

Optical Comparator

A premium horizontal benchtop optical comparator



FEATURES

Hardware

- 14" viewable screen
- 8" x 5" XY travel with 6.5° helix motion
- Quick release X axis and fine adjustment knobs in X and Y
- Rigid, all-steel construction
- 0.00004" XY scales

Optics & Illumination

- Fully telecentric with upright, corrected image
- 3 position internal lens turret
- 3.9" constant working clearance
- 3 vivid TruLight™ all LED illuminators available

DRO & Software

- Quadra-Chek® QC-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® Plus for CAD analysis fitting
- Optional SmartReport[®] with real-time statistics
- Optional ImageCapture software for saving images and movies
- Optional eCheck™ metrology software







Motorized CC-14 shown with optional Quadra-Chek QC-300 DRO and TruLight Ringlight.

CC-14 - New Technology for Increased Value

The CC-14 optical comparator is a quality, full-featured machine with a broad range of standard features.

High technology, all-LED illumination fills its 14" viewable screen at all the available magnifications. Use ImageCapture to save screen images and movies to document your inspections.

Solid Design

CC-14 is built for real world, shop environments. Its rigid, all-steel construction and heavy metal castings provide durability and consistent accuracy you can depend on every day.

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.

CC-14 offers consistent accuracy from every user with features like optional EdgeScan™ internal automatic edge detection. Connect your CC-14 to a PC and run optional measurement, fitting, and reporting software. Compare parts

directly to digital virtual charts with $eCAD^{TM}$.

Illumination

CC-14 offers first in its class - THREE bright TruLight all-LED illuminators. The standard green LED profile light, the optional TruLight white LED Ringlight and the TTL surface light offer variable intensities for perfect imaging in every situation. And LEDs provide years of uninterrupted performance.

Precision Optics

Choose 10X-100X telecentric mag lenses for superb image quality. The 3 position internal lens turret makes mag changes easy, while keeping lenses safe and ready for immediate use.

Compare the Quality



CC-14 Optical Comparator

TECHNICAL SPECIFICATIONS

Optical

Screen Size 14" diameter screen, with integral hood

Screen Type Ground glass with 90° centerlines and clips for mounting standard 14" overlay

charts

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

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

clearance

Optional Lenses 10X, 20X, 31.25X, 50X, 100X

Lens Turret Three position, manual, internal, with magnification display

Throat Clearance 9.8"

Mechanical

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

Optional XY Motion Motorized, with variable speed joystick

8" x 5"; focus travel - 2" with precision fine adjustment XY Travel

Extended X axis travel - 12" **Optional Travel**

XY Positioning Precision, with heavy duty substage for vertical motion and focus control Hardcoat anodized aluminum with fixturing slot, 16" x 4.75", 45 lb load Worktable

Manual, 315 lb; Motorized, 335 lb

capacity

Helix Motion ±6.5° with pivoting worktable assembly and zero stop System Dimensions, (approx DWH) Manual systems, 40.1" x 18.25" (32.1" with DRO) x 41"

Motorized systems 40.1" x 22.75" (32.1" with DRO) x 41"

Weight, approximate Illumination (TruLight™)

Optional Illumination



1. Profile light, bright green LED, continuously variable intensity

2. Oblique (Dark Field), Ringlight with 8 white LEDs, 6 switch-selectable patterns for effective directional lighting; continuously variable intensity

3. TTL surface, white brightfield, LED coaxial internal, continuously variable

intensity

Electronics

Optional Electronics

Power Requirements

XY Scale Resolution

Options



Quadra-Chek® QC-100 (std.)

Quadra-Chek® QC-200, QC-300

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);

115 VAC, 50/60 Hz, 1Φ, 350 W

0.00004"

Adjustable direct projection iris

ImageCapture Digital video screen image capture
External optical edge detection

EdgeScan

EdgeScan internal automatic edge detection (requires QC-200 or QC-300 DRO)

Fixtures and calibration accessories

Fresnel lens

Glass and plastic overlay charts Heavy duty steel weldment stand Service and support contracts

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



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