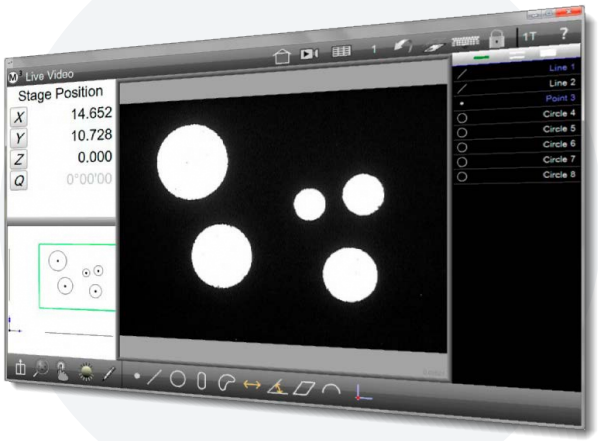
MetLogix

The M3

Supporting industry leading video, optical, and touch probe based metrology systems worldwide.



- Supporting Touchscreen gesture controls.
- Advanced video and optical edge detection measurement tools.
- Cutting-edge user interface thats clean and intuitive.

Designed For Multi-Touch Software Control

In addition to the conventional mouse interface, expanded Multi-Touch logic allows for one-touch feature measurements as well as versatile panning and zooming of the live video image and the active part view. Increase the efficiency of feature measurements, feature data manipulation, and reporting tasks with a simple pinch, zoom, swipe pan, or double click.

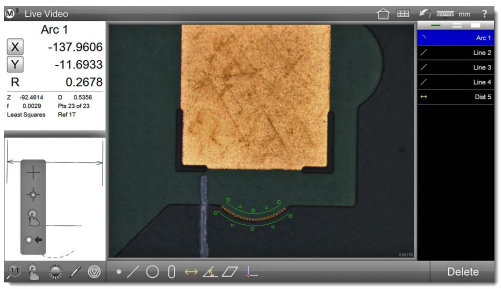
Advanced Video Probes

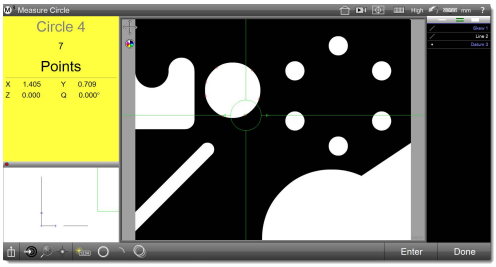
The custom EyeMeasure™ probe captures complex edges by creating a custom tool zone according to the finger path drawn on your touch screen enabled system.

The MeasureLogic™ probe's intelligent design provides an instant feature determination and measurement with a single click or press.

The VTouch™ probe provides industry first video touch probe functionality, with simple acquisition of individual points on a feature's edge, just a single press or click away.

The simple DXF Crosshairs tool is always available for manual crosshairs probing and can be translated or rotated within the video image for flexible manual probe measurements.





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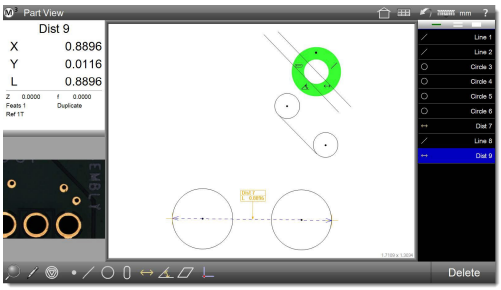
Graphics-based Part View Constructions

Generate popular construction types, like Distances and Tangent Lines, from within the graphical part view itself. The *Gesture Menu* can be used within the part view to provide access to on-the-fly feature creation and manipulation tools.

Supported constructions include:

- ✓ Average
- ✓ Intersections
- ✓ Shortest/Farthest Distances
- ✓ Perpendicular/Parallel lines
- ✓ Mid/Center/End Points
- ✓ Angle compliments
- ✓ Bolt/Gage Circles
- ✓ Tangent/Gage Lines

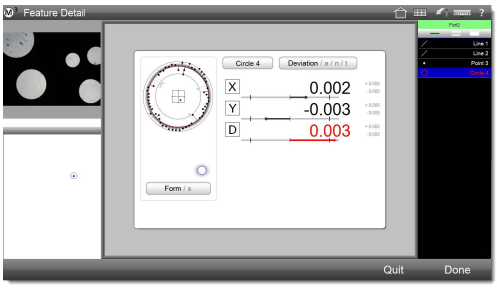


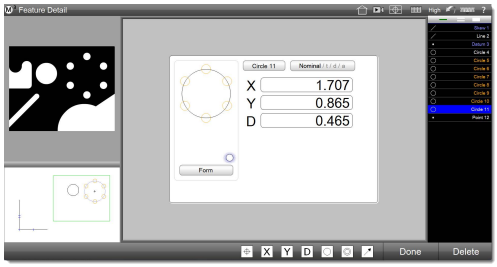
Geometric Tolerancing

Measure features, set nominals, apply tolerances and view deviation results with only a few quick clicks. You may also apply a variety of popular tolerance types to features in the standard feature-to-feature fashion, or utilize the *place tolerancing* system for applications where tolerances are specified in a block tolerance style call out. Universal tolerance values are applied according to your feature resolution groupings.

Supported tolerances include:

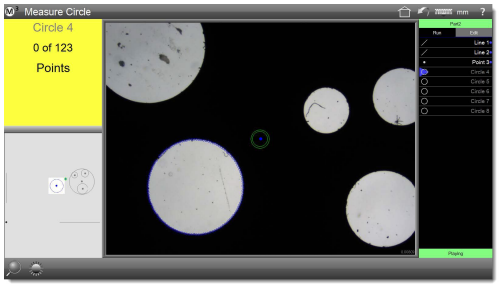
- ✓ X/Y/Z positional
- ✓ True position
- ✓ Size
- ✓ Form
- ✓ Orientation
- ✓ Angularity
- ✓ Concentricity
- ✓ Runout





Part Programs Playback

Playback or edit groups of measured, constructed, and created features from a saved part program file. Part program files, when loaded, will prepare the M3 software to repeat a sequence of recorded steps including measuring features, printing reports, and exporting measurement data. Playback guidance graphics provides helpful on-screen assistance for successful playback of your part programs.



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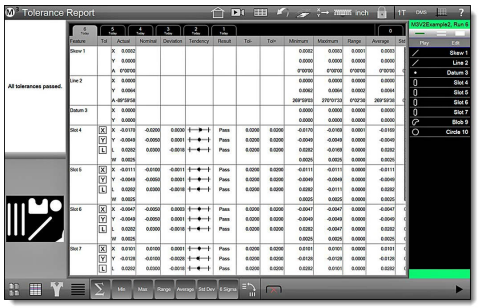
Runs Database and Results View

Track and analyze measurement run results for your part programs. View past measurement results quickly and easily using the tabbed runs database program results view. Perform quick cross run analyses of feature results using the Pivot data mode. Add quick statistical feedback including min, max, range, average, and 6 sigma to your data for more detailed analyses of result trends and measurement repeatability.



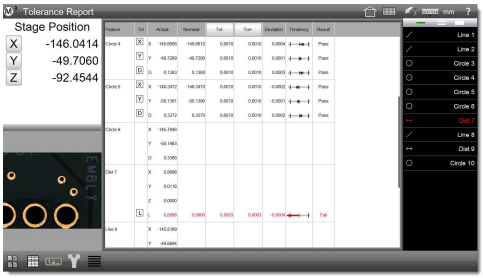
Flexible Report Content and Formatting

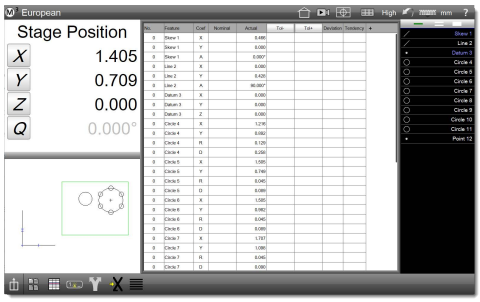
M3 software supports full customization of the data format, header information, and header and footer graphics. Part view graphics, time and date stamps, and operator information can all be included for any report type.

Reports can be viewed, printed (to local or network printer), or exported (various formats, to local or network locations) at the conclusion of a single inspection routine, or in a part program to support repetitive or automated measurement and reporting.

Report data formats include:

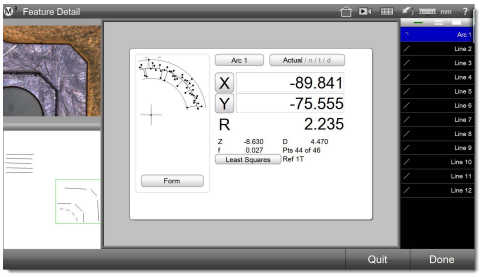
- ✓ CSV
- ✓ European
- ✓ Tolerance Report
- ✓ European 2





Feature Detail Graphics

Individual feature views provide you with informative drawings displaying point cloud distributions, nominal deviations and tolerance results. Scroll through your measured features list from this view for a feature-by-feature display of Actual, Nominal, Tolerance, Deviation, and Data Fit Type information.



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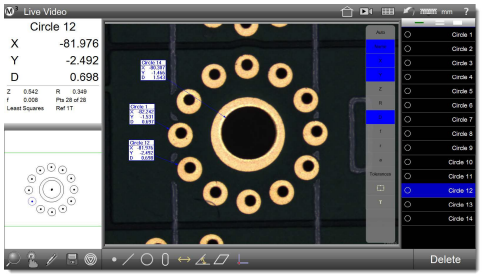
Quickly Annotate and Markup

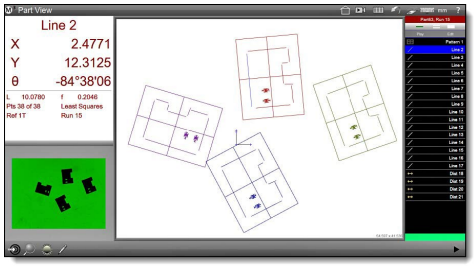
Gain access to instant feature markup tools using the part view *Annotation Menu*. Add customized feature data to your live video image or part view displaying only the desired coefficients.

You may annotate one or several features simultaneously with the *Smart Marquee* feature selection.



Field of View Functions

The field of view Auto Run function plays part programs to perform measurements quickly without operator intervention. Placing one or more identical parts in the field of view activates the FOV motion monitor, the parts are then measured and results displayed in the FOV part view. The FOV motion monitor ensures that you are always looking at the live camera image when loading and unloading parts on the measuring surface.



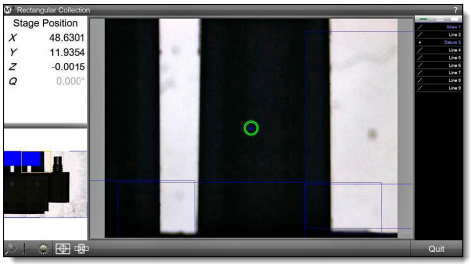
Expand the Field of View With SuperImage

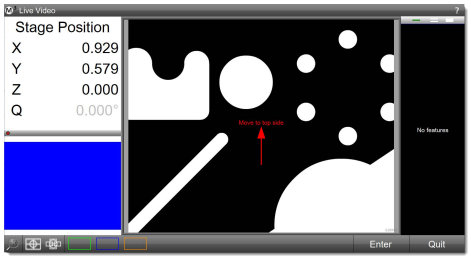
The SuperImage function collects and stitches individual camera frames together to scale large images into the field of view. SuperImages can be stitched from individual frames or from a rectangular stage area specified by the user.

Preset multiple stage areas to color coded Quick Stitch buttons to create soft fixture image locations.

Load one or more parts into soft fixture locations for FOV-like execution of your part program.

The SuperImage function may also be used within part programs to create an expanded view of specific part locations, improving measurement performance of features with high part-to-part positional variability.





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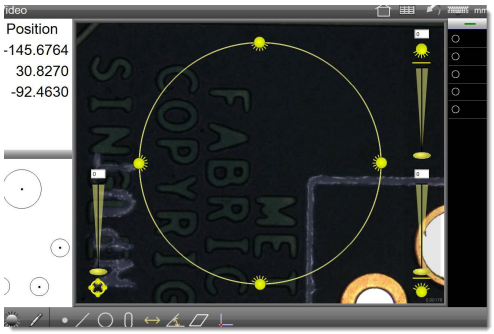
Support up to 8 Channels of Programmable Light Control

On-screen controls lets you adjust coaxial, sub-stage and quadrant ring light outputs, accommodating a wide range of measuring requirements.

Your light levels are also stored as program steps and are recalled during program playback.

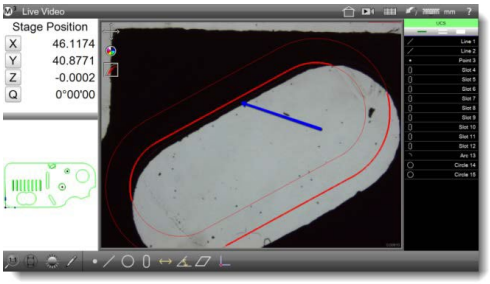


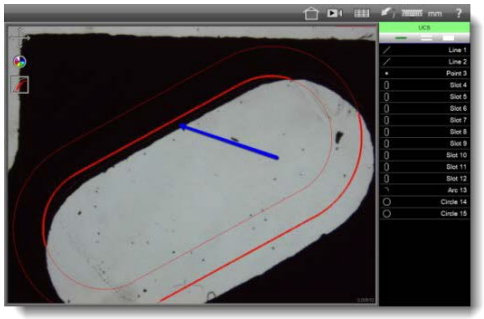
DXF Overlay and FOV Capability

Using the DXF/FOV option pack, you can import DXF files for *comparative style* Go/No-Go feature and part inspection. This includes a live error whisker display for violations of the original DXF tolerance zones. Utilize custom DXF crosshairs files, create on-the-fly overlay feature tools and pattern recognition for part program playback.

DXF/FOV option pack features include:

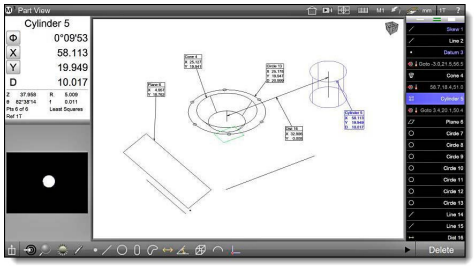
- ✓ Custom DXF crosshairs
- ✓ Import DXF overlay
- ✓ Export features to DXF
- ✓ Image freeze
- ✓ Pattern teach and recognition
- ✓ Feature-based video overlays





Touch Probe Support

Touch probe enabled systems allow measurement of 3D feature geometries in the XY, YZ and ZX planes. Measure planes, cones, cylinders and spheres in 3D part space. The results can be viewed in the 3D part view. Part views can be rotated with markups showing feature measurement results.



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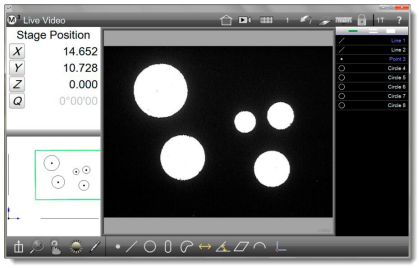
Machine Integration

Ask your MetLogix representative about a wide variety of encoder interface technologies, camera types, and light control hardware supported in the M3 system.



Supports Industry Standard Stage and Camera Software Calibration Methodologies

Robust and reliable machine and camera calibration can be achieved using popular machine and video correction methods. Linear Error Correction (LEC), Segmented Linear Correction (SLEC), Non-Linear Error Correction(NLEC), Orthogonality, Pixel Size, Camera Skew, Parcentricity and Field of View.

Industry Leading Operating System Platform

The Windows® operating system represents the current enterprise solution for computer software operating systems. You gain the performance and reliability of a globally recognized software solution as part of you measuring machine package.

MetLogix M Series Features Matrix	M1 Series	M2 Series	M3 Series
Optical edge detection	✓	✓	✓
Geometric functions	✓	✓	✓
XY, XYZ or XYQ axis support	✓	✓	✓
Data Reporting/Export	✓	✓	✓
Partview Display		✓	✓
Part programing and playback		✓	✓
Tolerancing		✓	✓
Feature annotation		✓	✓
Video edge detection			✓
Video image archive			✓
Image markup			✓

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Help and Resources

Please visit the support section at www.metlogix.com for access to Metlogix product documentation.

Watch tutorial videos for popular Mx functions at http://www.youtube.com/metlogix

Join the discussion on Facebook, search "Metlogix".

Contacts

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