

# **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<sup>®</sup> with real-time statistics
- Optional EdgeScan<sup>™</sup> for internal automatic edge detection
- Optional eCAD<sup>®</sup> electronic chart overlay package
- Optional MeasureFit® Plus for CAD analysis fitting
- Optional ImageCapture<sup>™</sup> software for
- saving images and movies
- Optional eChek<sup>™</sup> 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

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

**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** 

variable

**Electronics** 

**Optional Electronics** 

Quadra-Chek® QC-100 (std.)

Quadra-Chek® QC-200, QC-300

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

intensity

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

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

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

1. TruLight<sup>™</sup> profile light, bright green LED, continuously variable intensity

AD eCAD® for electronic CAD overlay & virtual chart system (requires separate computer)

eChek<sup>™</sup> (requires separate computer) 115 VAC, 50/60 Hz, 1Ф, 2500 W

**Scale Resolution** 

**Power Requirements** 

**Options** 

0.00004"

Adjustable iris assembly, adjustable slit iris assembly

Digital video screen image capture

EdgeScan <sup>™</sup> internal automatic edge

EdgeScan Fixtures and calibration accessories

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

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)







