

Optical Comparator

A premium 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

- Fully telecentric with upright, corrected image
- Internal quick change lens mount and lens storage rack
- 3.9" constant working clearance
- 10X mag lens, standard
- 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 eChek™ metrology software







Motorized CC-16 shown with optional Quadra-Chek QC-300 DRO and TruLight Ringlight.

CC-16 – High Performance and Quality

The CC-16 is a top quality optical comparator designed to meet the needs of today's manufacturers.

Its 16" diameter screen displays crisp, evenly illuminated images at every available magnification. You can use ImageCapture to save those screen images to document your inspections.

Solid Design

CC-16 is "rock solid" with its cast mineral composite base that provides structural integrity for consistent performance in shop environments. Superb mechanics and quality optics ensure reliable performance.

Intuitive Electronics and Software

The standard Quadra-Chek QC-100 provides geometric measuring functions. Choose the QC-200 or QC-300 DRO for even greater functionality.

Choose optional EdgeScan™ internal automatic edge detection for accurate edge measurements from every user. Connect your CC-16 to a PC and run optional measurement, fitting, and reporting software. Compare parts

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

Illumination

CC-16 offers a first in its class -THREE bright TruLight all-LED illuminators. The standard green LED profile light, optional TruLight white LED Ringlight and TTL surface light all provide variable intensity, uniform lighting and years of uninterrupted performance.

Precision Optics

Choose 10X-100X telecentric mag lenses for superb image quality. The quick change internal lens mount and convenient storage keeps lenses safe and ready for use.

Compare the Quality



CC-16 Optical Comparator

TECHNICAL SPECIFICATIONS

Optical

16" diameter screen, with integral hood Screen Size

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

charts

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

Telecentric, horizontal, with upright corrected image, 3.8" constant working **Optical System**

clearance, 10X projection lens

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

Lens Mount Internal, manual, with protective lens storage rack

Throat Clearance 10.75"

Mechanical

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

Motorized, with variable speed joystick Optional XY Motion

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

Optional Travel Extended X axis travel - 18"

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

control

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

Manual, 475 lb; Motorized, 495 lb

capacity

Helix Motion ±7.5° with pivoting worktable assembly and zero stop System Dimensions, (approx DWH) Manual systems, 37.7" x 15.7 (31.9" with DRO) x 40.2"

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

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

Electronics

Power Requirements

XY Scale Resolution

Optional Electronics

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);

Chek eChek (requires separate computer) 115 VAC, 50/60 Hz, 1Φ, 350 W

0.00004"

Options

Adjustable direct projection iris Image Capture Digital video screen image capture

EduScan 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

Swing away lamphouse

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



Warranty

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