

# OLYMPUS®

## SD/SF SERIES

Stereo Microscopes



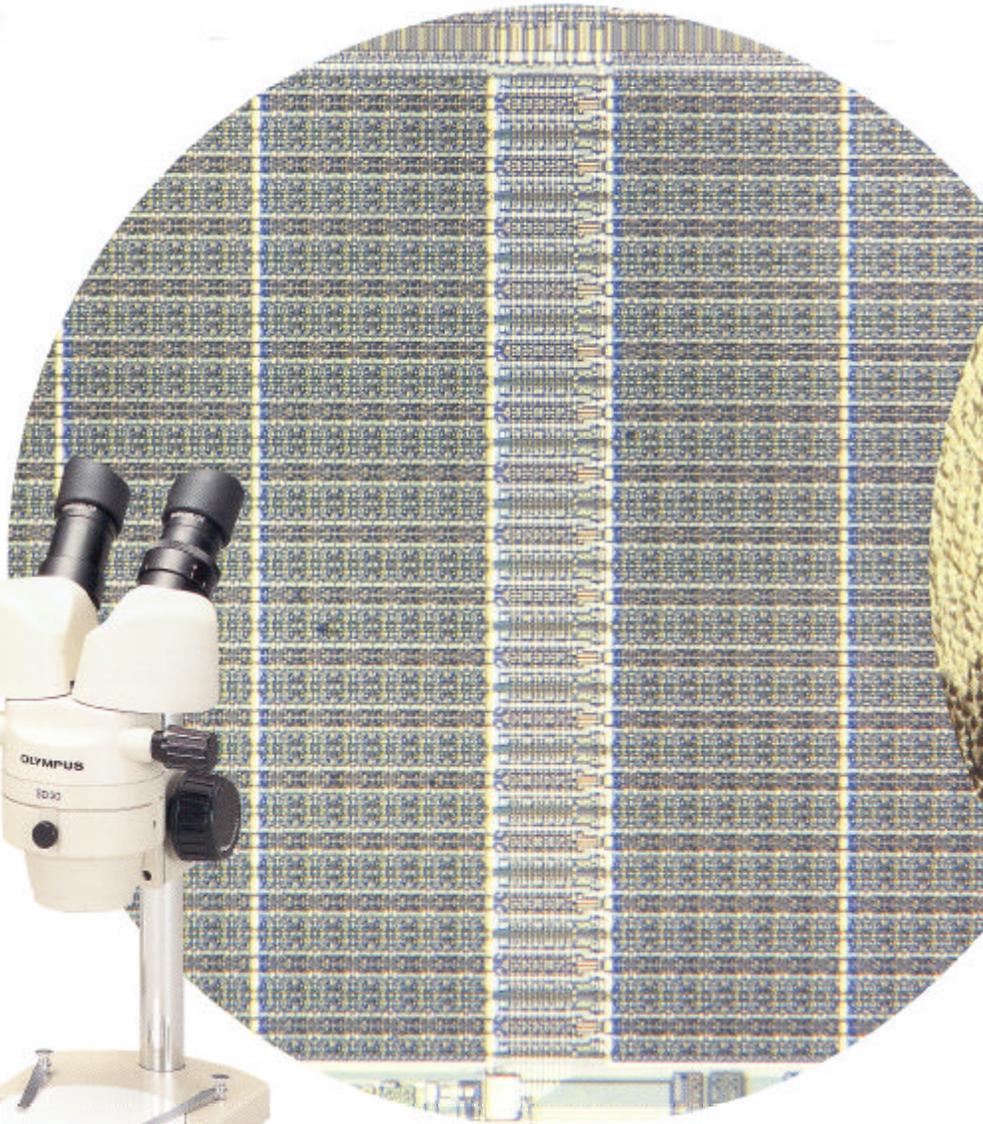
### Compact, Lightweight, Cost-Effective Stereo Microscopes Which Demonstrate Superb Performance and Easy Operation

Olympus' new stereo microscopes, the SD/SF series, feature Greenough optics for enhanced image flatness and contrast. The result is clearer and more distinctive images all the way out to the periphery of the field of view. A long 110mm working length, increased focal depth and a wide field of view with a field number of 22 combine to make the SD/SF series perfect for all applications ranging from

industrial and biological fields to education and training. Despite these advanced capabilities, microscope operation is simple. The SD series allows magnification changes between 1X and 3X by means of built-in magnification knobs, while the SF series' magnification power is fixed at 1X or 2X. Available in 2 types/9 models, the SD/SF series can answer any specific requirement.



The right and left magnification knobs mounted on the SD series' microscope body enable one-touch magnification power switchover between 1X and 3X. Because the operator's hand is kept at a distance from the specimen, the possibility of contamination due to dust, etc., is minimized. This feature allows the SD series to exhibit superior performance, even when mounted onto bonders and other equipment.



SD3060



SD3045

**A compact, lightweight design ideal for mounting onto equipment (SD/SF)**

\*Ergonomically designed, the SD/SF series ensures easy operation. The slim design of the microscope body allows specimens to be viewed directly without interfering with the field of view.

\*Observation tubes inclined at 45° and 60° are available for each of the SD and SF series models, thus permitting a choice depending on the purpose of microscopy.

\*Both series incorporate a high-eyepoint design so that even operators wearing eyeglasses can make observations easily. Diopter and interpupillary distance adjustments are also simple and quick.

\*The Olympus GSWH I OX eyepieces significantly broaden the field of view up to a field number of 22.

\*The SD/SF Series' objectives feature an extra long working distance of 110mm as well as increased focal depth and image flatness. As a result, views of even three-dimensional surfaces are sharp with excellent depth characteristics.

\*The use of optional auxiliary objectives and eyepieces permits microscopy with a variety of magnification powers.



**Various optional arms provided for machine mounting**

A variety of arms is optionally available to mount the microscope body onto existing equipment, such as bonders and probers, without requiring any modification. When combined with the optional SZ-STBI bonder arm and a universal stand, the SD/SF series can be incorporated into the assembly and inspection lines of industrial fields and perform electrophysiological testing in biological fields. When using a large-size stand, the microscopes can be easily adopted for printed circuit board assembly and inspection.



Featuring fixed magnification power, the SF series provides excellent maneuverability and superb optics, thus proving optimum for applications that don't require magnification power changes. The SF series comes in two models-SF10 series with 1X magnification factor and SF20 series with 2X magnification factor.



SF1060

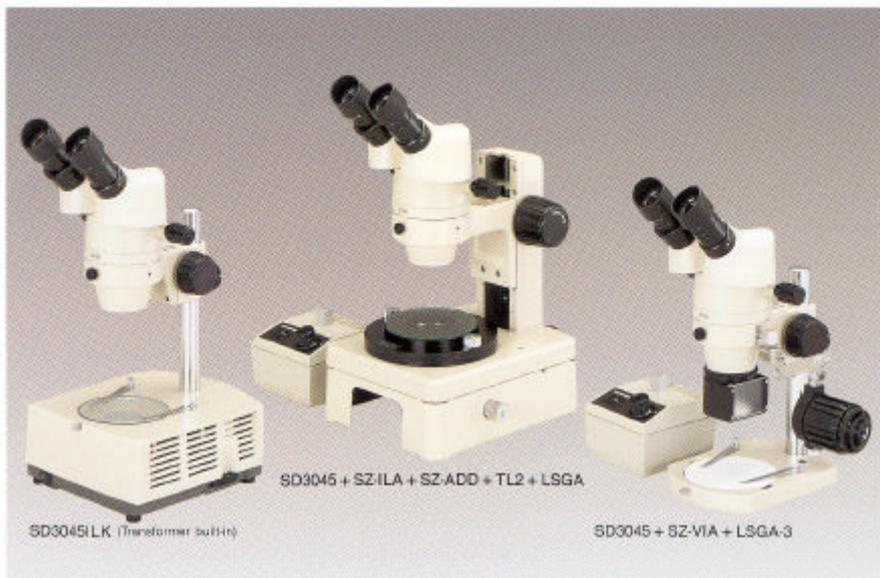
SF1045

SF2050

SF2045

**Illumination System (optional)**

Two types of transilluminator bases are available. One is a specially designed transmitted light illuminator. Because of its compact design and built-in transformer, operation in limited space becomes possible. The other is a transilluminator base which offers brighter light, either 15W or 50W, by combination with two different types of lamp housing and transformer. A darkfield illumination attachment is optionally available for the latter transilluminator base. Any microscope arm in the new stereo series accepts a compact illuminator for epi-illumination, and simple coaxial vertical illumination is also possible when combined with an optional coaxial vertical illuminator.

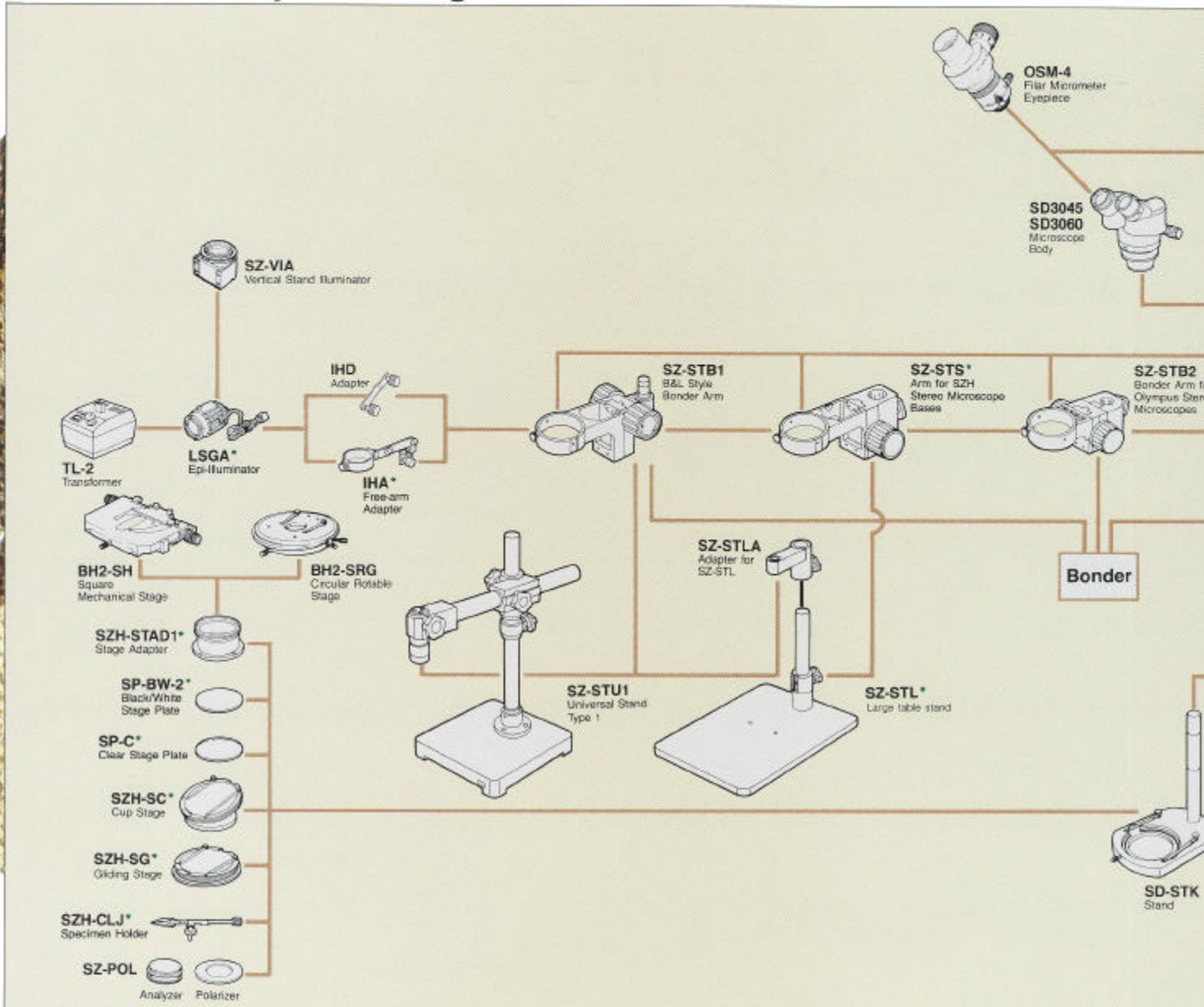


SD3045ILK (Transformer built-in)

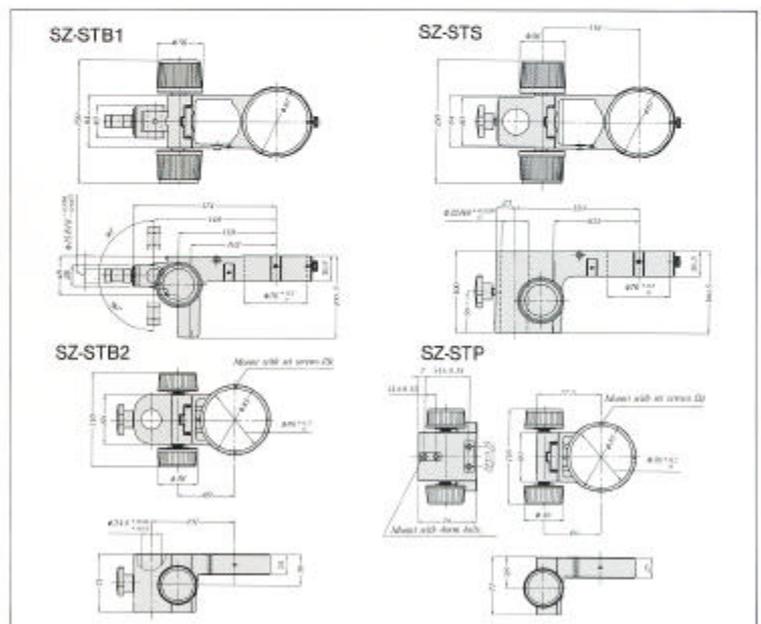
SD3045 + SZ-ILA + SZ-ADD + TL2 + LSGA

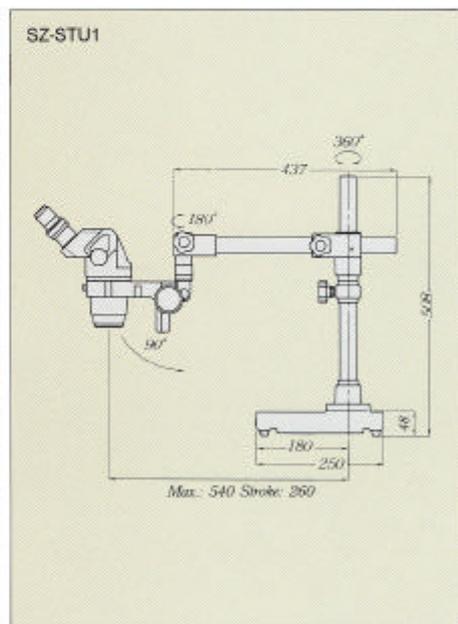
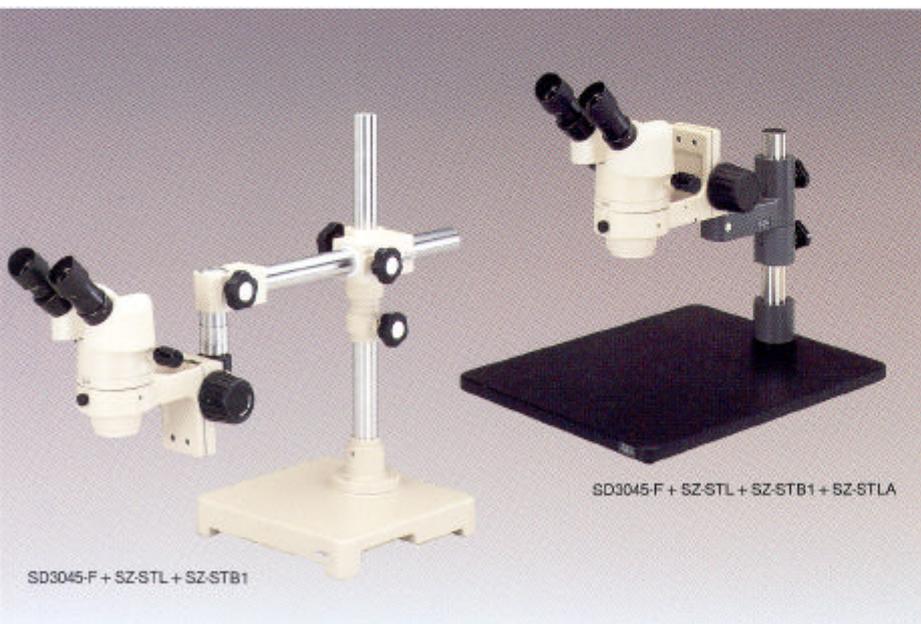
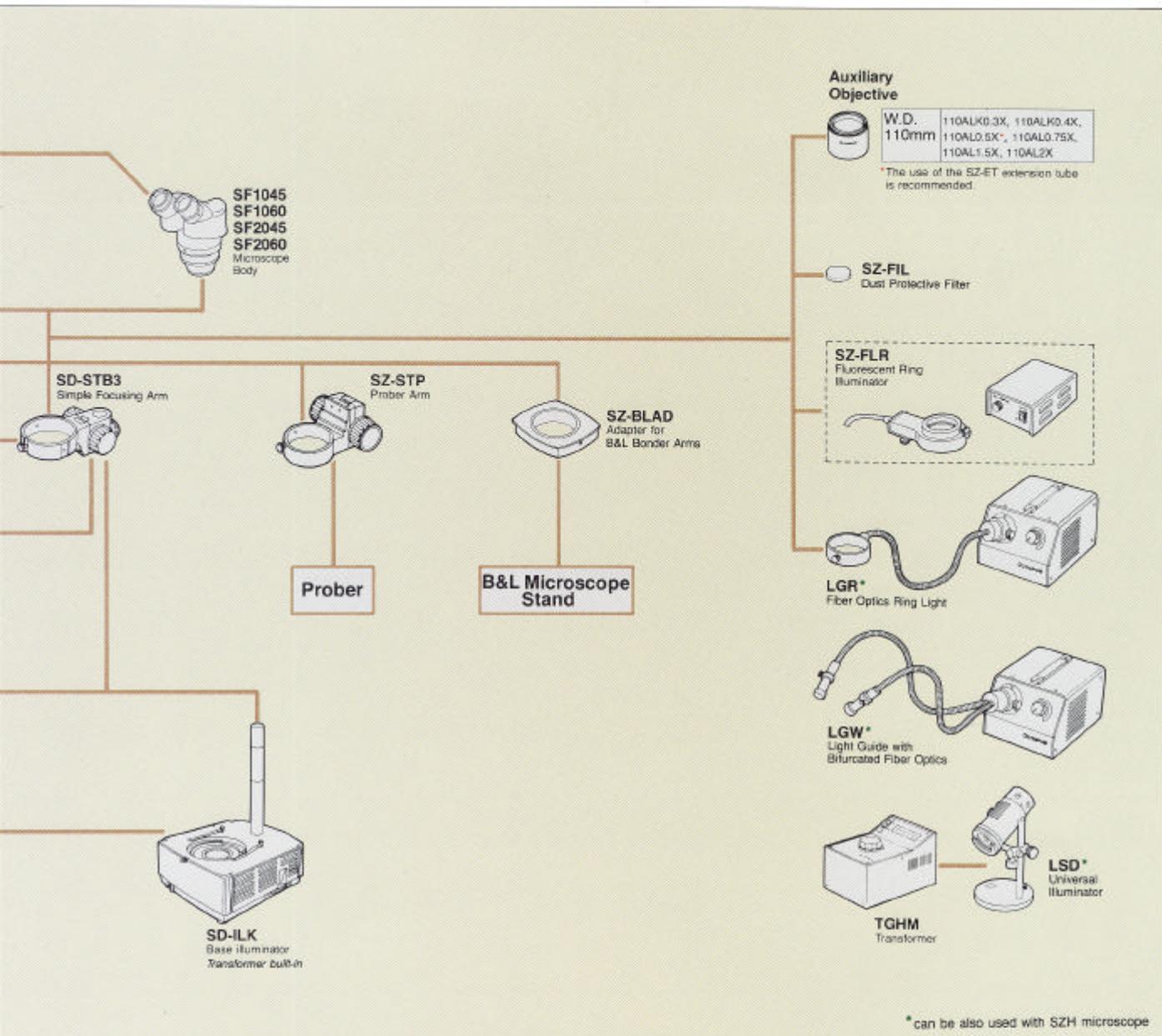
SD3045 + SZ-VIA + LSGA-3

# SD/SF Series System Diagram



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





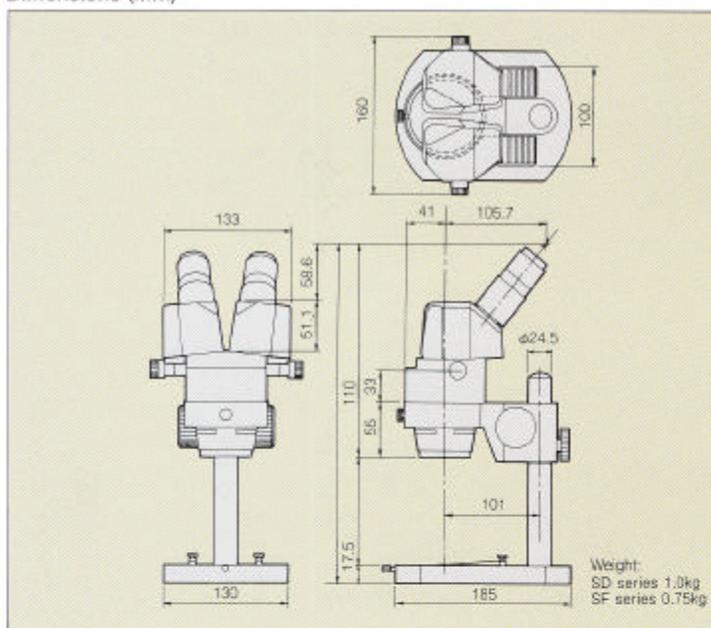
## Specifications

Models	SD series			SF series					
	SD3045ILK	SD3045	SD3060	SF2045ILK	SF2045	SF2060	SF1045ILK	SF1045	SF1060
Optical system	Greenough								
Convergent angle	12°								
Magnification	1X, 3X (switchable)			2X			1X		
Working distance (W.D.)	110mm								
Observation tube inclination	45°	60°	45°	60°	45°	60°	45°	60°	
Interpupillary distance adjustment	Right and left tubes interlocked distance adjustment, Adjustment range: 52—75mm (45° inclined tube), 51—75mm (60° inclined tube), with GSWH10X								
Diopter adjustment	Provided on left tube only Adjustment range: ±5 diopter								
Magnification change horizontal knobs	Right and left uniaxial			—					
Auxiliary objectives	0.3X, 0.4X, 0.5X, 0.75X, 1.5X, 2X (Screw into the microscope body's bottom)								
Eyeieces	GSWH10X (Field number (F.N.): 22; φ24mm eyepiece micrometer mountable)								

## Standard Configuration

Module	Models	SD3045 ILK	SD3045	SD3060	SF2045 ILK	SF2045	SF2060	SF1045 ILK	SF1045	SF1060
Microscope body	SD3045-F	○	○							
	SD3060-F			○						
	SF2045-F				○	○				
	SF2060-F						○			
	SF1045-F							○	○	
	SF1060-F									○
Eyeiece	GSWH10X	○ (2 pcs.)								
Focusing arm	SD-STB3	○	○	○	○	○	○	○	○	○
Stand	SD-STK	○	○	○	○	○	○	○	○	○
Base illuminator	SD-ILK	○			○			○		
Stage clips		○ (2 pcs.)								
Stage plate (B&W)	SP-BW-2	○	○	○	○	○	○	○	○	○
Stage plate (clear)	SP-C	○			○			○		
Halogen bulbs	6V10WHALCH	○ (2 pcs.)			○ (2 pcs.)			○ (2 pcs.)		
Power cord	UYCP	○			○			○		

## Dimensions (mm)



## SD Series

Auxiliary Objective	Eyepiece	1X			3X		
		10X	20X	30X	10X	20X	30X
0.3X		3X	6X	9X	9X	18X	27X
0.4X		4X	8X	12X	12X	24X	36X
0.5X		5X	10X	15X	15X	30X	45X
0.75X		7.5X	15X	22.5X	22.5X	45X	67.5X
1.5X		15X	30X	45X	45X	90X	135X
2.0X		20X	40X	60X	60X	120X	180X

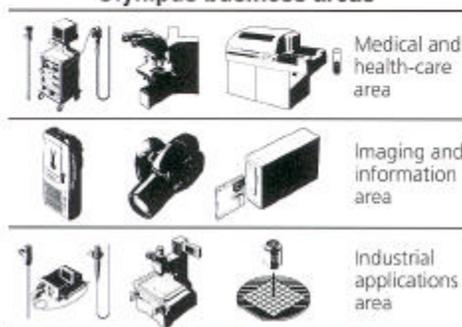
## SF Series

Auxiliary Objective	Eyepiece	SF10 Series			SF20 Series		
		10X	20X	30X	10X	20X	30X
0.3X		3X	6X	9X	6X	12X	18X
0.4X		4X	8X	12X	8X	16X	24X
0.5X		5X	10X	15X	10X	20X	30X
0.75X		7.5X	15X	22.5X	15X	30X	45X
1.5X		15X	30X	45X	30X	60X	90X
2.0X		20X	40X	60X	40X	80X	120X

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



## Olympus business areas



# OLYMPUS®

FOCUS ON LIFE

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