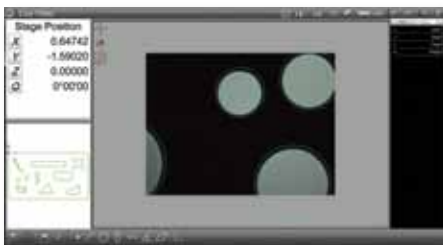# HDV300

Introducing the HDV300

The all new HDV300 video based measurement system by Starrett is an innovative new system that blends the power of the Optical Comparator with the power of digital video, hi-resolution cameras, telecentric optics and LED illumination. Equally effective on the manufacturing floor as well as the Quality Lab, The HDV is built upon Starrett's years of experience in both the Optical Comparator and Vision technology fields. The structure of the design allows for work handling, part fixturing and an operator interface typical on an Optical Comparator – that is where the similarity ends as digital technology takes over to measure parts in a progressive and practical way.

Utilizing the part design file (DXF), a digital overlay can be created to compare the inspected part to its design profile similar to using a Mylar overlay chart on a comparator screen.

Touch-screen technology allows the operator to select features to be measured independently as well as looking at an entire part all at once by simply tapping the feature to be measured on the screen. The intuitive M3 programming power and simple operator display interface make part measuring efficient and highly productive.

Features & Specifications

- Large measuring travel: 12" X-axis, 6" Y-axis (300mm x 150mm)
- Quick action interchangeable lens system (patent pending)
- Rugged design suitable for many manufacturing environments
- Bench top mounting
- DXF CAD import and overlay measurement software
- 24" Touch screen monitor
- LED illumination

M3 software showing DXF overlay with "Pass-Fail" results

Lens Choices and FOV	
Lens	**Size (mm)**
0.30X	29 x 22mm
0.50X	18 x 13mm
0.80X	11 x 8mm
1.0X	8.8 x 6.6mm
2.0X	4.4 x 3.3mm
4.0X	2.2 x 1.65mm
6:1 Zoom	12mm to 2mm

M3 Touchscreen Control

M3 Control for MV Manual Vision Systems

The MetLogix M3 control has a broad range of powerful, user-friendly functions on a touchscreen interface in place of the traditional control. The operating interface is graphically based and easy to learn.

A Starrett MV with an MetLogix M3 touchscreen control offers a state of the art vision system that is powerful, intuitive and exceptionally accurate.
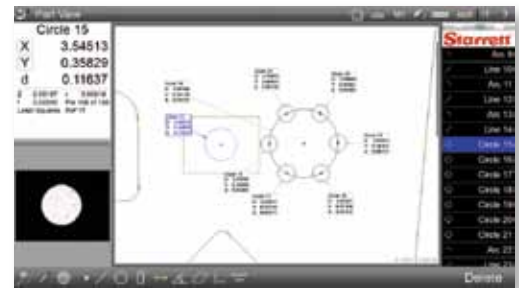
Features & Specifications

- Multi-Touch Software Control that can pan and zoom with pinch, swipe, or touch. Works with active part views and live video feeds (or use conventional mouse interface)

- Custom "Eye Measure" probe captures complex edges generated by a finger path drawn on the touch screen

- "Measure Logic" probe intelligence provides instant feature determination and measurement with a single touch

- DXF CAD file import for comparing parts being inspected to the actual design file - no need for cumbersome Mylar overlays

- "Vtouch" Probe has video touch probe functionality – just click for simple acquisition of points on a feature's edge

- Part View can generate distance and tangent lines from within the graphical part view. The "Gesture Menu" can be used for feature creation and manipulation tools.

- "Quick Annotate" allows data for on or several features to be displayed simultaneously with smart marquee feature selection.

- Application of universal tolerance value entry according to feature resolution groupings

- Feature Detail Graphics: Individual feature views display point cloud distributions, nominal deviations, and tolerance results. Scroll Actual, Nominal, Tolerance, Deviation and Data Fit Type information.

- Simple machine/camera calibration with popular machine and video correction methods

- Windows 7-based, globally recognized OS for flexible data exporting and interface with Windows applications
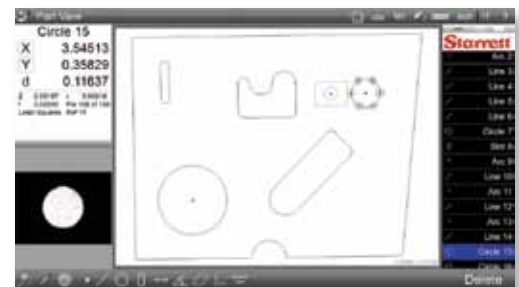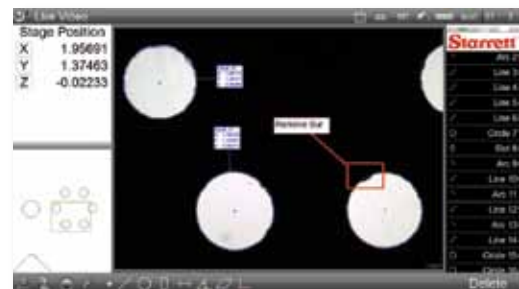
M3 Control with touchscreen interface

Intuitive graphic touch menu

Part View with selectable feature annotation

Part View with touch data point selection

Live Video View with touch data point selection

Flexible reporting options for display and export.