

OLYMPUS®

SZ SERIES

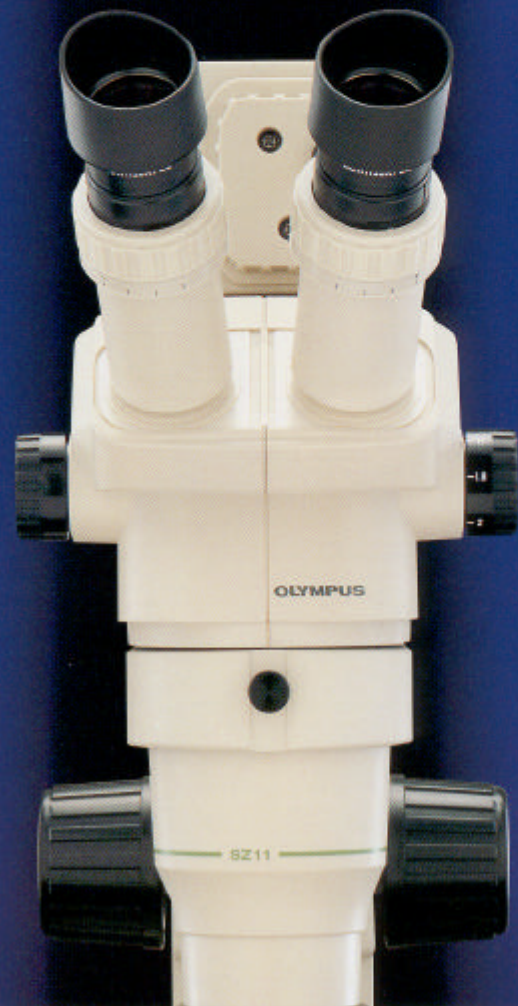
Zoom Stereo Microscopes



Advanced Technological Features in a S Enhanced Cost Effectiveness

The SZ World from Olympus—An Extended Lineup Plus A Host of Accessories— Performance to Exacting Requirements

Olympus' new SZ series meets the demand for higher precision in today's biological research, semi-conductor and other technological industries. In addition to high magnification factors and superb resolution, the compact design and extra-long working distance make this series perfect for use with bonders and probers. With a wide range of accessories available for all models, the four SZ series offer amazing versatility.



Slim Design for



Ideal image qualities for ultra-precise examination

The SZ series employs newly-designed Greenough optics, based on MTF (Modulation Transfer Function) analysis, for improved image flatness and contrast. As a result, images are brighter and more distinct even at the periphery of the field of view. With their large zoom range, these stereo microscopes are ideal for high-magnification, high-resolution observation in biological research, precision-oriented semi-conductor and other industries.

The microscope body your specialty demands

The SZ series includes various types of cost-effective microscope bodies to meet the needs of coaxial vertical illumination and TV observation. There are four different zoom ratio types with trinocular and binocular models at forty-five- and sixty-degree inclinations, with some models offering built-in coaxial vertical illuminators. Also, each tube allows interpupillary distance and diopter adjustments to suit the user.

- **Shade-free images of the specimen**

The coaxial vertical illuminator features a polarizer and 1/4" wavelength retardation plate for shade-free images that retain a high level of brightness through the entire depth of the specimen. As a further benefit, observation of liquid crystals and glass membrane-covered hybrid ICs is much simpler and more comfortable than with conventional models.

- **Trinocular tube with simple focusing**

Photomicrographic equipment or a TV camera may be mounted on the trinocular tube. With the C-mount TV adapter mounted, focusing of both the binocular tube and TV monitor is extremely simple. And super widefield TV observation through twice the area of conventional microscopes is also possible.

New GSWH series super widefield eyepieces

SZ series microscopes come with super widefield, high-eyepoint GSWH1 OX eyepieces, which enable observation over a wide area and are convenient for operators who wear glasses. 1 OX, 15X, 20X and 30X eyepieces are available.



Simple mounting to bonders and probers

Because of its original slim design and long working distance, the SZ series is perfect for use with bonders and probers. Various arms are available, allowing simple mounting to existing equipment. And zoom magnification adjustment knobs are mounted at the high position of the observation tube, which in turn provides extra convenience when mounting the microscope to other devices.



An SZ microscope mounted onto a prober
(photo courtesy of Tokyo Electron Ltd.)

A wide assortment of specialized accessories

A variety of accessories are available for use with the SZ series, including a trans-illuminator base and universal stand. Some accessories designed for the SZH series-Olympus' top-of-the-line zoom stereo microscopes-may also be adapted to the SZ series.

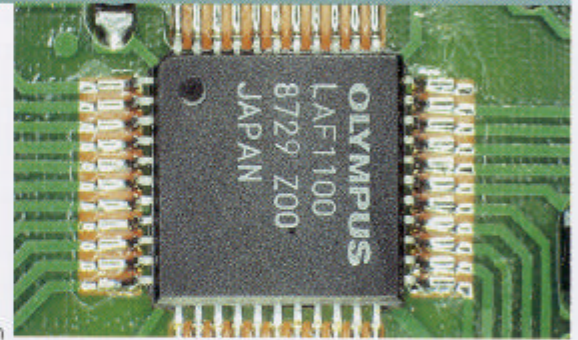
4 Types/14 Models Available Accommodating a Variety of High-Resolution, High-Magnification Microscopy

The sophisticated SZ11 microscope proves a powerful tool in the inspection of high-density ICs, examination of precision components and biotechnological fields.

SZ11

SZ1145CHI BINOCULAR TUBE WITH BUILT-IN COAXIAL VERTICAL ILLUMINATOR
 SZ1145TR PT TRINOCULAR TUBE WITH PHOTO TUBE
 SZ1145TR CTV TRINOCULAR TUBE WITH C-MOUNT
 SZ1145 BINOCULAR TUBE (INCLINED 45°)

The SZ11 series offers an extended zoom range for coverage of total magnification from 18X to 330X with high specification. In addition to high resolution image and high magnification, the series offers a working distance as long as 73mm and also the best suitability to inspection/assemble for high integrated circuit/high precise experiment. As a further benefit, it is very efficient also in the field of biology.



Auxiliary objectives: 0.5X, 1.5X, 2X



Basic Specifications

Item	Model	SZ1145 CHI	SZ1145 TRPT	SZ1145 TRCTV	SZ1145
Type		Greenough			
Objective		1.8X - 11X Zoom ratio: 6.1:1			
Working distance		63mm		73mm	
Observation tube inclination angle		45°			
Interpupillary distance adjustment range		50 - 76mm (left and right controls interlocked)			
Diopter adjustment		± 5 diopter (available on both eyes)			
Observation tube		w/ coaxial stand illuminator	Trinocular, w/ photo tube	Trinocular, w/ TV adapter	Binocular

Auxiliary Objectives (optional)

Auxiliary objective	Working distance (mm)	Coaxial stand illuminator usable range	
		GSWH10X	GSWH20X
73AL0.5X	114	△	△
73AL1.5X	36	△	○
73AL 2X	19	△	○

- : Usable at virtually all magnification factors. △: The field of view may darken at the periphery at low magnification factors.
- With the 1/4 wavelength retardation plate mounted, the working distance decreases by 10mm.
- 73AL1.5X and 73AL2X cannot be combined with the optional fiber optics ring light (LGR-2).

Optical Performance

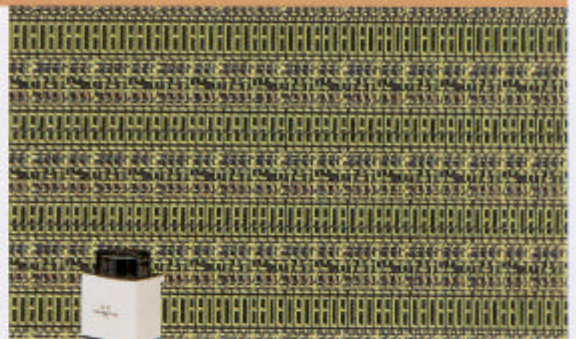
Microscope body	Zoom magnification	Working distance (mm)	Eyepiece		Eyepiece (Optional)					
			GSWH10X F.N. 22		GSWH15X F.N. 16.5		GSWH20X F.N. 12.5		GSWH30X F.N. 7	
			Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)
SZ1145 SZ1145TR	1.8X	73	18X	12.2	27X	9.2	36X	6.9	54X	3.9
	4X		40X	5.5	60X	4.1	80X	3.1	120X	1.8
	8X		80X	2.8	120X	2.1	160X	1.6	240X	0.9
	11X		110X	2	165X	1.5	220X	1.1	330X	0.6
SZ1145CHI	1.8X	63	18X	12.2	27X	9.2	36X	6.9	54X	3.9
	4X		40X	5.5	60X	4.1	80X	3.1	120X	1.8
	8X		80X	2.8	120X	2.1	160X	1.6	240X	0.9
	11X		110X	2	165X	1.5	220X	1.1	330X	0.6

The compact, lightweight design of the SZ60 is optimal for industrial inspection requiring high magnification powers and for machine mounting.

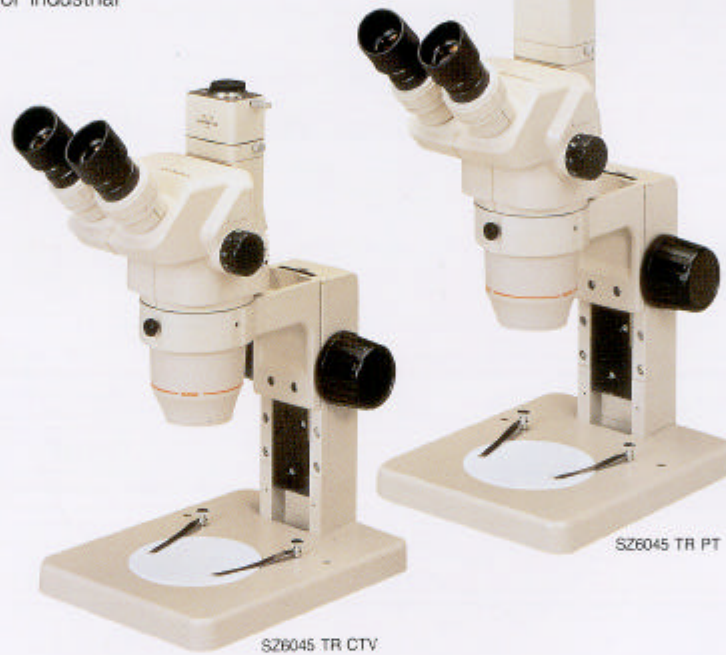
SZ60

SZ6045CHI BINOCULAR TUBE WITH BUILT-IN COAXIAL VERTICAL ILLUMINATOR
 SZ6045TR PT TRINOCULAR TUBE WITH PHOTO TUBE
 SZ6045TR CTV TRINOCULAR TUBE WITH C-MOUNT
 SZ6045 BINOCULAR TUBE (INCLINED 45°)

This series delivers sharp, high-contrast images and an excellent zoom range of 6.3:1 that guarantees observation of exceptionally high resolution images throughout a wide magnification range. 100mm working distance simplifies observation deep into the specimen, making it perfect for industrial inspection and for mounting on devices.



Auxiliary objectives: 0.5X, 1.5X, 2X



Basic Specifications

Model	SZ6045 CHI	SZ6045 TRPT	SZ6045 TRCTV	SZ6045
Item	Greenough			
Type	1X ~ 6.3X Zoom ratio: 6.3:1			
Objective	90mm	100mm		
Working distance	45°			
Observation tube inclination angle	50 ~ 76mm (left and right controls interlocked)			
Interpupillary distance adjustment range	± 5 diopter (available on both eyes)			
Diopter adjustment	w/ coaxial stand illuminator	Trinocular, w/ photo tube	Trinocular, w/ TV adapter	Binocular
Observation tube				

Auxiliary Objectives (optional)

Auxiliary objective	Working distance (mm)	Coaxial stand illuminator usable range	
		GSWH10X	GSWH20X
100AL0.5X	186	△	△
100AL1.5X	56	△	□
100AL 2X	36	△	△

- □: Usable at virtually all magnification factors. △: The field of view may darken at the periphery at low magnification factors.
- With the 1/4 wavelength retardation plate mounted, the working distance decreases by 10mm.
- 100AL2X cannot be combined with the optional fiber optics ring light (LGR-2).

Optical Performance

Microscope body	Zoom magnification	Working distance (mm)	Eyepiece		Eyepiece (Optional)					
			GSWH10X F.N. 22		GSWH15X F.N. 16.5		GSWH20X F.N. 12.5		GSWH30X F.N. 7	
			Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)
SZ6045 SZ6045TR	1X	100	10X	22	15X	16.5	20X	12.5	30X	7
	2X		20X	11	30X	8.3	40X	6.3	60X	3.5
	4X		40X	5.5	60X	4.1	80X	3.1	120X	1.8
	6.3X		63X	3.5	95X	2.6	126X	2	189X	1.1
SZ6045CHI	1X	90	10X	22	15X	16.5	20X	12.5	30X	7
	2X		20X	11	30X	6.3	40X	6.3	60X	3.5
	4X		40X	5.5	60X	4.1	80X	3.1	120X	1.8
	6.3X		63X	3.5	95X	2.6	126X	2	189X	1.1

A basic and versatile model, the SZ40 can be mounted on equipment and satisfies a wide range of applications—from training to uses in the pharmaceuticals field.

SZ40

SZ4045CHI BINOCULAR TUBE WITH BUILT-IN COAXIAL VERTICAL ILLUMINATOR
 SZ4045TR PT TRINOCULAR TUBE WITH PHOTO TUBE
 SZ4045TR CTV TRINOCULAR TUBE WITH C-MOUNT
 SZ4045 BINOCULAR TUBE (INCLINED 45°)
 SZ4060 BINOCULAR TUBE (INCLINED 60°)

The SZ40 series offers a working distance as long as 110mm and an extended zoom range for continuous coverage of magnification from 0.67X to 5X. Six types of auxiliary objectives are provided, with a variable working distance for 0.3X and 0.4X objectives, allowing connection to the bonder or prober without disturbing the operation of the machinery. Applications range from regular operation and equipment mounting to liquid crystal inspection and educational training.



Auxiliary objectives: 0.3X, 0.4X, 0.5X, 0.75X, 1.5X, 2X



SZ4060

SZ4045 CHI

SZ4045TR CTV

Basic Specifications

Item	Model	SZ4045	SZ4045	SZ4045	SZ4045	SZ4060
		CHI	TRPT	TRCTV		
Type		Greenough				
Objective		0.67X – 4X Zoom ratio: 6:1				
Working distance		100mm	110mm			
Observation tube inclination angle		45°				60°
Interpupillary distance adjustment range		50 ~ 76mm (left and right controls interlocked)				
Diopter adjustment		± 5 diopter (available on left eye only)				
Observation tube		w/ coaxial stand illuminator	Trinocular, w/ photo tube	Trinocular, w/ TV adapter	Binocular	Binocular

Auxiliary Objectives (optional)

Auxiliary objective	Working distance (mm)	Coaxial stand illuminator usable range		
		GSWH10X	GSWH20X	GSWH30X
* 110AL0.25X	400			Δ
110ALK0.3X	250 ~ 350		Δ	Δ
110ALK0.4X	180 ~ 250		Δ	Δ
110AL 0.5X	200		Δ	Δ
* 110AL0.62X	160	Δ	Δ	Δ
110AL0.75X	130	Δ	Δ	Δ
110AL 1.5X	61	Δ	Δ	○
110AL 2X	38	○	○	○

Optical Performance

Microscope body	Zoom magnification	Working distance (mm)	Eyepiece		Eyepiece (Optional)					
			GSWH10X F.N. 22		GSWH15X F.N. 16.5		GSWH20X F.N. 12.5		GSWH30X F.N. 7	
			Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)
SZ4045 SZ4045TR SZ4060	0.67X	110	6.7X	32.8	10X	24.6	13.4X	18.7	20X	10.4
	1X		10X	22	15X	16.5	20X	12.5	30X	7
	2X		20X	11	30X	8.3	40X	6.3	60X	3.5
	4X		40X	5.5	60X	4.1	80X	3.1	120X	1.8
SZ4045CHI	0.67X	100	6.7X	32.8	10X	24.6	13.4X	18.7	20X	10.4
	1X		10X	22	15X	16.5	20X	12.5	30X	7
	2X		20X	11	30X	8.3	40X	6.3	60X	3.5
	4X		40X	5.5	60X	4.1	80X	3.1	120X	1.8

- : Usable at virtually all magnification factors. Δ: The field of view may darken at the periphery at low magnification factors.
- With the 1/4 wavelength retardation plate mounted, the working distance decreases by 10mm.
- 110AL2X cannot be combined with the optional fiber optics ring light (LGR-2).
- * This auxiliary objective is a custom-made product.

Designed to perfectly fit bonders and probers, the SZ30 zoom stereo microscope features superior cost effectiveness.

SZ30

SZ3060
BINOCULAR TUBE
(INCLINED 60°)

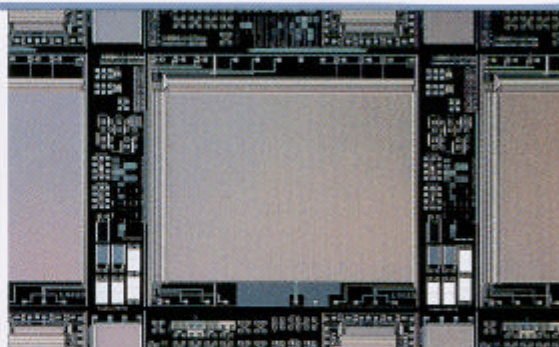
This model, developed primarily for mounting onto bonders and probers, offers excellent cost performance. The combination of a long working distance (110mm) and large zoom range of 0.9X to 4X means the user can expect superb optical performance and maneuverability.



Auxiliary objectives: 0.3X, 0.4X, 0.5X, 0.75X, 1.5X, 2X



SZ3060



Basic Specifications

Item	Model
	SZ3060
Type	Greenough
Objective	0.9X ~ 4X Zoom ratio: 4.4:1
Working distance	110mm
Observation tube inclination angle	60°
Interpupillary distance adjustment range	50 – 76mm (left and right controls interlocked)
Diopter adjustment	±5 diopter (available on left eye only)
Observation tube	Binocular

Optical Performance

Microscope body	Zoom magnification	Working distance (mm)	Eyepiece		Eyepiece (Optional)					
			GSWH10X F.N. 22		GSWH15X F.N. 16.5		GSWH20X F.N. 12.5		GSWH30X F.N. 7	
			Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)	Total magnification	Field of view (mm)
SZ3060	0.9X	110	9X	24.4	13.5X	18.3	18X	13.9	27X	7.8
	1X		10X	22	15X	16.5	20X	12.5	30X	7
	2X		20X	11	30X	8.3	40X	6.3	60X	3.5
	4X		40X	5.5	60X	4.1	80X	3.1	120X	1.8

■ Auxiliary objectives for SZ40 Series (optional) can be used.

Auxiliary Objectives (optional)

Auxiliary objective	Working distance (mm)	Coaxial stand illuminator usable range		
		GSWH10X	GSWH20X	GSWH30X
* 110AL0.25X	400			△
110ALK0.3X	250 – 350		△	△
110ALK0.4X	180 – 250		△	△
110AL 0.5X	200		△	△
* 110AL0.62X	160	△	△	△
110AL0.75X	130	△	△	△
110AL 1.5X	61	△	△	○
110AL 2X	38	○	○	○

■ ○ Usable at virtually all magnification factors. △: The field of view may darken at the periphery at low magnification factors.

■ With the 1/4 wavelength retardation plate mounted, the working distance decreases by 10mm.

■ 110AL2X cannot be combined with the optional fiber optics ring light (LGR-2).

* This auxiliary objective is a custom-made product.

A Variety of Arms and Stands are Available for Machine Mounting and Observation of Large-Sized Specimens



SZ-STU1

Universal Stand Type 1

The SZ-STU1 is designed for use with an SZ-STB1 bonder arm. The microscope body is tiltable during observation, thus expanding the working area. This helpful stand exhibits operational versatility in assembly/inspection lines in industry, as well as anatomical and electrophysiological testing in the biological world.



SZ-STU2+SZ-STS+PM10-AK

SZ-STU2

Universal Stand Type 2

Used in combination with the SZ-STS arm, the versatile SZ-STU2 universal stand type 2 allows a smooth adjustment of arm angle and length. This stand is perfect for inspection, photomicrography and TV mounting of large-sized specimens and on assembly lines. SZH microscope body can be also accepted on SZ-STU2.



SZ-STL+SZ-STLA+SZ-STB1

SZ-STL

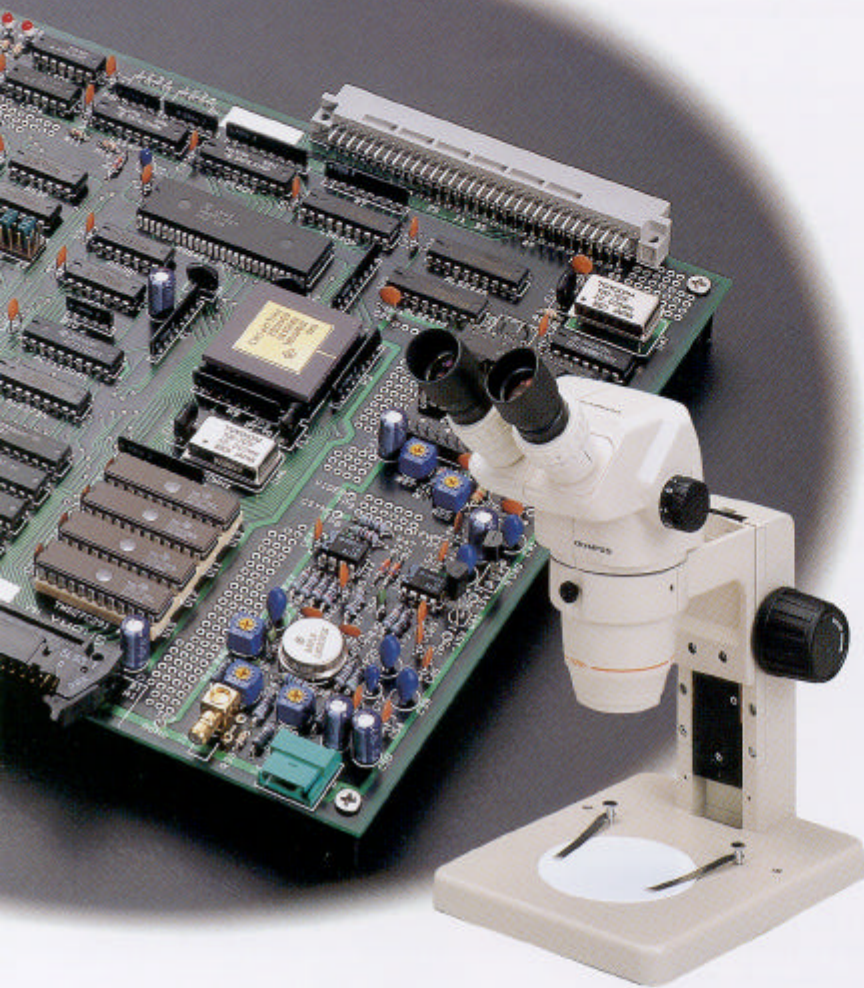
Large-size Microscope Stand

The large, sturdy SZ-STL stand allows the attachment of photomicrographic equipment and a TV camera. It is optimized for observation of large specimens during assembly and inspection of printed circuit boards, or other applications.



- ① **SZ-STB2:**
Bonder arm for Olympus stereo microscopes
- ② **SZ-STS:**
Arm for SZH stereo microscope bases
- ③ **SZ-STB1:**
B & L style bonder arm
- ④ **SZ-BLAD:**
Adapter for B & L bonder arms
- ⑤ **SZ-STP:**
Prober arm

Use of the appropriate arm allows the SZ series to be combined with various stands provided with the SZH zoom stereo microscope.



SZ-ST5 + SZH-ILLK

SZH-ILLK Simple Transmitted Light Illumination Base

Designed for use with the SZ-ST5 arm for the SZH microscope, the SZH-ILLK illumination base is equipped with a 6V, 20W pre-centered halogen bulb that delivers uniform, extra-bright illumination. Featuring high heat radiation efficiency, this base is ideal for observations frequently made in the biological field.

**Use of an SZ-ST5 arm also allows the mounting of various illumination bases provided for the SZH microscope.*



SZH-STAD-1 + BH2-SRG

SZH-STAD-1 + BH2-SH + SZ-ILA

SZH-STAD-1 Stage Adapter 1

The SZH-STAD-1 stage adapter 1 is used to attach the BH2-SRG circular rotating stage and the BH2-SH mechanical stage to the base section of the SZ microscope. This adapter can be used for reflected or transmitted light observation and it places the surface of the stage only 44mm above table-top level.

SZH-SC Cup Stage

The SZH-SC cup stage facilitates specimen positioning and can be freely adjusted to any desired angle.

SZH-SG Gliding Stage

The SZH-SG gliding stage permits free and smooth specimen manipulation on a horizontal plane over a 40mm range during microscopy.



SZH-SC

SZH-SG



SZ-FO + SZH-SG + SZ-ILA

SZ-FO + TV CAMERA System

SZ-FO

Focusing Stage

The SZ-FO stage is used in conjunction with the standard stand for the SZ series, the SZ-STL large-size microscope stand, or various stands for the SZH series. Because focus adjustment is made through vertical movement of the specimen, the specimen can be

brought into focus smoothly even when a TV system or photomicrographic equipment is attached. The range of vertical movement, as large as 21mm, enables combined use with a cup stage or a gliding stage.

Transmitted Light Illuminator, Coaxial Vertical Light Illuminator and Many Other Illumination Systems to Accommodate Expanded Applications



SZ-ILA+ SZ-ADD

SZ-ILA

Trans-illuminator Base

The SZ-ILA trans-illuminator base provides bright and uniform illumination from low to high magnifications.

Two illumination ways are available; LSGA (6V 15W HAL) + TL-2 and PMG3-LSH80 (12V 50W HAL)+SZ-CL50+TH3.

SZ-ADD

Dark field Adapter

When combined with an SZ-ILA trans-illuminator base, the SZ-ADD dark field adapter enables transmitted light dark field microscopy, which in turn accommodates the examination of striae in transparent materials and plankton in aqueous solution, as well as flaw detection.



SZ-VIA + LSGA + TL-2

SZ-VIA

Vertical Stand Illuminator

With a simple configuration, the SZ-VIA vertical stand illuminator facilitates high-contrast image observation of scratches on metal surfaces, IC chips, liquid crystal patterns and other objects, which was impossible under conventional oblique incident light illumination. It is designed for use with an LSGA3 epi-illuminator (employing a 6V 15W halogen bulb) that can be directly mounted to the stand, or an LSD stand illuminator (Incorporating 6V 30W tungsten bulb)

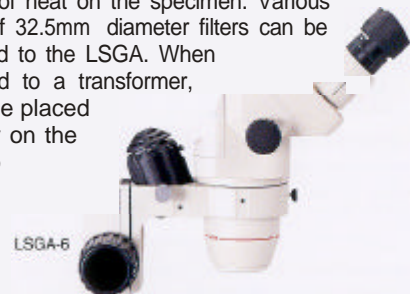


LSGA-3

LSGA

Epi-Illuminator

Employing a 6V, 15W high-intensity halogen bulb, the LSGA epi-illuminator is directly mountable to the microscope. The lamp housing incorporates a built-in, heat-insulating filter designed to minimize the adverse effects of heat on the specimen. Various types of 32.5mm diameter filters can be attached to the LSGA. When mounted to a transformer, it can be placed directly on the desktop

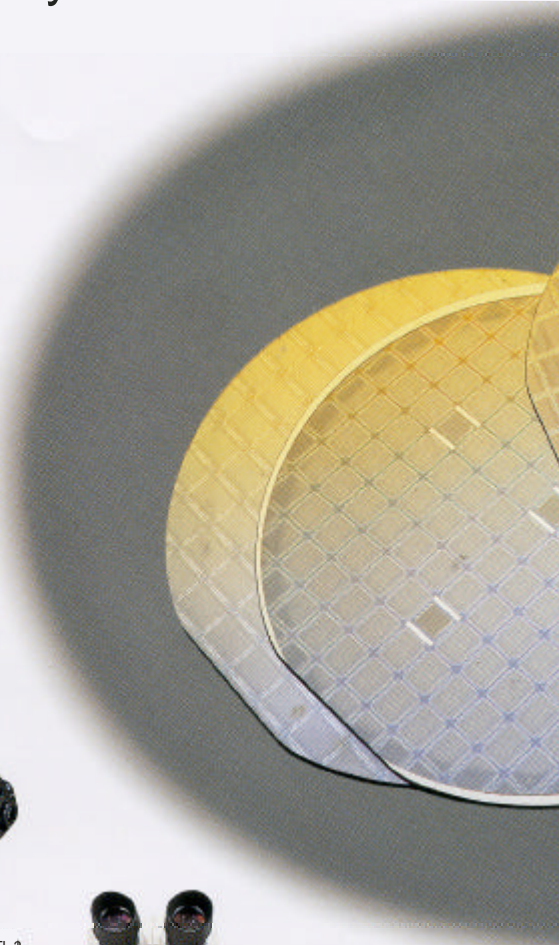


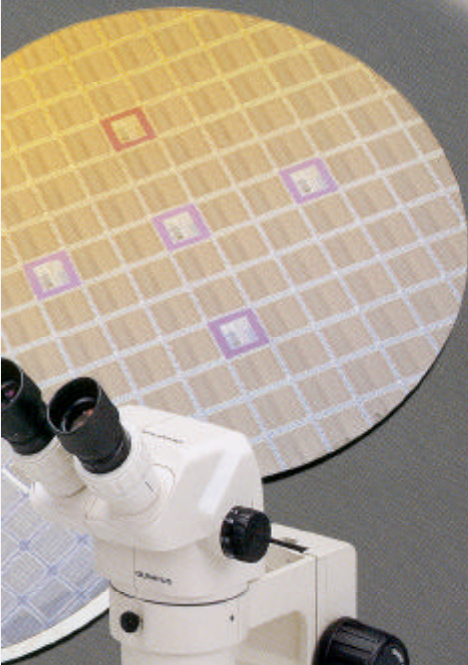
LSGA-6

LSD

Universal Illuminator

The LSD universal illuminator is designed for situations that call for especially bright illumination. Its stand configuration allows a selection of parallel luminous flux or convergent luminous flux, simply when placed alongside the microscope stand





SZ-FLR

Fluorescent Ring Illuminator

The SZ-FLR fluorescent ring illuminator assures a sharp, shadow-free field of view.



LGR

Fiber Optics Ring Light

The LGR fiber optics ring light provides a uniformly bright illumination with no shading to interrupt viewing of the subject. The illumination ring can be directly mounted on objectives, thus eliminating viewing interruptions. This cold light supply employs a 15V, 150W halogen bulb that is ideal for observation of specimens that are susceptible to heat.



LGW

Light Guide with Bifurcated Fiber Optics

The LGW light guide is capable of illuminating from any angle and position through the use of a flexible arm. The use of a collector lens also increases light intensity at high magnification powers, while also simplifying spot illumination.

LGW+PM10-AK

Perfect for photo-documentation of microscopic images.

PM10-AK3 Automatic Exposure Photomicrographic System

Featuring a lightweight, compact design plus automatic exposure and film advance, the PM10-AK photomicrographic system allows faithful reproduction of microscopic images onto the film plane.



Eyepieces & Measuring Instruments

GSWH Series Eyepiece Specifications

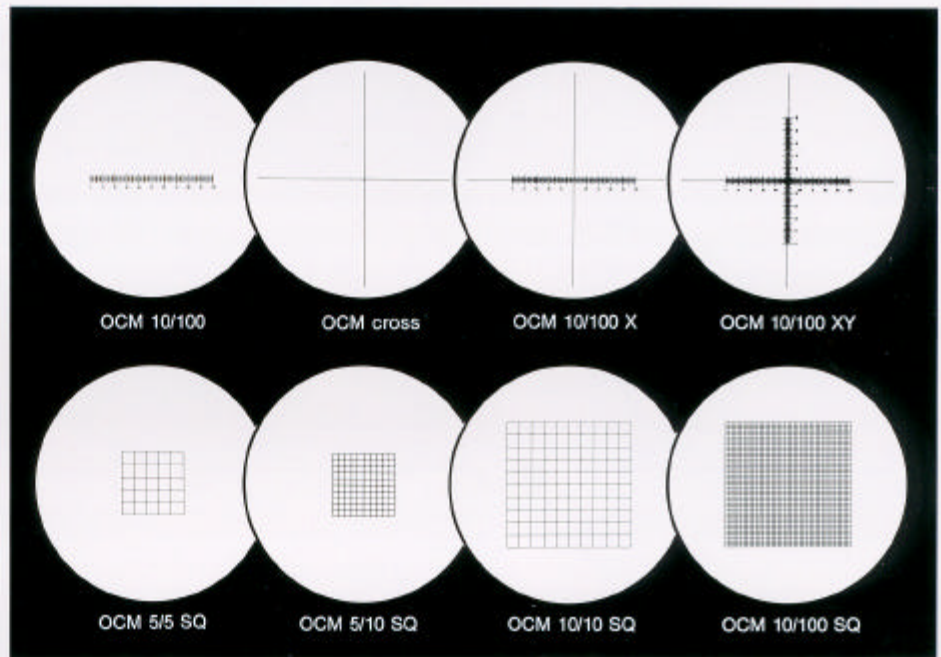
Item	Focus system	F.N.	Eye relief	Diopter adjustment	Micrometer
Eyepiece					
GSWH10X	Outside	22	24.6	Not available	φ24, mountable
GSWH10X-H			22.5	Available	
GSWH15X		16	18.8	Not available	
GSWH15X-H			18.0	Available	
GSWH20X	Inside	12.5	18.4	Not available	Not available
GSWH20X-H			18.4	Available	
GSWH20X-HC			18.4	Available	
GSWH30X		7	18.5	Not available	Not available
GSWH30X-H			18.5	Available	
GSWH30X-HC	18.5		Available	w/ cross	

OSM-4 Filar Micrometer Eyepiece

The OSM-4 is a compact and lightweight eyepiece that provides a high-precision digital readout of the specimen's dimensions.

- The eyepiece magnification is 10X, and its 10mm scale is divided into 10 increments. A single rotation of the micrometer drum provides a 1mm movement. The drum circumference is divided into 100 increments.

OSM-4



OC-M eyepiece Micrometers (φ24mm)

When the CC-M is inserted into the 10X or 15X eyepiece field iris diaphragm, the length of the specimen within the field of view may be measured. Various types are available to choose from depending on the specimen.

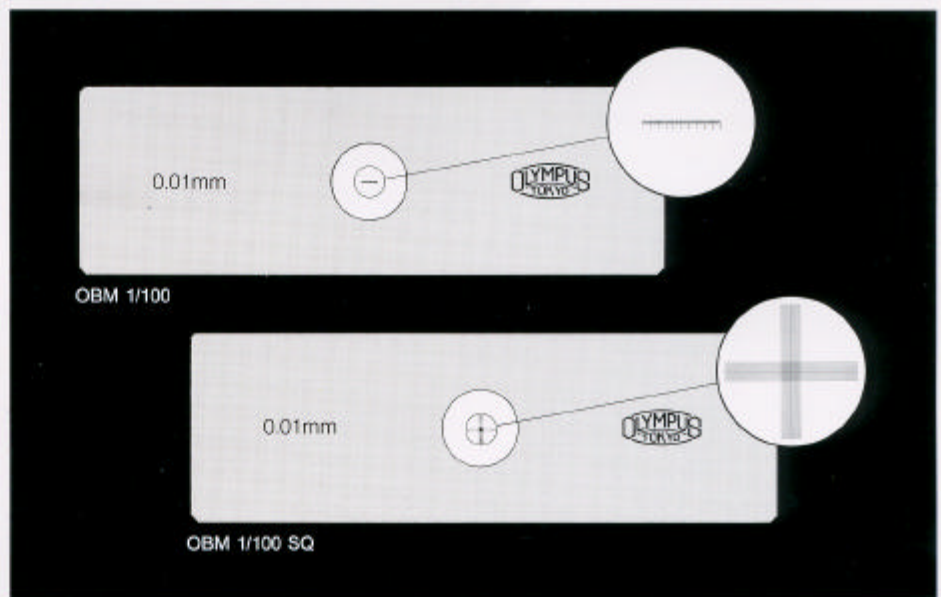
OBMM/OBM Stage Micrometer

The micrometer is utilized to calibrate micrometer reticles. Its 1mm scale is divided into 100 increments, on a 26mm x 76mm slide.

OBMM



for metallurgical specimens



for biological specimens

SZ series Specifications & Standard Outfits

Specifications

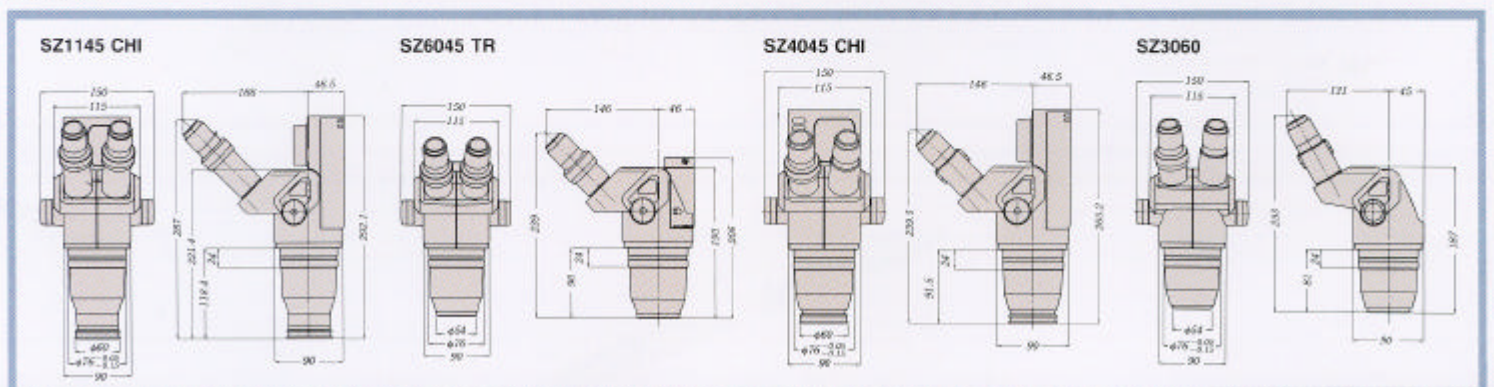
Models		SZ1145 CHI	SZ1145 TRPT	SZ1145 TRCTV	SZ1145	SZ6045 CHI	SZ6045 TRPT	SZ6045 TRCTV	SZ6045	SZ4045 CHI	SZ4045 TRPT	SZ4045 TRCTV	SZ4045	SZ4060	SZ3060
Microscope body	Magnification	1.8—11X				1—6.3X				0.67—4X				0.9—4X	
	Zoom ratio	6.1				6.3				6				4.4	
	Working distance	63mm	73mm			90mm	100mm			100mm	110mm				
	Observation tube inclination angle	45°											60°		
	Convergent angle	10°													
	Interpupillary distance adjustment	Left and right controls interlocked, range: 50-76mm (with eyepiece GSWH10X)													
	Diopter adjustment	± 5 diopt. (Available both eyes)								± 5 diopt. (Available left eye only)					
	Effective illumination range*	all mag	—			1.5X or higher	—			2.3X or higher	—				
	Photo tube/C-mount TV adaptor mounting port	—	Inner diameter: φ38mm		—	Inner diameter: φ38mm		—	Inner diameter: φ38mm		—				
Light path selection	—	100% BI or 100% CAMERA		—	100% BI or 100% CAMERA		—	100% BI or 100% CAMERA		—					
Eyepieces	Field number 22 (GSWH10X), φ24 micrometer mountable														
Stand	Microscope body mounting port	Inner diameter: φ76mm													
	Focus	Rack and pinion with ball bearing guide, height adjustment knob, standard stroke: 120mm													
	Applicable illuminator	Epi-illuminator, trans-illuminator base													
Stage plate	φ100mm, black & white, with stage clips														
Halogen bulbs	6V 20W	—			6V 20W	—			6V 20W	—					
Photo adaptor (intermediate magnification)	—	1X	—			1X	—			1X	—				
TV adaptor (intermediate magnification)	—	0.5X			—	0.5X			—	0.5X		—			

*With specimen tilted at an angle of 20° or less.

Specifications

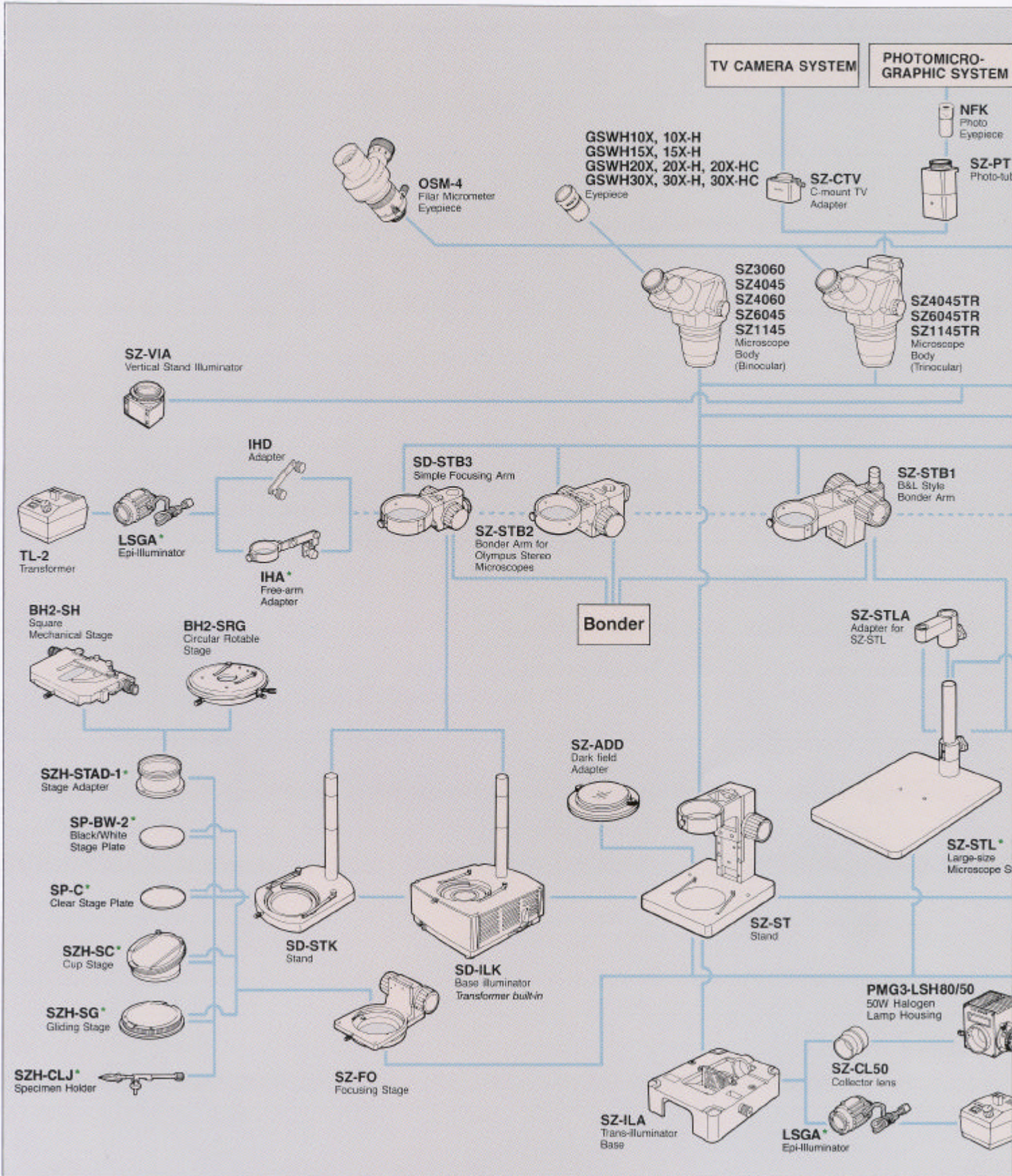
Models		SZ1145 CHI	SZ1145 TRPT	SZ1145 TRCTV	SZ1145	SZ6045 CHI	SZ6045 TRPT	SZ6045 TRCTV	SZ6045	SZ4045 CHI	SZ4045 TRPT	SZ4045 TRCTV	SZ4045	SZ4060	SZ3060
Microscope body	SZ1145CHI-F	○													
	SZ1145TR-F		○	○											
	SZ1145-F				○										
	SZ6045CHI-F					○									
	SZ6045TR-F						○	○							
	SZ6045-F								○						
	SZ4045CHI-F									○					
	SZ4045TR-F										○	○			
	SZ4045-F												○		
	SZ4060-F													○	
SZ3060-F														○	
Eyepiece	GSWH 10X	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)
Stand	SZ-ST	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Stage clips		○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)	○ (2 pcs.)
Stage plate (B&W)	SP-BW-2	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1/4 wavelength retardation plate		○				○				○					
Halogen bulbs	6V20WHAL	○ (2 pcs.)				○ (2 pcs.)				○ (2 pcs.)					
Transformer	TL-2	○				○				○					
Photo-tube	SZ-PT		○				○				○				
Photo eyepiece	NFK3.3XLD		○				○				○				
C-mount TV adaptor	SZ-CTV			○				○				○			

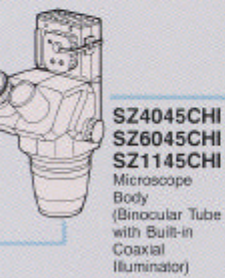
Dimensions



Specifications are subject to change without any obligation on the part of the manufacturer.

SZ Series System Diagram





SZ4045CHI
SZ6045CHI
SZ1145CHI
Microscope
Body
(Binocular Tube
with Built-in
Coaxial
Illuminator)



TL-2
Transformer

For SZ30, SZ40 series

W.D.	110ALK0.3X, 110ALK0.4X,
110mm	110AL0.5X*, 110AL0.75X, 110AL1.5X, 110AL2X

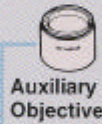
For SZ60 series

W.D.	100AL0.5X*, 100AL1.5X,
100mm	100AL2X

For SZ11 series

W.D.	73AL0.5X, 73AL1.5X,
73mm	73AL2X

*The use of the SZ-ET extension tube
is recommended.



**Auxiliary
Objective**



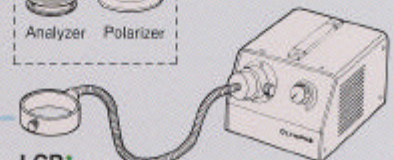
SZ-FIL
Dust Protective Filter



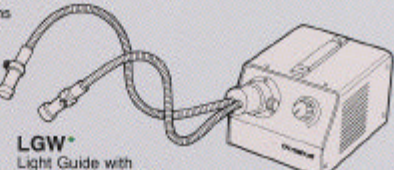
SZ-FLR
Fluorescent Ring
Illuminator



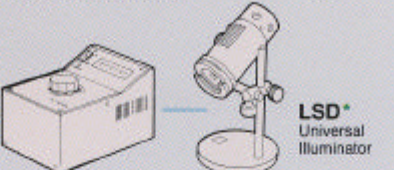
SZ-POL
Analyzer Polarizer



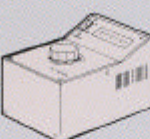
LGR*
Fiber Optics Ring Light



LGW*
Light Guide with
Bifurcated Fiber Optics



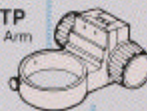
LSD*
Universal
Illuminator



TGHM
Transformer



SZ-STS*
Arm for SZH
Stereo Microscope
Bases

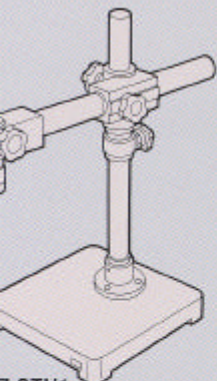


SZ-STP
Prober Arm

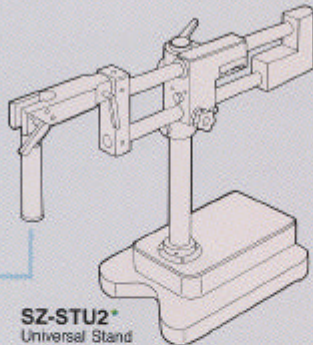


**B&L Microscope
Stand**

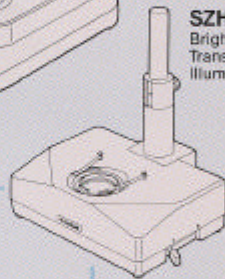
Prober



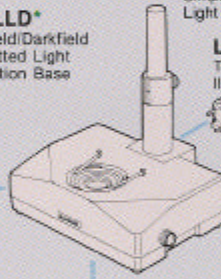
SZ-STU1
Universal Stand
Type 1



SZ-STU2*
Universal Stand
Type 2

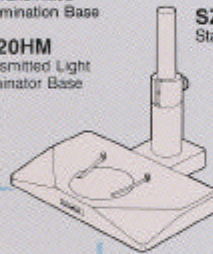


SZH-ILLD*
Brightfield/Darkfield
Transmitted Light
Illumination Base

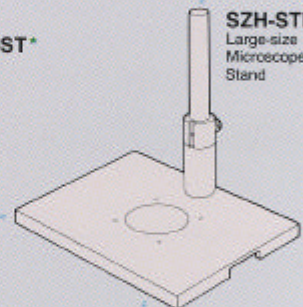


SZH-ILLK*
Simple Transmitted
Light Illumination Base

LS20HM
Transmitted Light
Illuminator Base



SZH-ST*
Stand



SZH-STL*
Large-size
Microscope
Stand



TH3
Transformer

*can be also used with SZH microscope



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Olympus business areas



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