This extremely versatile measurement instrument features a robust cast granite composite base and our proven cast iron "ultra precision" stage system. This comparator comes standard with integrated fiber optic surface illumination. Measurement scales are mounted in the center of travel with zero backlash. A variety of readout options combine to make this one of the most accurate and versatile horizontal benchtop comparators.

**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
- Solid cast iron, nickel plated stage
  - 3-axis solid rail crossed roller bearings
  - Twin universal dovetails
  - 18" x 5" (457mmx127mm) overall size
  - 10" (250mm) X-axis travel with quick release
  - 6" (150mm) Y-axis travel (vertical movement/rise & fall)
- 150 lbs capacity
- ±15 degree true parfocal helix stage adjustment with 5 minute vernier
- NIST traceable calibration certificate
- 1/4 micron scales are standard equipment
- 2 Year limited warranty

**OPTIONAL FEATURES:**
- Internal edge detection
- Swing away lamp house arm
- 24" (610mm) extended stage travel on X-axis (50 lbs capacity), 5" (127mm) Y-axis travel (vertical movement Rise & Fall)
- Choice of readout options, see pages 11-13
- Motorized and CNC computer controlled systems, 50 lbs capacity
- Output for electronic rotary screen protractor (Q-axis) with selectable 1 minute or 1/100 of a degree resolution
- Through-lens surface illumination
- Harsh Environment package
- Additional lens magnifications available
- Tooling

**DIMENSIONS**

**Technical Specification**

<table>
<thead>
<tr>
<th>Illumination</th>
<th>Profile: Built-in 24V/150W direct collimated halogen Surface: Built-in 24V/250W via fiber optics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screen Size</td>
<td>16&quot; (400mm) Ground glass with cross-lines</td>
</tr>
<tr>
<td>Stage</td>
<td>Cast iron, nickel plated, 18&quot; x 5&quot;, twin dovetail</td>
</tr>
<tr>
<td>Stage Travel</td>
<td>X = 10&quot; (250mm) Y = 6&quot; (150mm) Focus = 2&quot; (50mm)</td>
</tr>
<tr>
<td>Stage Options</td>
<td>Optional increase of stage travel 24&quot; (600mm) on X axis</td>
</tr>
<tr>
<td>Stage Accuracy</td>
<td>Within +/- 0.004mm +/- [L/20000]</td>
</tr>
<tr>
<td>Linear Scale Resolution</td>
<td>Standard: 0.00025mm/100000, 0.00010&quot;</td>
</tr>
<tr>
<td>Repeatability of Scales</td>
<td>+/- 1 Scale count (0.00025mm/0.00010&quot;)</td>
</tr>
<tr>
<td>Coated Telecentric Lenses</td>
<td>5x, 10x, 20x, 25x, 31.25x, 50x, 62.5x, 100x</td>
</tr>
<tr>
<td>Optical Accuracy</td>
<td>Within +/- 0.10% Profile, +/- 0.15% Surface</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>120V or 240V AC, 50/60 Hz, 10 Amp</td>
</tr>
<tr>
<td>Weight</td>
<td>460 lbs/209 kg</td>
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</tbody>
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