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*BETA*<sup>®</sup>

## Stereo Zoom Microscope for precision inspection and manipulation tasks

- Wide range of magnification x2.1 - x160
- High resolution, high contrast images
- Modular design for easy addition of accessories
- Stereo optics for easy viewing and documenting of complex surfaces

The Beta stereo zoom microscope provides high quality viewing for both biomedical and industrial applications. The modular design makes for easy addition of accessories, enhancing system performance and flexibility.

Beta is used in a wide range of both industrial and life science applications, ranging from general manufacturing, medical devices, electronics, precision engineering, plastics and rubber to intricate life science work.

With a stereo magnification range from x7 - x40 (x160 maximum) and 5.7:1 zoom, Beta provides high performance stereo magnification in a robust design. The standard x1.0 objective provides 85mm working distance enabling easy sample manipulation, with options to increase magnification or increase working distance. With its modular construction, complete range of accessories and ergonomic design, Beta is suitable for almost any application from routine dissection to computer chip failure analysis and documentation.

## Features and Benefits

- Incorporated modern advances in optical design allow your eyes and hands to work together resulting in increased throughput, accuracy and reduced scrap and rework.
- Wide magnification range of x2.1 - x160 provides clear, sharp images with long working distances and large depth of field.

## Versatility

- Modular design allows for quick changeover of accessories and options. For example, from manipulation to high magnification inspection on to image capture.

## Ergonomics

- Advanced design optimises ergonomic performance and provides superb hand-to-eye coordination for easy sample manipulation tasks.



Beta bench stand with integral substage illumination.

## Stand Options

- Stable, focusable bench stand with subject holder, substage illumination and floating or measuring stage options.
- Adjustable, swing away, boom mount for mounting directly to user's work surface or with coated platform base for easy transport.

Crank handle option allows convenient vertical adjustment when frequent changes in working distance are required.



Beta, with swing away boom mount, for flexibility and ease of use.

## Technical Data

### Optical

- Afocal stereo zoom microscope provides a 26.4 field angle.
- Ergonomic design optimises head and body position for comfortable viewing.

### Zoom Magnification (see table below)

- x7 - x40 multiplied by combinations of objective lenses and multipliers (total zoom magnification range x2.1 - x160).
- Zoom ratio 5.7:1
- Secondary multipliers x1.5 and x2.0
- Reducing objectives to increase working distance and field of view.
- Magnifying objectives to increase total magnification.

### Illumination

- 12V/60W semi coaxial long life spot lamps.
- 14 point LED ring light with intensity control (optional).
- Substage illumination (bench stand only) 12V/20W Halogen lamp.
- Option of tilting substage illuminator to enhance contrast.



Beta, high quality viewing for biomedical applications.

## Accessories

### Oblique and Direct Viewer

- Allows the operator to view a subject from an angle of 34° from vertical, which can be rotated through to 360° enabling a better stereo view of 3-dimensional subjects including PCB solder joints, holes, pillars and thread forms. Both manual and motorised versions are available.



Oblique and direct viewer



Fixed angle viewer

### Fixed Angle Viewer

- Allows the user three options; a fixed angle of 25° from vertical, the ability to view vertically or tilting the optical head and using the system standing up.

### Ergowedge

- Allows the view to be adjusted between -5° and -25° from horizontal.



Ergowedge

### Image Capture and Archive

Digital, USB and 35mm SLR cameras including Sony, Nikon, Pixera, Canon and other leading makes.

- Modular multimedia solutions for image archiving, acquisition, processing, analysis and documentation.



Image capture and archive

### Step Magnification Multiplier

- Allows the stereo zoom range to be increased by a factor of x1.5 or x2.0 without any loss in working distance.



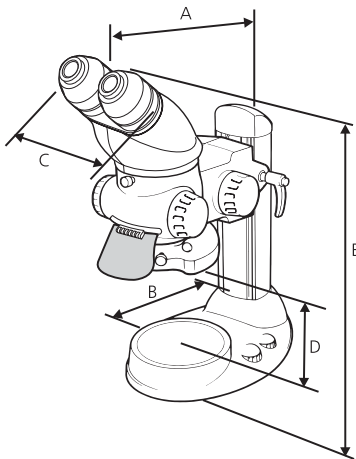
Step magnification multiplier

### Measuring/Comparison Graticule

- Allows the user the ability to measure and compare against a scale. Standard range is available as a crossline or graduated scale. Custom graticules can be manufactured to specific designs.

Objective Lens	Zoom Range			Working Distance	Field of View at Max. Zoom			Field of View at Min. Zoom		
		with x1.5 multiplier	with x2.0 multiplier			with x1.5 multiplier	with x2.0 multiplier		with x1.5 multiplier	with x2.0 multiplier
x0.3*	x2.1 - x12	x3.2 - x18	x4.2 - x24	312mm	15.3mm	10.2mm	7.6mm	87.0mm	58.0mm	43.5mm
x0.5	x3.5 - x20	x5.3 - x30	x7.0 - x40	177mm	9.4mm	6.3mm	4.7mm	53.5mm	35.7mm	27.2mm
x0.7	x4.9 - x28	x7.4 - x42	x9.8 - x56	130mm	6.7mm	4.5mm	3.4mm	38.0mm	25.3mm	19.0mm
x1.0	x7.0 - x40	x10.5 - x60	x14 - x80	85mm	4.6mm	3.0mm	2.3mm	26.2mm	17.5mm	13.1mm
x1.5	x10.5 - x60	x15.8 - x90	x21 - x120	47mm	3.2mm	2.1mm	1.6mm	18.0mm	12.0mm	9.0mm
x2.0	x14 - x80	x21 - x120	x28 - x160	29mm	2.3mm	1.5mm	1.2mm	13.3mm	8.9mm	6.6mm

\* when using the x0.3 objective lens with a bench stand model, an extended stand column is required to accommodate the increased working distance.



**Beta Bench Stand**

**Bench Stand:**

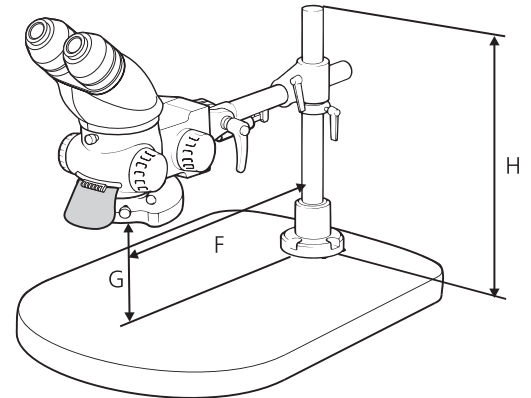
- A = 343mm
- B = 150mm
- C = 103 - 123mm
- D = 120mm
- E = 410mm

Unpacked weight: 9.5kg  
Packed weight: 13.0kg

**Boom Mount:**

- F = 400mm maximum
- G = 310mm less working distance
- H = 440mm

Unpacked weight: 17.0kg  
Packed weight: 20.0kg



**Beta Boom Mount**

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