100: model for SZM-1 and SZM-2.
 > ST-100.1: model for SZM-LED1, SZM-LED2 and SZO.
 Please note that this item cannot be combined with SZO-5, SZO-6 and SZ-STL8. Specific versions available also for other models.
 Note: Fastening on microscope base on request.

ST-110 & ST-110.1



Moving stage, with knobs

Manual positioning stage, using knobs for X-Y movements.
 Dimensions: 180x155mm. Range: 75mm (X) x 54mm (Y).
 > ST-110: model for SZM-1 and SZM-2.
 > ST-110.1: model for SZM-LED1, SZM-LED2 and SZO.
 Please note that this item cannot be combined with SZO-5, SZO-6 and SZ-STL8. Specific versions available also for other models.
 Note: Fastening on microscope base on request.

ST-111 & ST-111.1



ST-666 & ST-666.1



Moving stage, with micrometer screws

Manual positioning stage, using micrometer screws.

Dimensions: 185x145mm. Range: 25mm (X) x 25mm (Y).

Micrometer screws resolution: 0.01mm.

> ST-111: model for SZM-1 and SZM-2.

> ST-111.1: model for SZM-LED1, SZM-LED2 and SZO.

Please note that this item cannot be combined with SZO-5, SZO-6 and SZ-STL8. Specific versions available also for other models.

Note: Fastening on microscope base on request.

Heating stage, round

Temperature range: 20°C (room temperature) – 50°C.

Temperature setting resolution: 1°C. Temperature measuring resolution:

0.1°C. Display: LED display for set temperature.

LED display for measured temperature.

> ST-666: model for SZM-1 and SZM-2.

> ST-666.1: model for SZM-LED1, SZM-LED2, SZO and SZ-STL8.

Specific versions available also for other models.

Note: Fastening on microscope base on request.



MODULAR Series - General Accessories

Miscellaneous

15104	Cleaning kit
DC-002	Plastic dust cover, medium, 490(l)x490(h) mm
DC-003	TNT dust cover, medium, 600(l)x550(h) mm
DC-004	TNT dust cover, large, 700(l)x550(h) mm
M-005	Micrometric slide, 26x76mm, with 2 scales (1mm/100 & 10mm/100)

15104 - Cleaning kit

It cleans glass quickly and effectively, without leaving residue or odor. Ideal for precision lens or prism cleaning.



How to connect the cameras to our microscopes.

Please refer to the Adapter reference list on Digital section.

v 1.4.0 - OPTIKA reserves the right to make corrections, modifications, enhancements, improvements and other changes to its products at any time without notice.

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