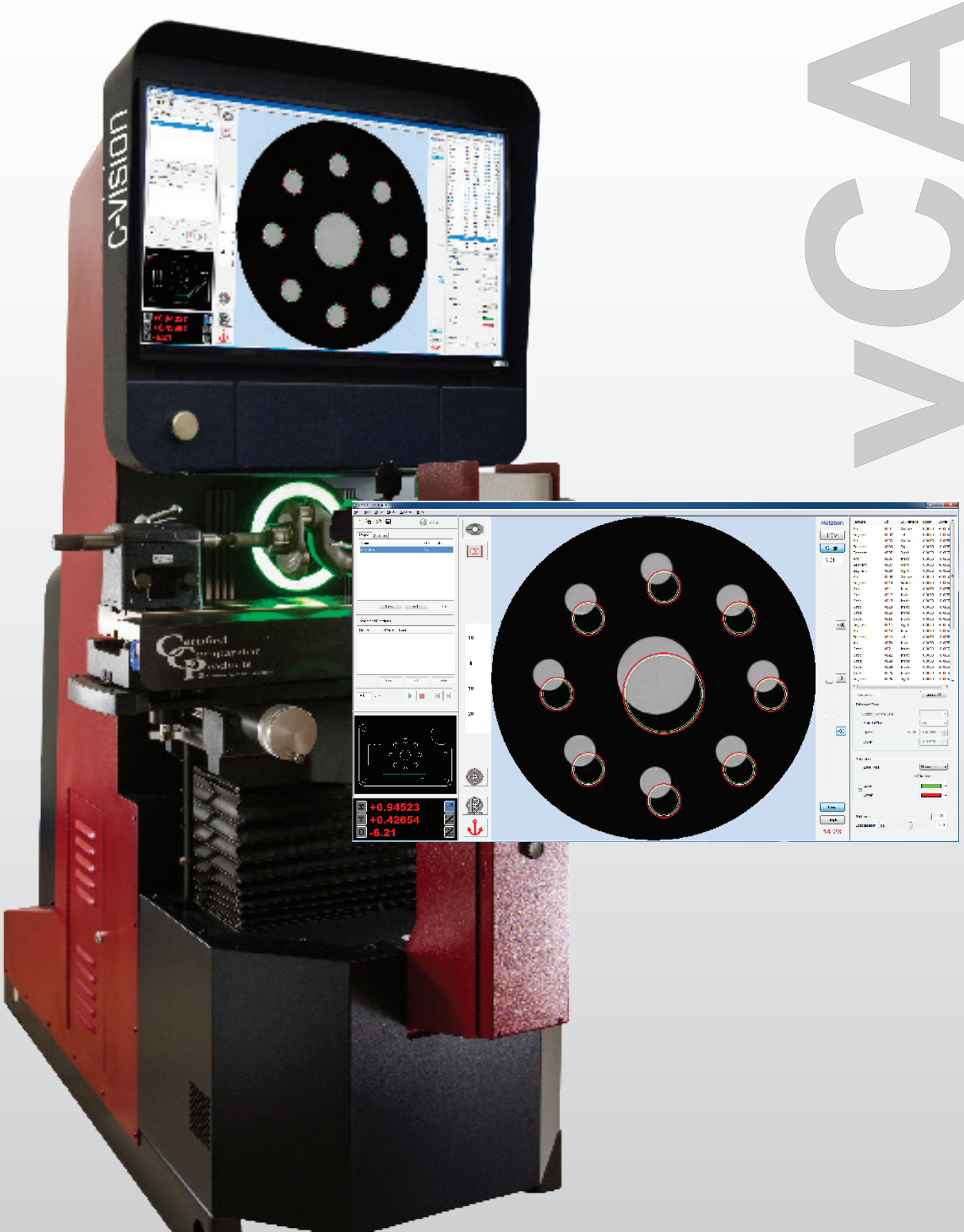
Precision for People

QVI

VCAD

Virtual Chart Gages from your CAD File



Virtual Chart Gages

Eliminate Overlay Templates

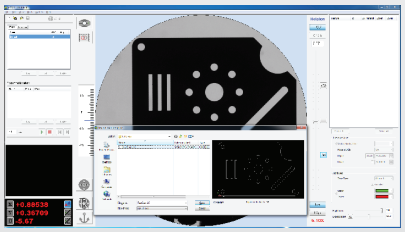
A vCAD virtual chart gage digitally compares part images to an imported CAD file overlay of that part. This allows you to align edges and compare dimensions of the screen image to the CAD overlay. vCAD virtual chart gages allow you to see the part matched with the CAD overlay, providing accurate and precise measurement. Using overlay templates on a traditional analog comparator can't compete with the simplicity and screen resolution provided by vCAD on a digital comparator.

vCAD displays charts and grids for manual reference, and color coordinated tolerances to help identify if a part is within tolerance. Changing magnification automatically re-aligns the part image to the overlay. Once the screen image and CAD overlay are aligned you can couple the pair together. This locks the image and overlay together, maintaining alignment when the stage is moved or when the part is rotated. The stage can be manually maneuvered or an automatic programmed location sequence can be created to automatically survey the part.

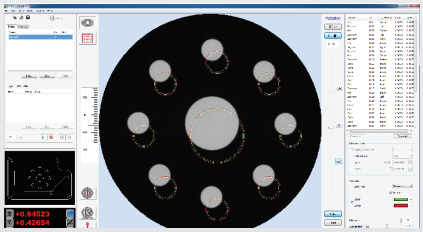
vCAD is a video comparator that brings the benefits of a comparator and vision system together using one simple to use software.

- vCAD allows the live video image of a part to be rotated and aligned to the 2D CAD model
- Define tolerance zones for size, color, and type with global settings and edit capabilities
- Tolerance bands as small as a few thousandths of an inch
- No line weight necessarily - the live image can be shown in the tolerance zone eliminating errors
- Up-to-date Engineering changes are reflected in the latest CAD file
- Eliminate the time and cost of manufacturing overlay charts
- Instantaneous magnification changes in vCAD - the CAD files rescale automatically to the selected magnification
- An entire part does not need to fit on the screen, the vCAD chart follows the part movement — allowing for smaller screens and higher magnifications

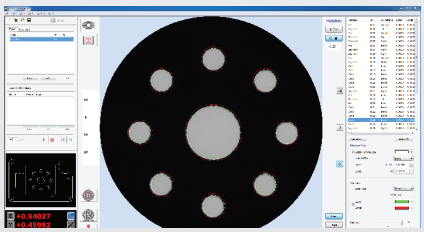
The vCAD process is easy as 1-2-3:



1. Import (open) DXF CAD template



2. Mount the part and focus on feature of interest



3. Line up image with chart gage, & begin inspection

	Standard
Supported CAD File Format	DXF, Gerber, Excellon, HPGL, PRT, EPS, DWG
Supported Systems	cvision Benchtop Model Systems, cvision Floor Model Systems
Units	English or metric
Inspection Modes	Manual moves; automated moves with manual step-by-step indexing; automated moves with programmed pauses; recall programmed inspection projects
CAD Alignment Methods	Visual Comparison - manual alignment of general part characteristics
Optional Offline Software Module	vCAD offline - available for remote programming without use of comparator. Offers the ability to define tolerancing, import CAD files, create alignment methods, and program critical inspection areas from a remote location.

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