

### **⊜Chek** <u>Measurement</u> Software

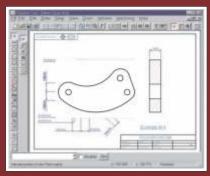
### eChek - Powerful Measurement Software Automate Measurements Automate Measurements

# Write Full CNC Programs Directly From Your Cad File

#### **Features**

- Complete measurement and construction functionality
- Full CNC operation
- Intuitive, full-featured user interface
- CAD import capability
- Easily links to other CCP software

#### From CAD...





...To eChek





eChek™ provides full measurement and construction functionality for points, midpoints, angles, lines, arcs, circles, distances, widths, included angles, angle intersections, line/circle intersections, point-to-line distances, gage ball tangent to two lines, and gage ball between two non-parallel lines

#### Full CNC Operation

eChek provides full "hands-off" CNC operation, including automatic worktable motion, edge detection (requires EdgeScan™ or Projectron™), geometric measurement and analysis, and data output. Step and repeat functions allow measurement of multiple parts in one setup. Once an eChek routine is created, it may be executed or modified as you see fit.

Intuitive User Interface

eChek's user interface allows simultaneous viewing of the model, edit, data, and status windows, with no tabbing or pulldown menus. Logically designed icon toolboxes provide direct access to measurement, construction, and analysis functions.

**CAD Import Capability** 

With CAD import, eChek automatically generates a full measurement routine from the CAD file, and performs measurement path optimization, including interactive worktable and CAD model movement.

Link to Other CCP Software

Extend your comparator's functionality even more with optional CCP MeasureFit® Plus for 2D fitting, SmartReport® powered by QC-Calc™ for custom report generation and data export, and/or eCAD™ that allows a DXF CAD model to project a "virtual chart" profile tolerance band onto the screen of a specially configured CCP optical comparator.



Optional CNC rotary indexer





# Measurement Softwar

Coordinate System

Cartesian (XY) and polar (RA) Decimal/degrees or deg/min/sec

Direct conversion of English and metric units

Selectable numeric resolution

Measurement Types

Coordinate point

Line

Radius and diameter

Included angle and intersection point

Width

Distance: xy, polar, point-line

Intersection(s) between lines and circles

Gage ball and gage diameters

Tolerances

Size - ANSO (+/-) and ISO (+/+, -/-, +/-) Locations - True position, concentricity,

linear

Form - Circularity, straightness Orientation - angularity, parallelism,

perpendicularity Profile - arc, line

Modifiers - MMC and LMC

Graphics Model

Real-time display of measured features

Auto scaling graphics model

Color coding

Zoom in/out with mouse

Build constructions by selecting features in

model window Click and drag to select

**Data Reduction** 

Calculate from edge detection data or

previously measured features

Best fit (Gaussian), minimum. or maximum

Datum Operations

Origin set Skew alignment Axis preset

Translate origin and rotate axes Construct from basic dimensions

Supported CAD file Format

DXF, IGES, Gerber, Excellon, HPGL

Computer Requirements Microsoft Windows XP Professional Dual core Pentium processor @ 1.8 Hgz

1 GB of RAM 80 GB hard drive

CD-ROM or DVD-ROM drive 1600x1200 monitor display

**CNC Control** 

XY worktable positioning Rotary indexing table (if equipped) Edge detection control (when equipped

with EdgeScan)

Control external devices with digital I/O

channels

Digital Readouts Supported

Q-Check DRO or QC-300

Data Output

Configurable hard copy report Default and custom report headers/comments

Color coded on-screen display Configurable data export to Excel or

database

Run time overrides Print graphics model

Export to MeasureFit® Plus, and

SmartReport® powered

by QC-CALC™ software; third-party SPC

software

Editing

Undo last step Insert, delete, change, and copy step Interactive editing while measuring

Standard, condensed, and expanded

listings

Advanced editor - edit steps in Edit

Window Global Edit

Languages

User interface in English, Spanish, French, German, Portuguese, Italian, Swedish, Dutch, Japanese, Korean, and

Chinese

Calibration Utilities

"Wall Effect" compensation Edge detection search parameters

System Configuration

Power-up defaults Language

RS-232 port configuration

Default report and export templates

Printer type and port Audible warnings and tones

Math/Logic Functions

Copy and Step & Repeat: XY or RA

offsets

Math operations

Branch on condition and If-Then-Else

statements

Online Help

Full featured, user-friendly Help Hyperlinks, related topics, index and

search

Options

Optional Software Module: eChek has the ability to define tolerancing import CAD files, create alignment methods, and program critical inspection areas from a remote location

Optional PSR Precision Stepper Rotary



