



National Award for
Outstanding Entrepreneurship - 2010



National Award for
Quality Products - 2002

Vaiseshika[®]
Where Quality and Standards Meet

ZOOM STEREOSCOPIC MICROSCOPES : SERIES 7004



DESCRIPTION :

Stereo Microscope **7004A** provides the viewer of full stereoscopic effect and is having the magnification option range from 20x to 60x. The instrument is ideal for critical depth perception, inspection of components /parts like gears, drill-holes, burrs, track, integrated circuits, transistors, resistors or any other component. Features 45° viewing binocular head with diopter adjustable right eye-piece. Adequate external illumination lamp facility is provided for high power viewing using halogen bulb.

The interpupillary distance adjustment of the eyepieces enables parallax free viewing. Two arm rests are provided, attachable to working stage. This facility is very useful while working for longer duration.

FEATURES :

- Magnification : 30x and 60x, Optional : 20x and 40x
- Full stereo effect
- True erect image
- Binocular head with adjustment facility for interpupillary distance 55mm to 75 mm Useful for field work
- Diopter power adjustment in one ocular
- Built in reflector to borrow day light / room light for sample illumination
- Focusing with sensitive rack and pinion system

SPECIFICATION :

Objectives	: Built-in 2x and 4x sliding type
Eye-pieces	: WF 15x pair/WF 10x/Ø18mm & 10x micrometer LC 0.1mm (optional)
Working distance	: 30x - 75mm, 60x - 45mm
Viewing Head	: Inclined at 45° or straight tube, with interpupillary distance 55mm-75mm
Diopter Adjustment	: ±5 in right side ocular
Focusing	: Through rack and pinion arrangement
Specimen Plate	: Ø100mm glass & milky
Body	: With hand grip on stand, may be removed from stand. Stage equipped with 100 mm interchangeable glass or milky plate. Hand rests for steady working.
Illumination	: Halogen illumination with additional facility of reflector mirror for borrowed light

ZOOM STEREOSCOPIC MICROSCOPES : SERIES 7004



DESCRIPTION :

Zoom Stereoscopic Microscope **7004D** for research institutes & industries. The microscope offers full stereoscopic view with continuously variable zoom effect. Sturdy and stable base with built in illumination system serves dual purpose of microscope base and specimen stage.

Vaiseshika Zoom Stereoscopic Microscope is fully synchronized with Image Capturing Device (Camera) interface with computer. Windows based measurement software has now made possible to analyze & measure whatever you see through microscope.

FEATURES :

- ❑ Built-in-halogen Light and incident light arrangement
- ❑ Fluorescent / LED Ring Light for daylight illumination
- ❑ Continuous zoom effect
- ❑ 3.5x to 270x magnification
- ❑ Parfocal zoom objectives
- ❑ Trinocular head with C Mount Camera attachment
- ❑ Eye diopters adjustment of the viewer
- ❑ Full interface with PC through CMOS/CCD Camera
- ❑ Complete windows based measurement software

BINOCULAR VS TRINOCULAR HEAD : UTILITY AND APPLICATION



BINOCULAR

Binocular Head having **two tubes** for vision through both eyes. It does not have facility for camera port.



TRINOCULAR

Trinocular Head having **three tubes** for vision through both eyes, as well as facility for camera port.

ZOOM STEREOSCOPIC MICROSCOPES : SERIES 7004

GENERAL SPECIFICATION:	7004B	7004C
Microscope Base/Stand	Standard Base with Illumination	Universal Stand without Illumination
Standard Magnification	7X- 45X or 7X - 63X continuously variable with standard EP & Zoom Objective	
Zoom Objective	0.7X to 4.5X or 7X to 6.3X continuously variable	
Zoom Ratio	6.5:1 or 9:1	
Standard Eyepiece	High Eye Point Wide Field 10X / Ø 23	
Optical Magnification	3.5X to 270X or 3.5X to 378X with optional Eyepiece & Objectives	
Optional Eyepieces	WF Eye Piece Pair 15X, 20X & 30X and Micrometer WF Eye Piece Pair 10X, Least count: 0.1mm	
Optional Objectives	Auxiliary Objective 0.37/0.5X, 0.75X, 1.5X & 2.0X attachable below main objective	
Viewing Head (Inclined at 45°)	Trinocular (three parts, two for visual observation & one for camera attachment)	
Rotation of Head	0 to 360°. The binocular vision is convenient to observer and eliminates fatigue of eyes.	
Interpupillary Distance	Adjustable according to your eyes from 52mm to 76mm	
Diopter Adjustment	± 6	
Light Distribution	50:50 between camera pot & observation head	
Color Filter	Blue & Green etc (optional)	
Focusing	Coarse focusing with pillar clamp. Fine focusing with sensitive rack & pinion motion through large knobs on both sides. Fine focusing range 50 mm approximately.	
Working distance	90-110 mm with standard objective.	
Illuminator	Base Illuminator	Transmitted Illumination of the Fluorescent lamp / LED
	Outer Illuminator	Reflected Illumination of the halogen lamp / LED

OPTICAL SPECIFICATION :						
Eyepiece	Item	Main Body	Auxiliary Objective			
			0.5X	0.7X	1.5X	2X
	Zoom Range	0.7X~4.5X	0.35X~2.25X	0.49X~3.15X	1.05X~6.75X	1.4X~9X
10X	Total magnification	7X~45X	3.5X~22.5X	4.9X~31.5X	10.5X~67.5X	14X~90X
	Field of View in mm	Ø32.8~5.1	Ø65.7~10.2	Ø46.9~7.3	Ø21.9~3.4	Ø16.4~2.6
15X	Total magnification	10.5X~67.5X	5.3~33.8X	7.4X~47.2X	15.8X~101.3X	21X~135X
	Field of View in mm	Ø24.3~3.8	Ø48.6~7.6	Ø34.7~5.4	Ø16.2~2.5	Ø12.1~1.9
20X	Total magnification	14X~90X	7X~45X	9.8X~63X	21X~135X	28X~180X
	Field of View in mm	Ø20~3.1	Ø40~6.2	Ø28.6~4.4	Ø13.3~2.1	Ø10~1.6
30X	Total magnification	21X~135X	10.5X~67.5X	14.7X~94.5X	31.5X~202.5X	42X~270X
	Field of View in mm	Ø12.9~2	Ø25.7~4	Ø18.4~2.9	Ø8.6~1.6	Ø6.4~1
Working distance(mm)		90-110mm	170mm	130mm	50mm	35mm

3D ZOOM DIGITAL STEREOSCOPIC/VIDEO MICROSCOPES : SERIES 7004



3D Zoom Digital Stereoscopic/Video Microscope **7004B**, by **Vaiseshika** is the high-power digital zoom video inspection system to inspect 3D structures, such as SMT solders joints, QFP, capacitors, connectors, wire bonds, medical stents and medical devices. 3D Zoom Digital Stereoscopic/Video Microscope has a special 45 degree oblique viewing adapter which is motorized to rotate around the sample for three dimensional viewing, is able to see things not possible with traditional 2D microscope. It is easily motorized controlled about the Rotation speed (fast/slow/stop), direction (clockwise and counter-clockwise) and LED light intensity. Other angle (30°, 40°) viewing adapters are also available. It is configured with High Resolution VGA Color Camera to reach the real-time observation. It has longer working distance, larger visual field and higher depth of fields.

SPECIFICATION			
Oblique Viewing	30°	OR	45°
Rotary Viewing Angle	360°		
Optical Zoom Magnification	0.35x-2.25x		
Digital Video Magnification	25x-162x		
VGA Camera	Image Output: 1/2.5" Color Camera		
	Resolution: 1.3M(1280x1024)		
	Auto Balance		
	Power Supply: DC12V		
LCD Monitor	Display Size: 17" Square Screen		
	Image Input: AV, VGA, HDMI		
	With Balance and R.G.B Setting		
	View Angle: 160°/160°		
	Power supply: DC12V		
Illumination	Built-in Adjustable LED Ring Lightsource		
Motor	DC5V Servo Motor		
Control Box	Direction Control : Clockwise and Counter-clockwise		
	Rotation speed: Fast/Slow/Stop		
	LED Light Intensity		
	Power supply; 90-250V/50Hzor60Hz		
Application Industry	SMT, PCB, BGA, etc		