

Optical Comparator

A premium midrange horizontal optical comparator



Hardware

- 20" diameter screen
- Heavy duty cast iron worktable support structure
- Nickel plated worktable
- 15" x 9" motorized XY travel
- 0.00004" XY scales

Optics & Illumination

- Telecentric with fully corrected image
- Optional motorized 5-position internal lens turret
- 8.38" constant working clearance
- 10X-100X projection lenses
- TruLight™ green LED profile illumination standard

DRO & Software

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







CC-20 shown with optional Quadra-Chek QC-300 DRO.

CC-20 – Innovative Illumination = Superior Images

The CC-20 optical comparator is a precision instrument designed for the shop floor. It has extensive features and a range of options to configure a system to meet your specific needs.

The eye level 20" diameter screen and conveniently located DRO make measurements fast and easy.

Solid Design

CC-20 is rigidly constructed with heavy duty components that provide durability and long-term reliability. Its high load capacity nickel-plated worktable easily accommodates large, complex machined parts and fixtures. Use optional ImageCapture to save screen images and movies to document your inspections.

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. Optional EdgeScan™ internal automatic edge detection ensures accurate edge measurements from every user. Connect your CC-20

to a PC and run optional measurement, fitting, and reporting software. Simplify your inspections with virtual charts right on the comparator screen with eCAD™.

Illumination

CC-20 includes first in class bright green TruLight LED profile illumination with variable intensity control. This innovative LED backlighting in conjunction with high intensity mercury arc surface lighting gives CC-20 superior imaging capabilities.

Precision Optics

Mount up to 5 of the available 10x-100x mag lenses in the optional motorized internal lens turret where they are safe and ready for immediate use.

Compare the Quality



CC-20 Optical Comparator

TECHNICAL SPECIFICATIONS

Optical

Screen Size 20" diameter screen, with integral hood

Screen Type Ground glass with 90° centerlines and clips for mounting standard 20" overlay

charts

Screen rotation protractor with ±360° motion, digital display, thermal Protractor

compensation function, 0.01° or 1' display

Optical System Telecentric, horizontal, with fully corrected image, 8.4" constant working

Optional Lenses 10X, 20X, 31.25X, 50X, 62.5X, 100X

Lens Mounting Standard one position, fixed; Optional five position, motorized turret

Throat Clearance

Mechanical

15" x 9"; Focal - 3" with precision fine adjustment XY Travel

Optional Travel Extended X axis travel - 18"

Motorized, DC servo, with variable speed joystick and X axis fine adjustment knob XY Positioning

XY Motion Precision mechanical bearing slides attached to a heavy duty cast worktable

support structure

Worktable Nickel plated iron with 3 fixturing slots, 32" x 8"; 550 lb load capacity

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

System Dimensions, (approx DWH) 67" x 38" x 75"

Weight, approximate

Illumination

Optional Illumination

1. TruLight[™] profile light, bright green LED, continuously variable intensity

2. TTL surface, white brightfield, LED coaxial internal, continuously

variable intensity

Electronics

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

115 VAC, 50/60 Hz, 1Ф, 2500 W

Power Requirements Scale Resolution

Options

0.00004"

Adjustable iris assembly, adjustable slit iris assembly

ImageCapture

External optical edge detection

EdgeScan

EdgeScan

Digital video screen image capture

External optical edge detection

EdgeScan

EdgeScan

Digital video screen image capture

External optical edge detection (requires QC-200 or QC-300 DRO)

Fixtures and calibration accessories

Fresnel lens

Glass and plastic overlay charts

High efficiency mercury arc surface illuminator heat glass

Service and support contract

Surface illumination concentrator (for 50X and 100X lenses)

Swing-away lamp house

Overhead curtain

Warranty Two year, limited (North America only)







