



# NATIONAL

National Optical & Scientific Instruments, Inc.  
A Member of the Motic Group

## 446 SERIES

Stereo Microscope with Inclined Head and Dual Magnification

All the quality features and versatility of larger stereo microscopes, in a compact size that is more efficient for many uses. Choose low or high magnification simply by turning the objective turret. Viewing head is 45 degrees inclined and rotates 360 degrees so that user can position microscope conveniently in forward or reverse viewing position. Post mount permits head to be adjusted up or down to accommodate larger objects on stage.

### OPTICAL SYSTEM

- Paired widefield 10x eyepieces, left-side diopter adjustment, interpupillary adjustment from 55mm to 75mm.
- Eyepieces equipped with reticle holder/retainer to accept reticle with 23mm O.D.
- Viewing head rotates 360°, adjusts up or down on post mount to accommodate difference size specimen.
- Paired objectives are parfocalled, parcentered and achromatic.
- Magnification changed by rotating objective turret 90° to positive click stops.

### ILLUMINATION

- Top light (incidental) is 12v, 10 watt tungsten with adjustable beam.
- Bottom light (transmitted) is 12v, 10 watt tungsten.
- 4-position light control: top only/bottom only/top & bottom/off.

### BASE

- Professional, all-metal frame.
- Rack & pinion focusing with slip clutch and tension adjustment.
- Includes two 80mm stage plates: frosted glass and reversible black/white plastic contrast plate.
- Locked-on stage clips.

### WARRANTY

- Lifetime limited warranty, excluding bulb, cord, and fuse.



# National 446 Series

<b>Specifications</b>	
Eyepiece	10x, 20mm (15x, 20mm, models 446TBL-15, 447TBL-15)
Head	45° inclined head, rotates 360°
Stage	80mm, frosted glass, reversible black & white
Magnification Options	1x , 3x (Models 446TBL-10, 446TBL-15) 2x, 4x (Models 447TBL-10, 447TBL-15) 1x, 2x (Model 448TBL-10)
Maximum Specimen Height	35mm
Working Distance	75mm
Top Illumination	12v, 10w tungsten
Bottom Illumination	12v, 10w tungsten
Height/ Weight	12 1/4 in. (310mm)/ 5.5 lbs (2.2 kgs)

#### PACKING:

- Individual: Ship wt. 9 lbs (4.1 kgs), Dimensions 16x17x11 in. (400x425x275mm)
- Master carton pack 4 each: Ship wt. 33 lbs (15 kgs), Dimensions 29x15x13 in. (725x375x325mm)

<b>Parts and Accessories</b>	
605-400	WF5x eyepieces, paired
615-400	WF15x eyepieces, paired
620-400	WF20x eyepieces, paired



#### **National Optical & Scientific Instruments, Inc.**

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Authorized Distributor

Products subject to changes in material and design, equal to or exceeding those described above.

ISO 9001:2000 Certified  
ISO 14001:2001 Certified