

MODEL 16H HORIZONTAL BEAM

This extremely accurate and versatile measurement instrument features a robust cast granite base and our proven cast iron "ultra precision" stage system. Integrated fiber optic surface illumination and all measurement scales have zero backlash and are mounted in the center of travel. A variety of readout options combine to make this the most accurate and versatile horizontal benchtop comparator available at any price. It is ideal for use with overlays or direct measurement.

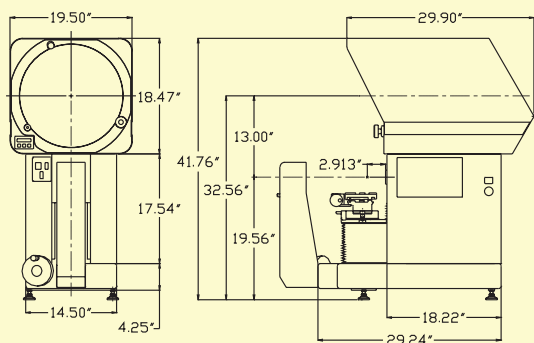
FEATURES:

- 16" (400mm) Vertical screen for optimum viewing
- Erect and reversed profile image
- High resolution ground glass screen with calibration reticle, 90 degree cross lines and chart clips
- Machined chart ring with vernier protractor, 1 minute graduation
- Coated telecentric parfocal optics
- Quick change single lens mount
- Fiber optic surface illumination
- Integrated hood
- Nickel plated, completely cast iron workstage
 - 3 axes solid rail crossed roller stage bearings
 - Twin universal dovetails
 - 18" x 5" overall size
 - 10" X axis travel with "glide release"
 - 6" Y axis travel (rise & fall)
 - 150 lbs. capacity
 - ± 15 degree true parfocal helix table adjustment, with 5 minute vernier
- NIST traceable calibration certificate
- 2 Year limited warranty

OPTIONAL FEATURES:

- Internal edge detection
- Linear Scale Resolution 0.00025mm/.00001"
- Swing away lamp house arm
- 20" or 24" extended stage travel on "X" axis (50 lbs capacity)
- Choice of readout options see pages 11-13
- Motorized and CNC computer controlled readout systems, 50 lbs capacity
- Output for electronic rotary screen protractor (Q axis) with selectable 1 minute or 1/100 of a degree resolution
- Harsh Environment package
- 3 axes of measurement

DIMENSIONS



This ultra precision system utilizes an integrated zero backlash, high resolution scale, in a free state, normalized zero stress stage. These features combine to attain inherent accuracy and repeatability values as high as $\pm .000025$ " without electronic compensation.

Technical Specification	
Illumination	Profile: Built-in 24V/150W direct collimated halogen Surface: Built-in 24V/250W via fiber optics
Screen Size	16" (400mm) Ground glass with cross-lines
Workstage	Cast iron, nickel plated, 18" x 5", twin dovetail
Workstage Travel	X = 10" (250mm) Y = 6" (150mm) Focus = 2" (50mm)
Workstage Options	Optional increase of stage travel to 20" (500mm) on X axis
Workstage Accuracy	Within $\pm 0.004\text{mm}$ $+(L/20) \cdot 0.001$
Linear Scale Resolution	Standard: 0.00025mm/.000010"
Repeatability of Scales	± 1 Scale count (0.001mm/.00005")
Coated Telecentric Lenses	5x, 10x, 20x, 25x, 31.25x, 50x, 62.5x, 100x
Optical Accuracy	Within $\pm .10\%$ Profile, $\pm .15\%$ Surface
Power Requirements	120V or 240V AC, 50/60 Hz, 10 Amp
Weight	460 lbs/209 kg

Proudly made in the USA

