A Premium 16″ Horizontal Benchtop Optical Comparator

Features

Hardware

- 16″ diameter screen
- 15″ x 6″ XY travel with 7.5° helix motion
- 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
- 3.8″ constant working clearance
- 3 vivid TruLight® all LED illuminators available

DRO & Software

- Quadra-Chek® QC-100 or Q-Check® standard
- QC-200 or QC-300 Series DRO optional
- Optional EdgeScan™ or Projectron™ for internal automatic edge detection
- Optional eCAD® electronic chart overlay package
- Optional VidiProbe™ video automation package with Measure-X® 2D software
- 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

CC-16 – High Performance and Quality

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

The 16″ diameter screen displays crisp, evenly illuminated images at every available magnification.

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

CC-16 offers a choice of QuadraChek® QC-100 or QVI® Q-Check® DRO as standard. The Q-Check controller provides full geometric measuring functions with simple push button controls. Choose the QC-200 or QC-300 DRO for even greater functionality.

Choose optional EdgeScan or Projectron internal automatic edge detection for accurate edge measurements by any 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.

Illumination

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

Precision Optics

Choose from a range of telecentric mag lenses for superb image quality. The quick change internal lens mount and convenient storage keeps lenses safe and ready for use.

Optional TruLight LED ring light with six selectable light combinations and variable intensity control.
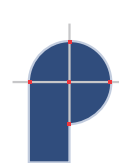
Technical Specifications

Optical

Screen Size	16″ diameter screen, with integral hood
Screen Type	Ground glass with 90° centerlines and clips for mounting 16″ overlay charts
Protractor	Digital screen display, ±360° readout with 1′ (0.017°) resolution
Optical System	Telecentric with upright, reversed image, 3.8″ constant working clearance
Optional Lenses	5X (this lens prohibits all other lenses), 10X (included unless optional lens turret is ordered) 20X, 31.25X, 50X, 100X
Lens Mount	Internal, quick change lens mount and storage rack with locking access door
Optional Lens Turret	Two position, manual, internal
Throat Clearance	10.75″

Mechanical

XY Motion	Manual, with fine adjustment knobs for X and Y
Optional XY Motion	Motorized, with variable speed joystick
XY Travel Range	15″ x 6″
Focus Travel	2″ with precision fine adjustment
Optional XY Travel	Extended X axis travel - 18″
XY Positioning	Precision, with heavy duty substage for vertical motion and focus control
XY Scale Resolution	0.00004″
Worktable	Hardcoat anodized aluminum with fixturing slot, 20″ x 4.75″, 60 lb capacity
Helix Motion	±7.5° with pivoting worktable assembly and zero stop
System Dimensions (approx DWH)	37.7″ x 15.7″ (31.9″ with DRO) x 40.2″
Weight	Manual, 475 lb; Motorized, 495 lb

Illumination (TruLight®)

Standard Illumination	Profile light: High-brightness, green LED, with continuously variable intensity
Optional Illumination	Oblique (Dark Field), ring light with 8 white LEDs, 6 switch-selectable patterns for effective directional lighting; continuously variable intensity Through-the-lens coaxial surface light, white brightfield, LED, continuously variable intensity

Electronics

Standard Electronics	Choice of Quadra-Chek® QC-100 or QVI® Q-Check® DRO Controller
Optional Electronics	Quadra-Chek® QC-200 or QC-300

Optional Software Packages
(All optional software requires a separate computer)

MeasureFit® Plus
SmartReport® with real-time statistics
Quadra-Chek QC-Wedge (requires Microsoft® Excel™)
eCAD® electronic CAD overlay & virtual chart system
eChek™ Metrology Software
Measure-X® 2D Metrology Software

Power Requirements

115/230VAC, 50/60 Hz, 1 , 350W

Options

Adjustable direct projection iris
Digital video screen image capture
EdgeScan™ internal automatic edge detection (requires a Quadra-ChekDRO)
Projectron™ automatic grayscale edge detection (requires a Q-Check DRO)
VidiProbe™ Video Measurement with turret mounted camera and Measure-X 2D software
Fixture and calibration reticles
Fresnel Lens
Overhead Light Shield
Glass and plastic overlay charts
Heavy duty steel weldment stand
Ergonomic, motorized adjustable height stand
CE mark available for systems delivered to Europe
Service and support contracts
Swing away lamphouse

Warranty

Full parts and labor warranty for 1 year.