

# Optical Comparator CC-20

CC-20 – Innovative Illumination = Superior Images

## A Premium Midrange **Horizontal Optical** Comparator

Features

#### Hardware

- 20" diameter screen
- Cast iron vertical elevating assembly, heavy duty cast iron 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
- 8.4" constant working clearance
- 10X-100X projection lenses
- TruLight<sup>®</sup> green LED profile illumination standard

#### DRO & Software

- Quadra-Chek<sup>®</sup> QC-100 or Q-Check<sup>®</sup> standard
- QC-200 or QC-300 Series DRO optional
- Optional SmartReport<sup>®</sup> with real-time statistics
- Optional EdgeScan<sup>™</sup> or Projectron<sup>™</sup> for internal automatic edge detection
- Optional eCAD<sup>®</sup> electronic chart overlay package
- Optional MeasureFit<sup>®</sup> Plus for CAD analysis fitting
- Optional ImageCapture<sup>™</sup> software for saving images and movies
- Optional eChek<sup>™</sup> metrology software
- Optional VidiProbe<sup>™</sup> video measurement package with Measure-X<sup>®</sup> 2D software



The CC-20 optical comparator is a precision instrument designed for the shop floor. It has extensive standard features and a range of options that allow you to configure a system to meet your specific measurement 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 longterm reliability. Its high load capacity, nickel-plated worktable easily accommodates large, heavy machined parts and fixtures.

## **Intuitive Electronics and Software**

CC-20 offers a choice of QuadraChek® QC-100 or QVI<sup>®</sup> Q-Check<sup>®</sup> DRO as standard. The Q-Check controller

provides full geometric measuring functions with simple push button controls. Choose a OC-200 or OC-300 DRO for even greater functionality. Choose optional EdgeScan or Projectron for internal automatic edge detection that ensures accurate edge measurements from every user. Use optional ImageCapture<sup>™</sup> to save screen images or movies to document your inspections. Connect your CC-20 to a PC and run optional measurement, fitting, and reporting software. Simplify your inspections with virtual charts projected directly to the screen with eCAD<sup>®</sup>.

#### Illumination

CC-20 includes first in class high brightness TruLight LED profile illumination with variable intensity control. Optional high intensity LED 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.



TruLight LED lighting provides cool operation and continuously variable intensity control.









#### **Technical Specifications**

#### Optical

Screen Size Screen Type Protractor

Optical System Optional Lenses Optional Lens Turret Throat Clearance

#### Mechanical

XY Motion XY Travel Range Focus Travel Range Optional X Travel XY Positioning

XY Scale Resolution Worktable Optional Helix Motion System Dimensions (approx DWH) Weight

Illumination (TruLight<sup>®</sup>) Standard Illumination Optional Illumination

Electronics Standard Electronics Optional Electronics

Optional Software Packages (All optional software requires

**Power Requirements** 

Options

Warranty



20" diameter viewing area screen, with integral hood Ground glass with 90° centerlines and clips for mounting 20" overlay charts Screen rotation protractor with ± 360° motion, digital display, thermal compensation function, 0.01° or 1' display Telecentric with upright, and un-reversed image, 8.4" constant working clearance 10X, 20X, 31.25X, 50X, 62.5X, 100X Internal, motorized 5 position 18.38" Motorized with variable speed joystick; fine adjustment knob in X & Y 15" x 9" 3-inch, with precision fine adjustment Extended X axis travel - 18" Precision, cast iron vertical elevating assembly with heavy duty substage for vertical motion and focus control 0.00004" Heavy duty cast iron nickel plated worktable, 32" x 8", 300 lb capacity ±15° with pivoting worktable assembly and zero stop 67" x 38" x 75" 1,600 lb Profile light: bright green LED, continuously variable intensity Through-the-lens coaxial surface light, white brightfield, LED, continuously variable intensity Choice of Quadra-Chek<sup>®</sup> QC-100 or QVI<sup>®</sup> Q-Check<sup>®</sup> Quadra-Chek QC-200 or QC-300 MeasureFit<sup>®</sup> Plus SmartReport<sup>®</sup> with real-time statistics

SmartReport<sup>®</sup> with real-time statistics Quadra-Chek QC-Wedge (requires Microsoft<sup>®</sup> Excel<sup>™</sup>) eCAD<sup>®</sup> for electronic CAD overlay & virtual chart system eChek<sup>™</sup> Metrology Software

115/230 VAC, 50/60 Hz, 1Φ, 600 W

Adjustable direct projection iris Digital video screen image capture EdgeScan<sup>™</sup> internal automatic edge detection (requires a Quadra-Chek DRO) Projectron<sup>™</sup> automatic grayscale edge detection (requires a Q-Check DRO) VidiProbe<sup>™</sup> Video Measurement with turret mounted camera and Measure-X<sup>®</sup> 2D software Fixture and calibration reticles Fresnel lens Overhead Curtain light shield Glass and plastic overlay charts Swing-away lamphouse CE mark available for systems delivered to Europe Service and support contracts

Full parts and labor warranty for 1 year.

HOURS