

# CC-16

### **Optical Comparator**

A large field 16" horizontal benchtop optical comparator



#### FEATURES

#### **Hardware**

- 16" diameter screen
- 15" x 6" XY travel with 7.5° helix motion
- Quick release X axis and fine adjustment knobs in X and Y
- Heavy cast mineral composite base
- Rigid, all-steel construction
- 0.00004" XY scales

#### **Optics & Illumination**

- Telecentric with upright, corrected image
- 3.9" constant working clearance
- Fixed, large field 5X mag lens, standard
- Vivid TruLight™ all LED illumination

#### **DRO & Software**

- Ouadra-Chek® OC-100 standard
- QC-200 or QC-300 Series DRO optional
- Optional EdgeScan™ for internal automatic edge detection
- Optional eCAD™ electronic chart overlay package
- Optional MeasureFit<sup>®</sup> Plus for CAD analysis fitting
- Optional SmartReport<sup>®</sup> with real-time statistics
- Optional ImageCapture software for saving images and movies
- Optional eChek™ metrology software







Motorized CC-16 5x shown with optional Quadra-Chek QC-300 DRO.

#### CC-16 5x – Large FOV on a Benchtop Comparator

The CC-16 5x is a specially configured benchtop optical comparator designed to give you a large field of view in a minimum of space. Its evenly illuminated 16" screen shows 3.2" of the part being inspected.

A range of options lets you do more than traditional inspections with CC-16 5x. ImageCapture lets you save screen images and movies to document your inspections. eCAD puts virtual charts from your CAD files on the glass screen. Other software options provide custom reporting, fitting, and statistical analysis.

#### **Solid Design**

CC-16 5x is "rock solid" with its cast mineral composite base that keeps the optics aligned and isolated from shop environments. The securely mounted and smoothly moveable worktable includes helix motion for repeatable profile measurement of threads.

#### **Intuitive Electronics and Software**

The standard Quadra-Chek QC-100 provides geometric measuring

functions. Or choose QC-200 or QC-300 DRO for even greater functionality.

Choose optional EdgeScan<sup>™</sup> internal automatic edge detection for accurate edge measurements from every user.

#### Illumination

CC-16 5x includes first in its class bright TruLight all-LED illumination with variable intensities. TruLight LEDs provide years of uninterrupted performance.

#### **Precision Optics**

The integral 5x mag lens provides sharp, uniform images across its entire field of view.

**Compare the Quality** 



## CC-16 Optical Comparator

#### TECHNICAL SPECIFICATIONS

Optical

Screen Size 16" diameter screen, with integral hood

Ground glass with 90° centerlines and clips for mounting standard 16" overlay Screen Type

charts

Protractor Digital screen display, ±360° readout with 1' (0.017°) resolution

**Optical System** Telecentric, horizontal, with upright corrected image, 3.9" constant working

clearance, 5X dedicated fixed lens system

**Throat Clearance** 10.75"

Mechanical

XY Motion Manual, with quick release X axis and fine adjustment knobs in X and Y

**Optional XY Motion** Motorized, with variable speed joystick

15" x 6"; focus travel - 2" with precision fine adjustment XY Travel

Extended X axis travel - 18" **Optional Travel** 

Precision, with heavy duty cast iron substage for vertical motion and focus XY Positioning

control

Worktable Hardcoat anodized aluminum with fixturing slot, 20" x 4.75", 60 lb load

capacity

Helix Motion ±7.5° with pivoting worktable assembly and zero stop

Manual systems, 37.7" x 15.7" (31.9" with DRO) x 40.2" System Dimensions, (approx DWH)

Motorized systems 37.7" x 20.2" (31.9" with DRO) x 40.2"

Weight, approximate Illumination (TruLight™)

**Optional Illumination** 

Manual, 475 lb; Motorized, 495 lb

Quadra-Chek® QC-200, QC-300

Profile light, bright green LED, continuously variable intensity

TruLight TTL surface, white LED coaxial internal, continuously variable intensity

Quadra-Chek® QC-100 (std.) **Electronics** 

**Optional Electronics** 

Optional Software Packages MeasureFit MeasureFit Plus (requires separate computer);

SmartReport® with real-time statistics (requires separate computer);

Quadra-Chek® QC-Wedge (requires separate computer and Microsoft® Excel™)

■ eCAD™ for electronic CAD overlay & virtual chart system (requires separate

computer);

**Chek**™ (requires separate computer)

**Power Requirements** 115 VAC, 50/60 Hz, 1Φ, 350 W

**XY Scale Resolution** 0.00004"

**Options** 

Adjustable direct projection iris

ImageCapture
Digital video screen image capture
External optical edge detection
EdgeScan™ internal automatic edge detection (requires QC-200 or 300 DRO)

Fixtures and calibration accessories

Fresnel lens

Glass and plastic overlay charts Service and support contracts Swing away lamphouse

Heavy duty weldment stand

Full on-site warranty for 1 year. Parts only warranty for second year. Warranty





