

SERIES  
No. 3 **OLYMPUS** | **CATALOGUE**  
**MICROSCOPE**

*FOR STEREOSCOPIC MICROSCOPES AND THE ACCESSORIES*





You can observe a natural, non-reversed image with the third dimensional effect in the wide field of view .... this is a great feature of GREENOUGH BINOCULAR STEREO-SCOPIC MICROSCOPE.

The Stereo microscope has been used as an indispensable tool in dissection of plants. In recent years, because of a remarkable progress made in precision machine industry, the Stereo microscope has also found wide application in industry, in manufacture, assembly and inspection of minute parts. In the chemical and food industries too, this Stereo microscope has come into wide use.

Because of such a wide application of the Stereo microscope, and to meet the customers' demands which vary according to their purposes, Olympus provides various models of Olympus Stereo microscope with a wide variety of accessories and parts, such as .... a Stereo microscope with the zooming magnification mechanism, an inclined body tube, a universal stand, etc.



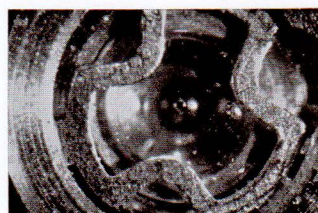
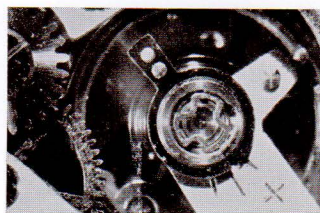
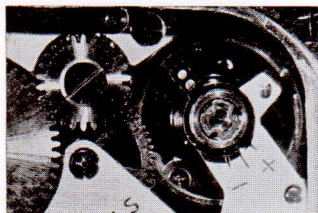
NEW PRODUCT  
ZOOM RATIO 5.7  
WORLD FIRST

# SZ III

STEREOSCOPIC  
ZOOM  
MICROSCOPE



Stereoscopic microscope is widely utilized in the observation of plants, the anatomy of animals, or in the inspection and assembly of precision parts at the modern factories. In the improved OLYMPUS SZ-III Stereo model, smooth and continuous changes of magnification and view field with 5.7 zooming ratio are now accomplished by turning the magnification dial while making an observation. By the use of this zooming system, there is no "image fade away" when changing magnifications, and you can very simply obtain the desired magnification. Thus the effectiveness of the zooming system can be fully obtained in the overall observation as well as the enlarged and partial observation of a specimen.





**Z**OOM  
CONTINUOUSLY  
WITH NO  
DISPLACEMENT  
OF FOCUS

**O**NLY  
FULLY PRISMATIC  
SYSTEM IN  
ZOOM  
MECHANICS  
NO MIRRORS

**O**PTICAL  
PATH  
UNDISTORTED

**M**AGNIFICATION  
VARIES  
CONTINUALLY  
FROM  
3.5× to 160×

### OUTSTANDING FEATURES

1. Zoom ratio 5.7, continuous flow of magnification from 7X to 40X. (Maximum magnification 160X is obtainable by use of G20X eyepiece and 2X objective)
2. No out-focusing effect while changing magnification.
3. A perfect stereoscopic and erect view of the image is attainable by means of the multi-objective zooming mechanism.
4. Wide range of availability for optional accessories, for instance, universal stand, illuminators, conversion objectives and so forth.

### SPECIFICATIONS

1. Zoom ratio: 5.7
2. Total magnifications:

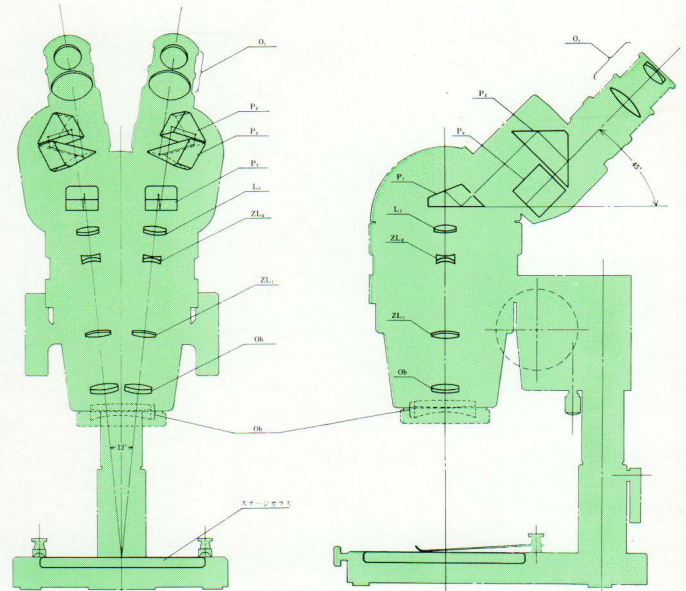
Objective \ Eye piece	0.5X	0.75X	1X	1.5X	2.0X
G10X	3.5X 20X	5.25X 30X	7 X 40X	10.5X 60X	14X 80X
G20X	7X 40X	10.5X 60X	14X 80X	21X 120X	28X 160X

■ Standard combination

3. Binocular head: 45° inclined, convergent angle 12°
4. Range of interpupillary adjustment: at exit-pupil 46-74mm (G10×)
5. Ocular tube movement: by head rotation 360°
6. Working distance: objective 1X (standard) 97mm  
0.5X 166mm  
0.75X 111mm  
1.5X 52mm  
2X 36mm
7. Body movement, vertical: 102mm  
(by rack and pinion) 55mm  
(by pillar) 47mm
8. Range of body rotation: 75° pivoted at the pillar
9. Stage plates: glass plates.(clear and smoked)

### STANDARD SET

Microscope: body, binocular head, built-in objective 1X  
Stand: stage and pillar 1pc.  
Eyepiece: G10X paired 1pc.  
Stage plates: clear and smoked glass 1pc  
Eyepiece caps, eye-shades, plastic dust cover, wooden cabinet.



### OPTIONAL ACCESSORIES

1. Conversion objectives:



0.5×



0.75×



1.5×

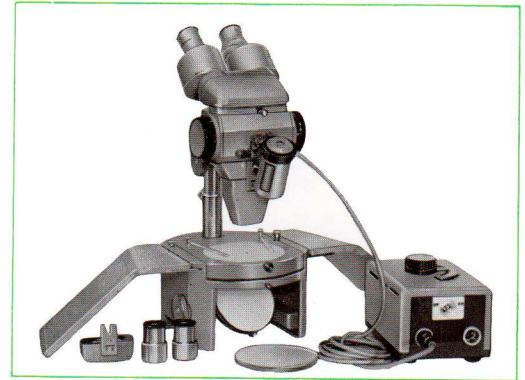
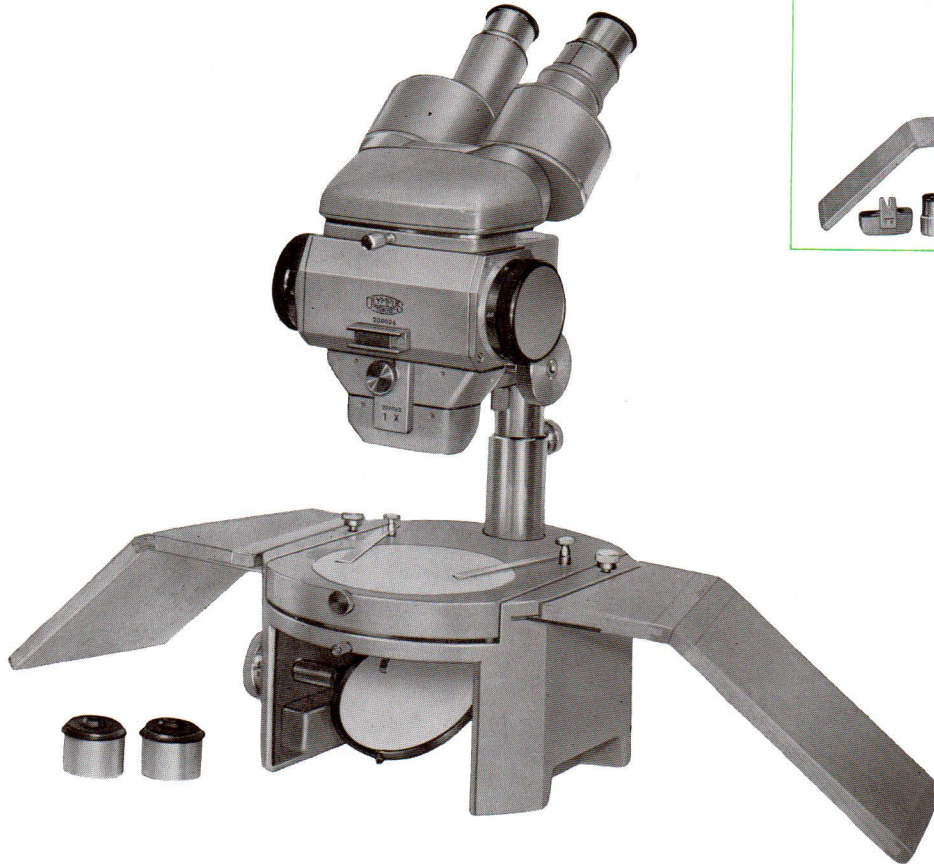


2.0×





# STEREOSCOPIC MICROSCOPE



## FEATURES

### Binocular Body with Inclined head

The inclined 45 degree binocular head allows the observer to maintain a natural position and thus to escape fatigue while looking through the microscope.

### Novel rapid change of magnification

Five different magnifications in each of the range from 6.3 X to 40 X, 12.5 X to 80 X, 25 X to 160 X are obtained by simply turning a drum.

### Large working distance

The large working distance between object and objective is 90 mm with use of the G 10 X or G 20 X wide-angle oculars.

### Erect image with non-reversed side

Stereoscopic vision is a "range finder" for placing the exact position of objects.

### Interpupillary Distance

Interpupillary Distance adjustment provided and also it is possible to compensate different visual faculties of both eyes by Diopter adjustment.

### Accessories

Illuminating stand with mirror for transparent microscopy and clear and smoked glass plates provided.

### Optics

Type I    Eye-pieces : G 10 X, G 20 X  
             Objective : 1 X only  
 Type II    Eye-pieces : G 10 X, G 20 X  
             Objective : 1 X, 2 X

TABLE OF THE DATA OF OUR OBJECTIVE AND EYEPIECES

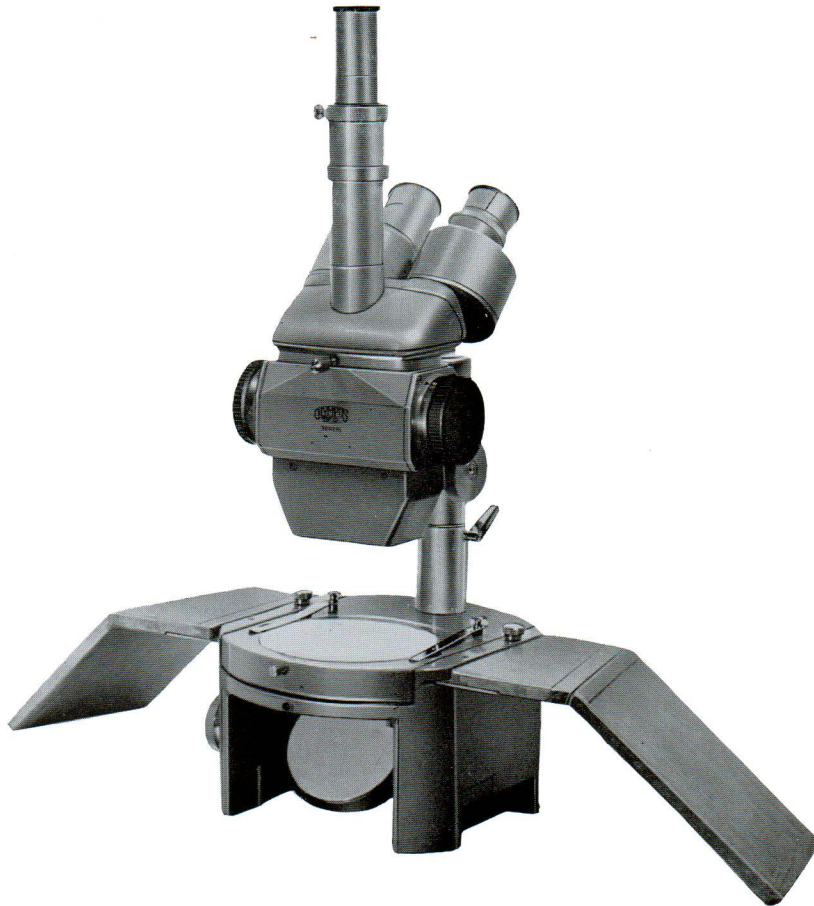
Type I (Objective lens 1 X only)						
Eyepiece G 10 X	magnification	6.3 X	10 X	16 X	25 X	40 X
	Field (mm) $\phi$	32	20	12.5	8.0	5.0
Eyepiece G 20 X	magnification	12.6 X	20 X	32 X	50 X	80 X
	Field (mm) $\phi$	16	10	6.25	4.0	2.5

Type II (Objective lens 1 X and 2 X)						
Eyepiece G 10 X	magnification	12.6 X	20 X	32 X	50 X	80 X
	Field (mm) $\phi$	16	10	6.3	4.0	2.5
Eyepiece G 20 X	magnification	25 X	40 X	64 X	100 X	160 X
	Field (mm) $\phi$	8	5	3.15	2.0	1.25



# X-Tr

## TRINOCULAR STEREOSCOPIC MICROSCOPE



X-Tr with PM-6

In every field where the stereoscopic examination is required with the PHOTOMICROGRAPHIC, CINEMATOGRAPHIC or TELEVISION systems, the Trinocular Stereoscopic Microscope Model X-Tr presents significant advantages.

The Olympus Trinocular Stereoscopic Microscope Model X-Tr is a multi-purpose instrument with many diverse applications, including plant classification, entomology, anatomical examination of animals, geology, stamp and coin inspections, gemmology, and in the electronic and precision instrument industries.

### FEATURES:

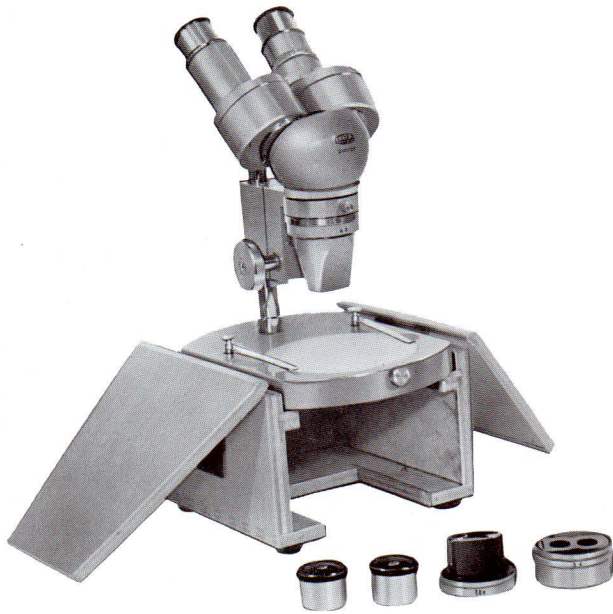
1. The convenient trinocular head consists of the binocular tube inclined 45 degrees plus the vertical single tube for photomicrographic, cinematographic or television work.
2. Ten different magnifications are obtained by turning a drum.
3. Long working distance: 90 mm
4. Inter-pupillary adjustment provided
5. The magnification for photomicrography is very according to the visual magnification obtained by a magnification drum.
6. The inclined extra stage is provided for photomicrography.
7. Olympus model PM-6, PM-7, ACM-3 or MTV can be set on the X-Tr.

### STANDARD SET:

Microscope trinocular body with 1X objective	1
Stand	1
Trans-illuminating substage base with hand-rests and 20W bulbs	1
Eyepieces G10X and G20X Wide Field (paired)	1
Photo lens 10X	1
Glass stage plates (clear and smoked)	1 each
Large stage clips	1 pr.
Inclined extra stage for photomicrography	1
Dust plugs for binocular tube	1 pr.
Dust plug for vertical tube	1
Eyeshields	1 pr.
Dust cover	1

Eyepiece	Objective lens	1X				
		6.3X	10X	16X	25X	40X
G10X	magnification	6.3X	10X	16X	25X	40X
	field (mm) $\phi$	32	20	12.5	8	5
G20X	magnification	12.6X	20X	32X	50X	80X
	field (mm) $\phi$	16	10	6.25	4	2.5



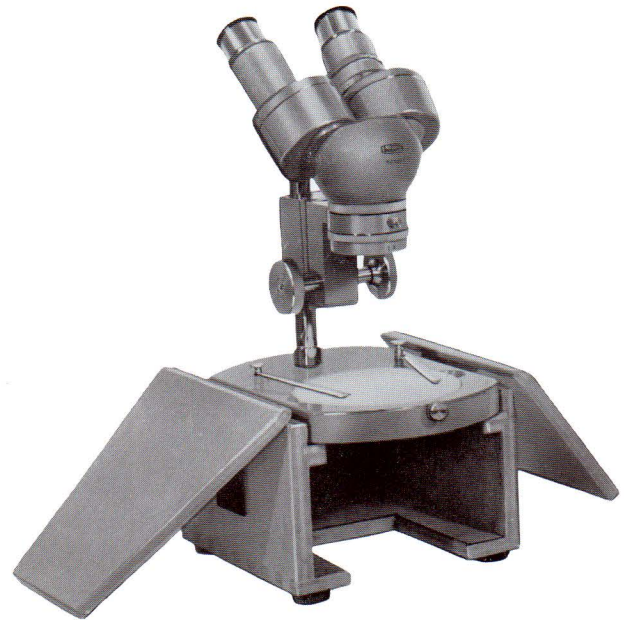


### MODEL V

1. 45 degree inclined head. Rotative and fixative at any position.
2. The paired objective is interchangeable easily by bayonet mount.
3. Real and erect image with stereoscopic effect.
4. Large field and long working distance.
5. Interpupillary distance adjustment provided.
6. Diopter adjustment to compensate different visual faculties of both eyes.
7. Available simplified wooden base with hand rest.
8. Convertible clear glass and smoked glass.

Table of Magnifications, Field and Distance

Objeeives	Free Working Distance	Eyepieces			
		G10X		G20X	
		Magnification	Field $\phi$	Magnification	Field $\phi$
1.5X	67 mm	15X	13.3 mm	30X	6.7 mm
3X	56 mm	30X	6.7 mm	60X	3.3 mm
6X	30 mm	60X	3.3 mm	120X	1.6 mm



### MODEL VK

1. 45 degree inclined binocular head. Rotative and fixative at any position.
2. Real and erect image with stereoscopic effect.
3. Large field and long working distance.
4. Interpupillary distance adjustment provided.
5. Diopter adjustment to compensate different visual faculties of both eyes.
6. Available simplified wooden base and hand rest.
7. Convertible clear glass and smoked glass.

Table of Magnifications, Field and Distance

Objective	Free Working Distance	Eyepiece	
		G10X	
		Magnification	Field $\phi$
2X (Fixed)	66.5 mm	20X	10.0 mm



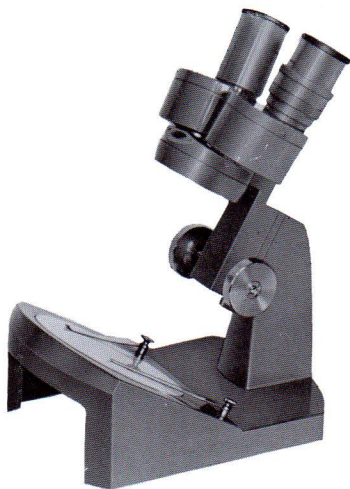
model VA-10-I

1. Vertical binocular tube.
2. Real and erect image with stereoscopic effect.
3. Large field and long working distance.
4. Interpupillary distance adjustment provided.
5. Diopter adjustment to compensate different visual faculties of both eyes.
6. Convertible clear glass and smoked glass.

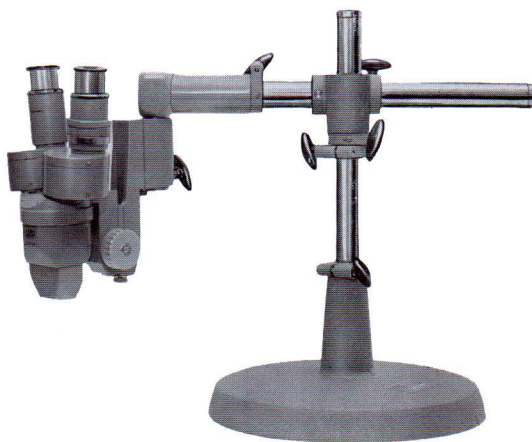
Table of Magnifications, Field and Distance

Objectives	Free Working Distance	Eyepiece G10X	
		magnifications	Field number $\phi$
1X	117 mm	10X	20.0 mm
2X	78 mm	20X	10.0 mm
3X	58 mm	30X	6.7 mm
6X	31 mm	60X	3.3 mm

Objective is to be selected.



model VA-10-II



model VA-10-IV

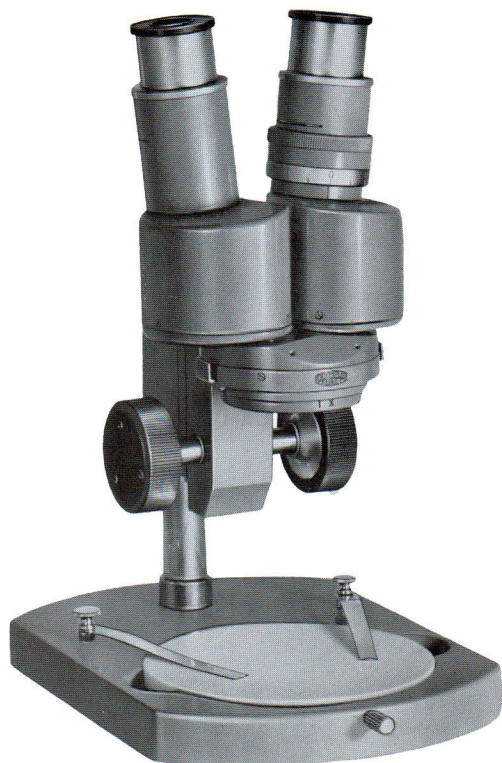
### Combinations

Eyepiece	Objectives	Stand		
		Horizontal Stand (VS-I)	Inclined Stand (VS-II)	Universal Stand (VS-IV)
G10X	1X	VA-10-I	VA-10-II	VA-10-IV
	2X	VA-20-I	VA-20-II	VA-20-IV
	3X	VA-30-I	VA-30-II	VA-30-IV
	6X	VA-60-I	VA-60-II	VA-60-IV



# VA-II·VT-II·DM

## STEREOSCOPIC MICROSCOPE



### MODEL VA-II

Binocular head for easier viewing.

Paired G 10 X eyepieces provide large, distortion-free field-of-view.

Parfocalized objectives insure minimum of refocusing and adjustment.

1X and 2X objectives provide the most useful range of magnifications of 10X and 20X.

Unique, rapid "click-lock" for simple, quick-change of objectives. Erect, unreversed images.



### MODEL VT-II

#### Features :

- Objectives 1X and 2X are built-in the revolving turret
- Hand grip type pillar for safe handling and transportation
- Ruggedized construction-head is detachable quickly from stand for use on universal arm or others.

#### Specification :

Binocular microscope head	1 pc.
Objective 1X and 2X	1 each
Eyepiece G10X paired	1 pair
Stand with pillar and stage	1 pc.



### MODEL DM

Square Stage 85 mm × 75 mm

Clear Stage Glass and Matted Glass Stage (attachable)

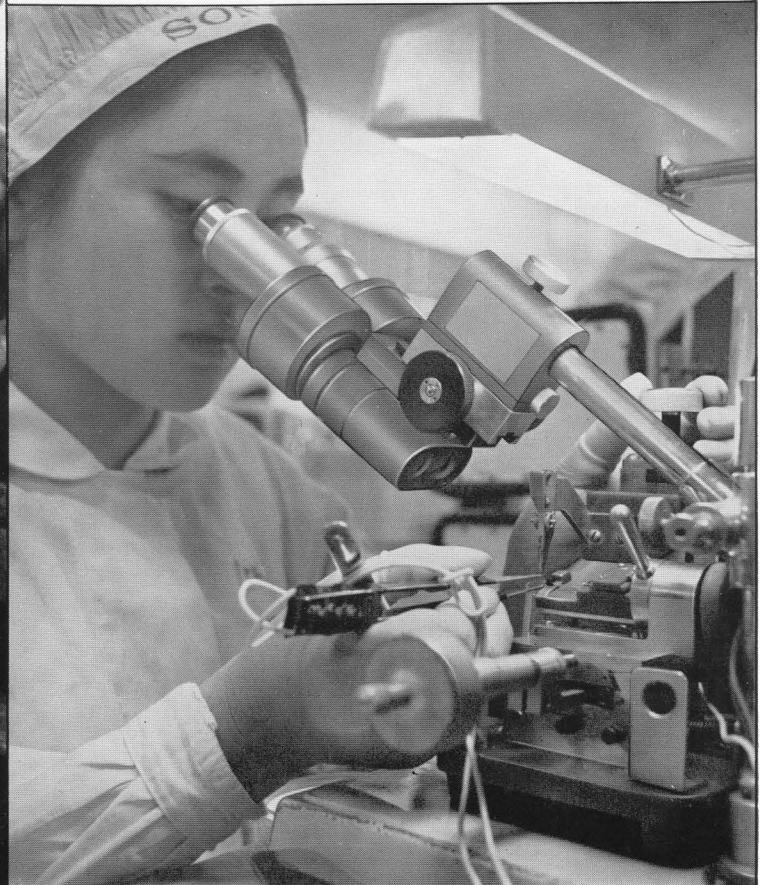
Focusing by Rack and Pinion Motion

Plane and Concave Mirror

Two Hinged Joint Arm for Magnifier

Steinheil Magnifier (10X, 20X)





▲ Olympus stereo Microscope in Sony factory

◀ Lens polishing at Olympus factory



# ACCESSORIES

Variety of accessories are available to fully meet your requirements and enhance the versatility of Olympus Stereoscopic microscopes. Don't forget to include these optional accessories in your order for Olympus stereo Microscopes.

**EYEPIECES :** Wide Field eyepieces offer superior image....wide field of view....full chromatic and distortion correction



G10X

G15X

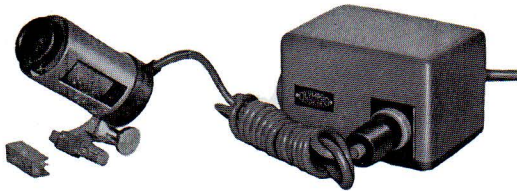
G20X

Type	Magnification	Focal length	Field number
Wide Field	G 10X	25mm	20
	G 15X	16.7mm	13
	G 20X	12.5mm	12.2
	G 10X with micrometer, 10mm 100	25mm	20

## ILLUMINATORS :

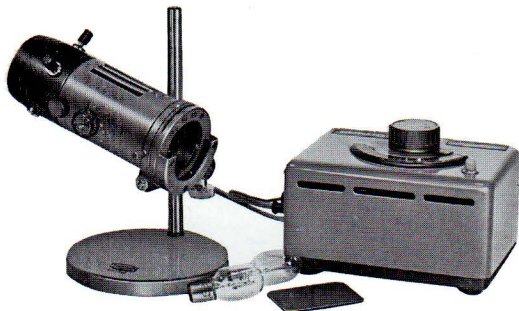
### Epi-illuminator MODEL LSG

Model LSG (6V, 2A bulbs)....with transformer TD (uniform voltage 6V.)



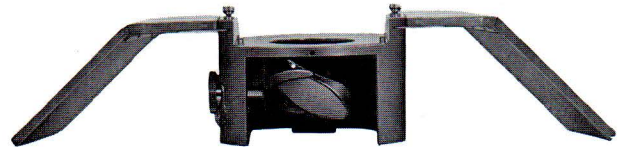
### Trans-illuminator MODEL LSD

with transformer TC (6V 5A. bulb)



### Trans-illuminating stand

Trans-illuminating substage base (with hand-rests, mirror and 20W bulbs)



### Fluorescent illuminator MODEL LSF

Illuminator with U shaped fluorescent bulb for shadow-less and heat-less illumination



## UNIVERSAL STAND :

### MODEL VS-IV

All of Olympus stereoscopic microscope body can be attached to the Universal Stand Model VS-IV for examining large objects.



As we are continually improving and developing our products, the equipment supplied may not agree in all details with the descriptions and/or illustrations shown in this catalog.



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