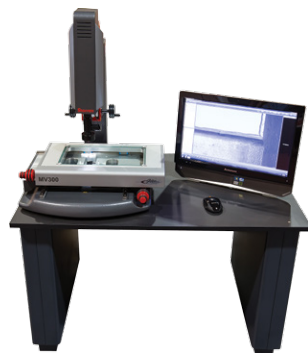
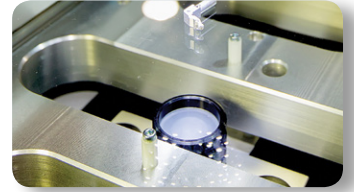
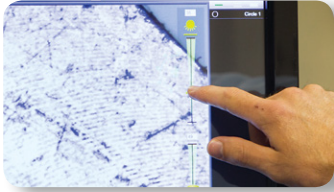


MV300 | VIDEO MEASURING SYSTEM



Starrett®

www.starrett-precision.co.uk



Starrett - Total Solution Provider

With Starrett Metrology products, the system is only a part of the whole package. From application analysis, system specification, installation and training, to post-installation field services, the excellence of our products is matched by the quality and comprehensive range of our services.

Committed to Quality

We recognize that reliable operation and dependable accuracy are essential to your quality and manufacturing operations. As part of our commitment to quality, we have established first generation NIST traceable documentation for all calibration artifacts and standards for all Vision Systems, UKAS traceable documentation for all calibration artifacts and standards for all Optical Projectors is also available. Our metrology professionals are available to assist you with whatever you need to keep your system on the job.

Complete Pre and Post Purchase Support

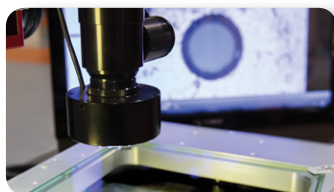
Our factory trained experts are available to perform calibration, preventive maintenance, repairs, upgrades and system retrofits. We offer in-house training, custom programming and measurement process development. Our field technicians are trained to ensure that the same calibration and validation methods utilised in the factory are used in the field.

Starrett Vision Systems

The unbeatable combination of precision mechanics, powerful and intuitive software, and extensive pre and post purchase support, ensure that Starrett Vision Systems take video-based, multi-sensor measuring systems to the next level.

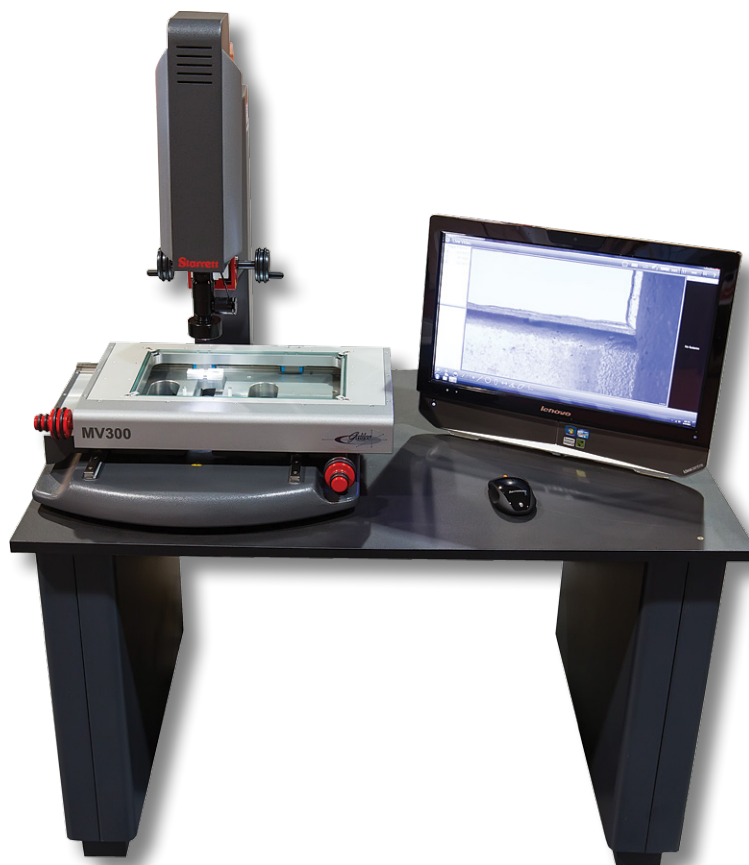
Starrett Vision Systems combine high-resolution images with robust, precision mechanical platforms to deliver superb accuracy and repeatable measurement results for a wide range of metrology applications. Systems are available with a choice of metrology readouts.

Starrett Metrology Systems provide quick Return-On-Investment through increased product quality, user time savings and alternative equipment reduction.



The Galileo MV 300 system is a general-purpose manual video-based measurement system, ideal for quality assurance and inspection labs, and manufacturing, assembly and research facilities.

A precision mechanical bearing X-Y-Z stage and column translates data accurately and repeatably to the Metlogix M3 touchscreen measuring solution. Other measurement systems can also be supplied on request.



Features

- Bench top video measuring system.
- Measurement Volume: 300mm x 150mm x 125mm (12" x 6" x 5.5")
- Accuracy in μm : (X-Y) $E1=3.5+5L/1000$ (Z) $E1=2.5+5L/1000$
- 0.5 μm resolution scales supplied as standard
- Video Camera: S Video Colour CCD
- Maximum Workload: (Evenly distributed) 9 kg (20 lbs)
- Metlogix M3 metrology software supplied as standard. Metronics / Heidenhain systems can be supplied on request.
- Optics: 6.5:1 zoom optics offering 12 - 300x magnification with auxiliary lens
- Choice of fibre optic or LED 2 or 3 channel output illumination
- Flat panel LCD touchscreen video display.
- One year warranty with extensions available
- Power supply 110 / 120 / 230 / 240 / 250V AC 50 / 60Hz.

MV300 - SPECIFICATIONS AND OPTIONS

X-Y-Z Measuring Range (mm)	300 x 150 x 125
X-Y-Z Measuring Range (inch)	12 x 6 x 5.5
X-Y Accuracy in μm	$E1=3.5+5L/1000$
Z accuracy in μm	$E1=2.5+5L/1000$
Control System / Software	Metlogix M3
Zoom Optics	6.5:1
S Video Colour Camera	Supplied as standard
Surface Ring Illumination	LED or Fi-O
Transmitted Illumination	LED or Fi-O
Coaxial Illumination	Supplied as an option
Dark Field Quadrant Illumination (L.E.D. only)	Supplied as an option
Auxiliary Lenses (Optional)	.5x, 2.0X
Workstation	Supplied as an option
Part Fixturing	Supplied as an option
Video Pixel Calibration Standards	Supplied as an option
Calibration Standards	Supplied as an option

Solutions, Not Products

Starrett Metrology Systems can be configured with a comprehensive range of accessories, all designed to ensure that our systems are not just a measurement product, but are the solution to your measurement application.

Where there is a requirement for an accessory or option not shown in this literature, please contact us for detailed technical advice and support.

Accessories available include:

- **Workstation:** A number of different purpose built ergonomic workstations are available, designed to provide the operator with a pleasant, comfortable environment in which to use the machine.
- **Video Pixel Calibration Standards**
- **Calibration Standards**
- **Part Fixturing**



Glass calibration standard



Galileo workstation - A number of different options are available, please ask your Starrett representative for more details.

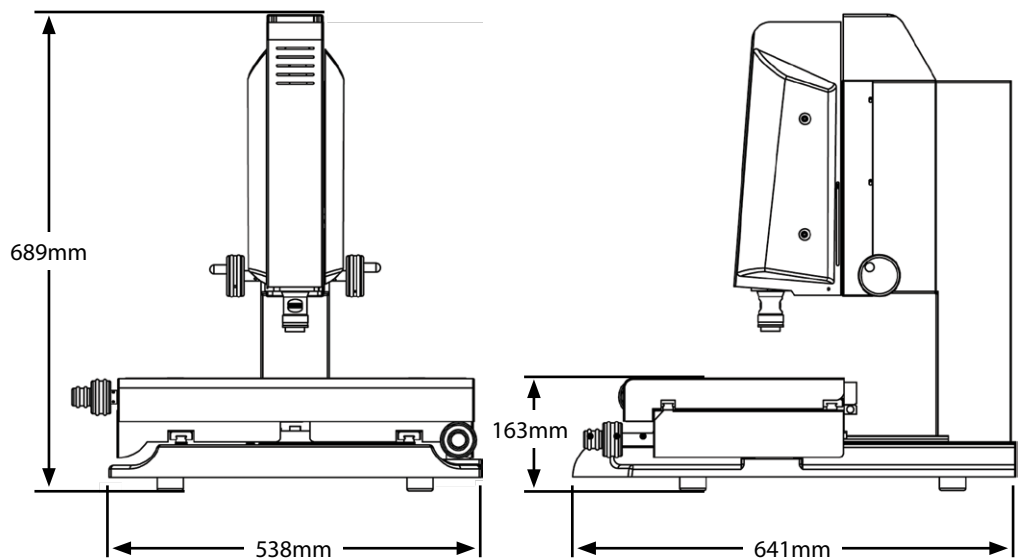
MV300 Dimensions

MV300 dimensions are as listed in the image, all measurements are in millimetres.

Gross Weight: 137kg.

Nett Weight: 67kg.

Shipping dimensions: 120 x 82 x 100cm.



M3 Metrology Software

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 pan and zoom of the live video image and the active part view.

Advanced video probe toolbox: 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 Crosshair tool is always available for manual crosshair probing and can be translated or rotated within the video image for flexible manual probe measurements.

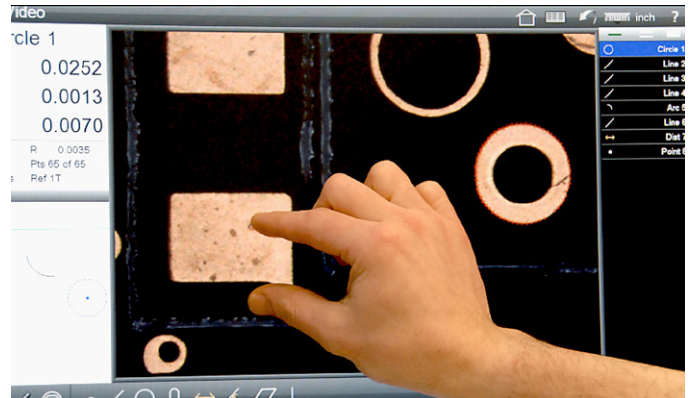
Support up to 8 channels of programmable light control: On-screen controls let you adjust Coaxial, Substage, and Quadrant Ring light output accommodating a wide range of measuring requirements.

Advanced Edge Teach: Improve edge detection performance under a variety of image and lighting conditions.

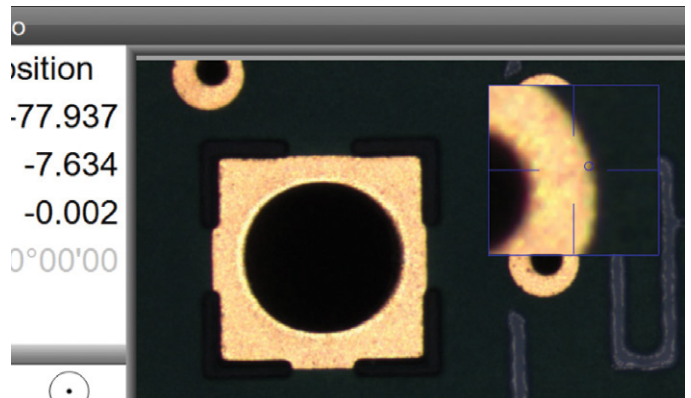
Graphics-based “Part View” constructions: Generate popular construction types, like Distances and Tangent Lines, from within the graphical part view itself.

Quick Annotate and Markup: Gain access to instant feature markup tools using the part view “Gesture 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.

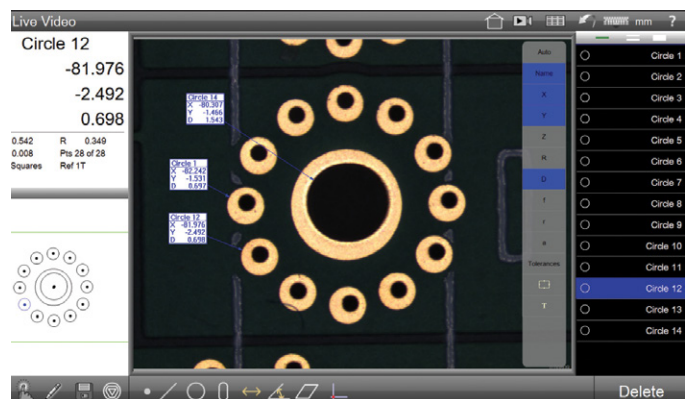
Geometric tolerancing: Measure features, set nominals, apply tolerances and view deviation results with only a few quick clicks. You may also apply a variety of popular tolerance types to features in the standard “feature-to-feature” fashion, or utilize the “place tolerancing” system for applications where tolerances are specified in a block tolerance style call out. For these cases the M3 software lets you enter and apply universal tolerance values according to your feature resolution groupings.



Feature measurements may be performed using common touchscreen operations such as pan and pinch zoom, in addition to conventional mouse operations.



Features with poor edge contrast or difficult spacing can be captured easily with the M3 software’s manual teach feature.



Add customised feature data to your live video image or part view.

Feature Detail Graphics: Individual feature views provide you with informative drawings displaying point cloud distributions, as well as nominal deviations, and tolerance results.

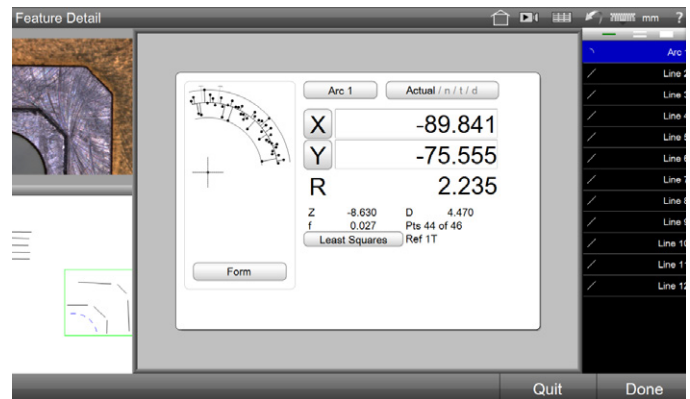
DXF Overlay and FOV capability: Using the DXF/FOV option pack, you may import DXF files for “comparative style” Go/No-Go feature and part inspection. This includes a live error whisker display for part violations of the original DXF tolerance zones.

Part programs and playback: Playback or edit groups of measured, constructed, and created features from your saved part program file. Part program files, when loaded, will prepare the M3 software to repeat a sequence of feature measurement steps, printed reports, and exported measurement data. The playback guidance mechanism features helpful on-screen instruction for successful playback of your part programs.

Flexible Report Content and Formatting: M3 software supports full customisation 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, or exported at the conclusion of a single inspection routine, or they can be included in a part program to support repetitive or automated measurement and reporting.

Support for all current industry standard software methodologies for Stage and Camera calibration.

Industry leading Operating System platform: The Windows® 7 operating system represents the current enterprise solution for computer software operating systems.



Individual feature views provide informative drawings with point cloud distributions, nominal deviations and tolerance results.

Feature	Tol	Actual	Nominal	Tol	Toler	Deviation	Tendency	Result
Circle 4	X	-146.0010	-146.0010	0.0010	0.0010	0.0004	←→	Pass
	Y	-49.7289	-49.7289	0.0010	0.0010	0.0001	←→	Pass
	D	0.1383	0.1383	0.0010	0.0010	0.0003	←→	Pass
Circle 5	X	-146.3472	-146.3470	0.0010	0.0010	-0.0002	←→	Pass
	Y	-50.1381	-50.1380	0.0010	0.0010	-0.0001	←→	Pass
	D	0.3372	0.3370	0.0010	0.0010	0.0002	←→	Pass
Circle 6	X	-145.7946						
	Y	-50.1463						
	D	0.3368						
Circle 7	X	0.8896						
	Y	0.0116						
	Z	0.0000						
	L	0.8896	0.8895	0.0001	0.0001	-0.0004	←→	Fail
Circle 8	X	-145.5189						
	Y	-49.6984						

Starrett® Optical Products Dealer is:

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Imaging Inspection Measurement

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