Versatile Measurement Systems

Optical comparators are among the most versatile measurement tools in any inspection lab or machine shop. Traditional methods and new digital techniques provide dozens of ways comparators can be used to inspect, measure, and report on part conditions.

Surface Inspection
TruLight® through-the-lens surface light is a high intensity, pure-white light, projected parallel to the optical axis. This type of illumination is ideal for visual inspection or surface grain, texture, cracks, flaw or colors in the object’s surface.

Measurement by Comparison
Overlay charts or eCAD® virtual chart gages provide a master outline of the nominal part, allowing easy comparison of the actual part to the master.

Measurement by Motion
Distances between features can be measured manually using the standard DRO controller, or even using a ruler to measure directly on the screen and simply dividing the distance by the magnification. Fully automatic measurements can be made using optional edge detection and automation software.
Angle Measurement
The rotating screen ring and digital protractor readout allow direct measurement of angles. Radius and angle chart gages are available for direct comparison as well.

Off-Axis Measurement
Helix motion allows measurement of threads, gears, and gear cutting hobs by rotating the part so that the features are presented correctly to the optics and measured normal to the part axis.

Tool Pre-Setting
The comparator's high magnification and bright light make it convenient for use as a manual tool presetter. Ample room is available in the work envelope to manipulate the part by hand to facilitate alignments.

Manual Inspection
CCP comparators offer a constant, long working distance between the part being inspected and the front lens. This large working area provides ample room for tooling fixtures, or for manual inspections without fixtures.

Certified Comparator Products offers a complete line of optical comparators with the world's most advanced measurement technologies. From reliable manual profile projectors to fully automatic CNC controlled vision comparators, CCP has the right measurement solution to support your manufacturing needs. Our worldwide network of certified channel partners offers expert support and service for CCP comparators anywhere in the world.

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