

VF7

Field of View Measuring System

- VF7 is a fast, two dimensional, high precision measurement machine.
- Designed to minimize the need for focus adjustment and part positioning.
- Incorporates a touch panel that allows for automatic measurement programs search, execution and measurement results display.
- Includes InSpec Metrology Software®.
- Offers high and low image magnification.
- Incorporates advanced LED lighting.
- Features a single USB connection to the workstation computer.



Technical Specifications

| Image Magnification | Measurement Capacity | Measurement Range |
|---------------------|----------------------|-------------------|
| Low | 69.3 x 49.6 mm | 30 mm |
| High | 17.3 x 12.4 mm | 3 mm |

| Machine Dimensions | Stage Position Range | Stage Weight Capacity |
|--------------------|----------------------|-----------------------|
| 290 x 453 x 883 mm | 49 mm | 3 kg |

Product information is subject to change without prior notice as a result of ongoing technical development.

Key Features

- Large Measurement Range
 - Minimizes Measurement Error
 - Minimizes Focus Adjustments
- Instant Zoom
 - High Resolution Camera
- Single Snapshot Measurement
- Scratch Resistance Stage Glass
- Advanced Lighting System
 - 8 Channel Ringlight
 - Axial Surface Light
 - Profile Backlight
- Automatic Part Identification
 - Adjusts to Part's Orientation
 - Minimal Part Fixturing Required

Touch Panel

Pass Indicator:

Illuminates green indicating the part passed inspection.

Fail Indicator:

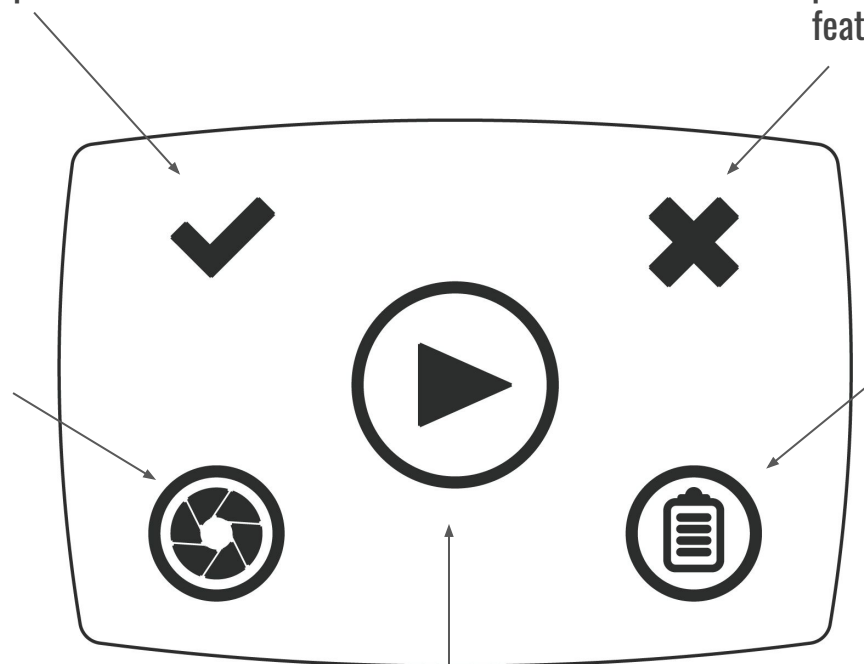
Illuminates red when the part fails inspection or a feature fails to measure.

Live Image:

Press to display a live video image.

Report:

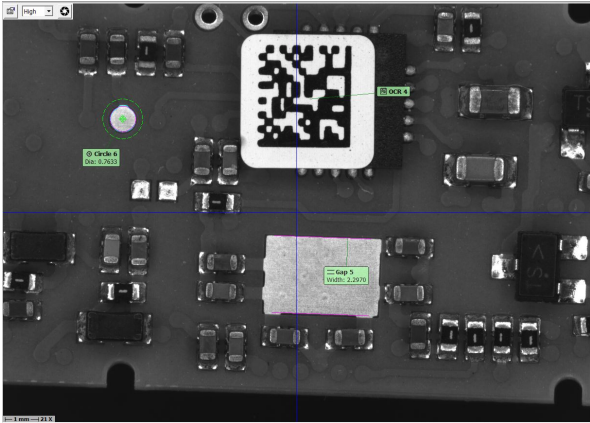
Opens and closes the Reporting page. Prints the report.



Play:

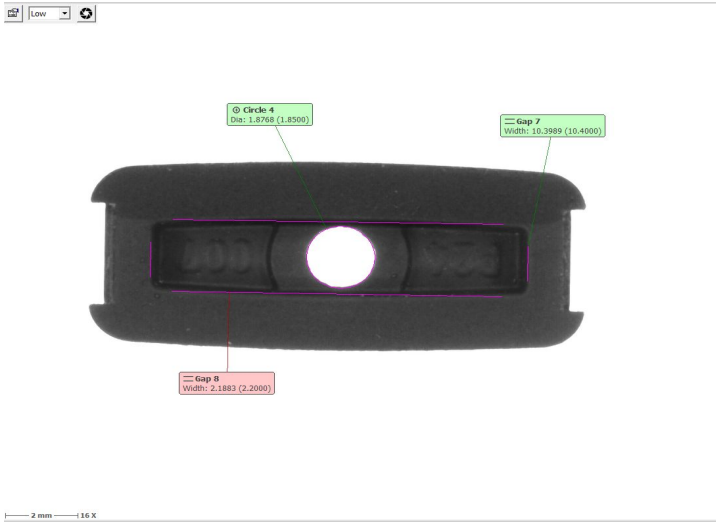
Runs programs. Searches pattern library and runs program. Displays the machine's state.

Applications



Printed circuit board seen at high magnification using ringlight and axial surface light.

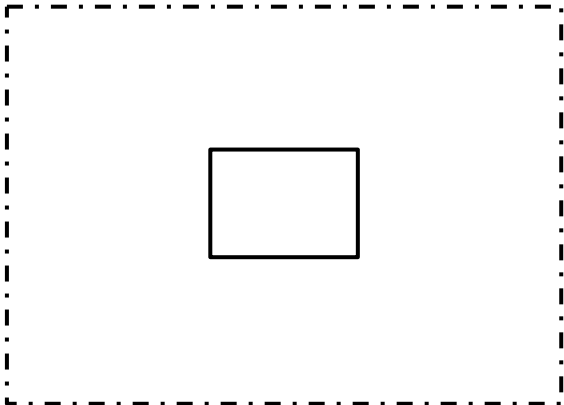
Rubber part seen at Low Magnification using ringlight and axial surface light.



VF7 Measurement Capacity

Measurement capacity at low and high magnification:

Place the parts inside the rectangles to check if they fit on the stage!



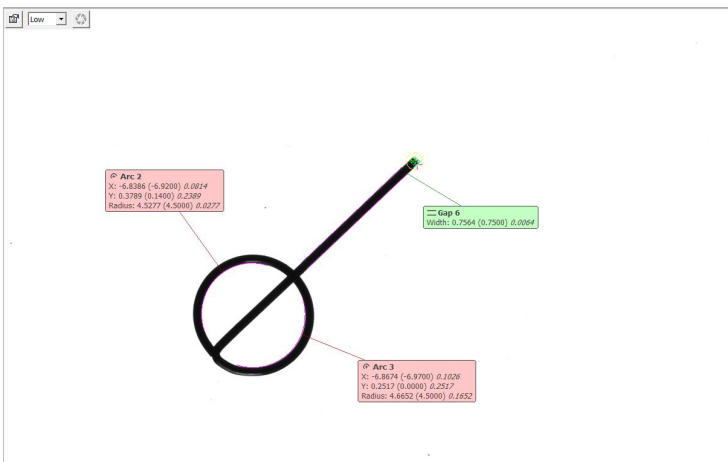
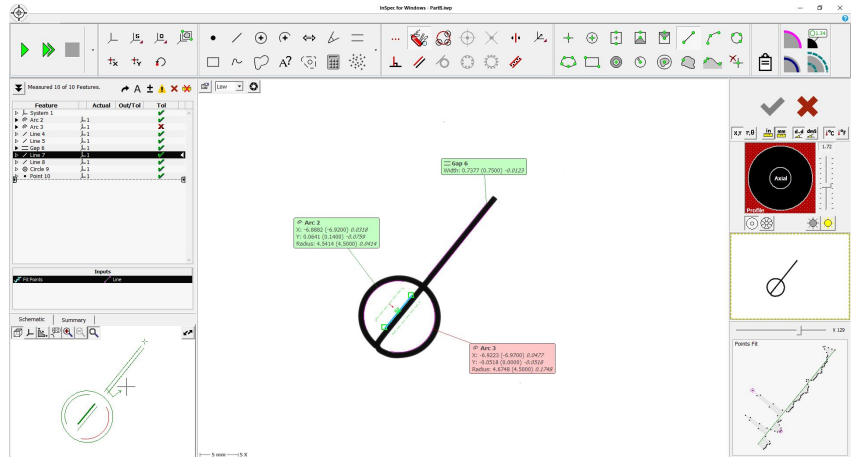
--- Low Magnification
~69.3 x 49.6 mm

— High Magnification
~17.3 x 12.4 mm

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InSpec Software for VF7

- Concise screen layout.
- Advanced focus and edge detection algorithms.
- Sub-pixel accuracy and repeatability.
- Included optics and light calibration routines.



- Programmable labels and geometric overlays display the measurement results on the camera window.
- Color of labels indicate if measurements are in or out of tolerance.

- Automatically record data and print an inspection report.
- Export measurement results and data automatically after completing measurements.
- Advanced geometric dimensioning and tolerancing capability.

| MICRO·VU | | Program: Part01.wip | | 7/28/2020 11:26:27 AM | | | |
|---------------------|-----------|---------------------|--------|-----------------------|---------|---------|---|
| Units: mm, deg, deg | | | | | | | |
| System 1 | Actual | Nominal | Upper | Lower | Dev/Nom | Out/Tol | ✓ |
| Origin X | -0.8773 | -0.8773 | 0.0000 | -0.0000 | 0.0000 | | |
| Origin Y | -1.8467 | -1.8467 | 0.0000 | 0.0000 | 0.0000 | | |
| Skew | 24.5347 | 24.5347 | 0.0000 | 0.0000 | 0.0000 | | |
| Flare | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | |
| Roll | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | |
| Arc 2 | Actual | Nominal | Upper | Lower | Dev/Nom | Out/Tol | ✓ |
| Center X | -6.8089 | -6.8200 | 0.1000 | -0.1000 | 0.0131 | | |
| Center Y | 0.2583 | 0.1400 | 0.1000 | -0.1000 | 0.0983 | | |
| Radius | 4.5252 | 4.5000 | 0.1000 | -0.1000 | 0.0252 | | |
| Arc 3 | Actual | Nominal | Upper | Lower | Dev/Nom | Out/Tol | ✗ |
| Center X | -6.8395 | -6.8700 | 0.1000 | -0.1000 | 0.0305 | | |
| Center Y | 0.2660 | 0.0000 | 0.1000 | -0.1000 | 0.2660 | | |
| Radius | 4.6688 | 4.5000 | 0.1000 | -0.1000 | 0.1688 | 0.0688 | |
| Line 4 | Actual | Nominal | Upper | Lower | Dev/Nom | Out/Tol | ✓ |
| Direction | 13.5919 | 13.5919 | 0.0000 | 0.0000 | 0.0000 | | |
| Line 5 | Actual | Nominal | Upper | Lower | Dev/Nom | Out/Tol | ✓ |
| Direction | -150.4159 | -150.4159 | 0.0000 | 0.0000 | 0.0000 | | |
| Gap 6 | Actual | Nominal | Upper | Lower | Dev/Nom | Out/Tol | ✓ |
| Center X | 5.2774 | 5.2517 | 0.0000 | -0.0143 | 0.0059 | | |
| Center Y | 3.3948 | 3.0000 | 0.0000 | 0.0000 | 0.3948 | | |
| Width | 0.7562 | 0.7500 | 0.1000 | -0.1000 | 0.0062 | | |
| Line 7 | Actual | Nominal | Upper | Lower | Dev/Nom | Out/Tol | ✓ |
| Direction | 13.3102 | 13.3102 | 0.0000 | 0.0000 | 0.0000 | | |