## MODEL 16VS VERTICAL BEAM

This dynamic vertical optical system is the first of its kind manufactured in the USA. This system allows a much greater stage capacity up to 50 pounds (15 lbs in the center of the glass plate) with optional stage travel up to 12" x 4".

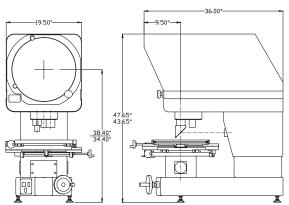
## **FEATURES:**

- •16" (400mm) Diameter vertical screen for optimum viewing
- Reversed and inverted image
- Precision ground glass screen with calibration reticle, 90 degree cross lines, and chart clips
- Machined chart ring with vernier protractor
- High specification stage
  - •50 lbs stage capacity (15 lbs on glass)
  - •15" x 10.5" (350x267mm) overall size of stage
  - •11" x 7" (280x178mm) glass insert
  - •8" x 4" (200x100mm) travel
  - •4" (100mm) focal distance in the Z-axis
  - •Multiple stage options with up to 16" x 8" of travel
- •LED light source. Fan cooled and electronically dimmed for long lamp life
- Dynamic optical head to maintain constant mass accuracy
- •Built in rotary 3 lens turret & 2 position condenser turret
- Non coaxial surface illumination is standard
- Welded plate steel case fabrication
- Coated telecentric parfocal optics
- •Lens choices of 10X through 100X
- •Linear Scale Resolution 0.1 μm/.000004" X & Y-axis
- •Choice of readout or full CNC computerized systems available
- NIST traceable calibration certificate
- 2 Year limited warranty

## **OPTIONAL FEATURES:**

- CNC controlled motorized stage
- Internal edge detection
- Coaxial surface illumination
- Output for electronic rotary screen protractor (Q-axis) on readout with selectable between DMS (degree-minute-second) and DD (decimaldegrees) of a degree resolution
- •Q axis accuracy of +/- 0.5 degrees
- Choice of readout options
- For choices of other vertical stages see page 96
- Wide selection of lenses
- Harsh Environment Package
- Tooling

## **DIMENSIONS**





Technical Specification	
Illumination	Profile: Dimmable LED Surface: LED
Screen Size	16" (400mm) Ground glass with cross-lines
Stage	Cast iron, nickel plated, 15" x 10.5" overall size
Stage Travel	X = 8" (200mm) Y = 4" (100mm) Focus = 4" (100mm)
Stage Accuracy	Within +/- 0.004mm +[(L/20).001]
Linear Scale Resolution	Standard: 0.1 µm/.000004" (X & Y axis)
Repeatability of Scales	+/- 1 Scale count (0.1 µm/.000004")
Coated Telecentric Lenses	10x, 20x, 50x
Optical Accuracy	Within +/- 0.1% Profile, +/15% Surface
Power Requirements	120V or 240V AC, 50/60 Hz, 10 Amp
Weight	375 lbs/170 kg