

Features and Specifications

- **Optics:** 12:1 Motorised Video Zoom Package on CNC systems with Video Magnifications of 15X to 550X*.
6:1 Video Zoom on manual systems with Video Magnifications of 15X to 350X*.
 - **Lighting:** Fibre optic ring and sub stage (bottom) lighting with Fibre Optic Coaxial (through the lens) available as an option, or White LED ring and sub stage with White LED Coaxial (through the lens) available as an option.
 - **Video Camera:** Colour CCD, 768H x 494V pixel array.
- VGA Display:**
- **CNC Systems:** Two 15" LCD monitors.
 - **Manual Systems:** Choice of 14" hi-res CRT Colour Video Monitor or 15" LCD Colour Video Monitor.

Drive Method:

- **CNC Systems:** X/Y/Z and Zoom Stepper drives with Trackball Joystick control for X, Y and Z.
- **Manual Systems:** X and Y Handwheels with Coarse, Fine and Quick positions.

Travel and Measuring Capacity:

- **X:** 150 or 300mm/6 or 12".
- **Y:** 150mm/6".
- **Z:** 140mm/5.5".
Includes adjustable 100mm/4" Z axis Dovetail Slide.

Metrology Software:

- **CNC System:** Metronics Quadra-Chek QC5000 3 dimensional software.
- **Manual Systems:** Choice of Metronics Quadra-Chek QC220 2 dimensional readout, Metronics Quadra-Chek QC230 2.5 dimensional readout, or Metronics Quadra-Chek QC5000 3 dimensional software.

Linear Accuracy:

- **CNC:**
(X & Y): $E2 = 1.9 + 5L/1000$
(Z): $E1 = 2.5 + 5L/1000^{**}$.
- **Manual/Joystick:**
(X & Y): $E2 = 3.5 + 8L/1000$
(Z): $E1 = 2.5 + 5L/1000^{**}$.
- **Resolution:** 0.0005mm (.00002").
- **Maximum Workload:** 40lbs (18kg).
- **Warranty:** One year.

* Auxiliary lenses required to achieve full magnification range.

** Accuracy is achieved at the glass plate level at $68F \pm 1F$ ($20C \pm 0.5C$) using maximum magnification with 2X auxiliary lens.

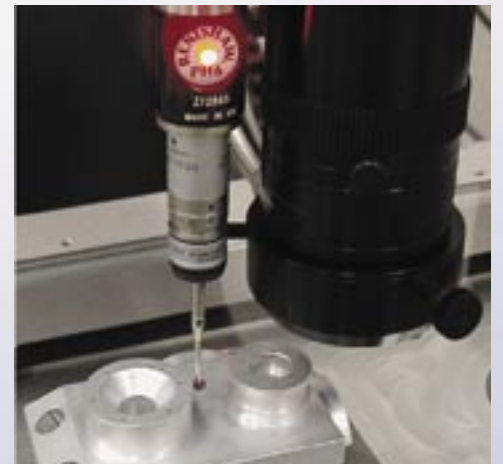
Options and Accessories

- 0.25x, 0.5x, 0.75x, 1.5x, and 2x Auxiliary Lenses.
- CNC Rotary Positioning Device.
- Integrated workstation.
- Video Side Probes.
- Touch Probe.
- Four quadrant LED Light Ring.

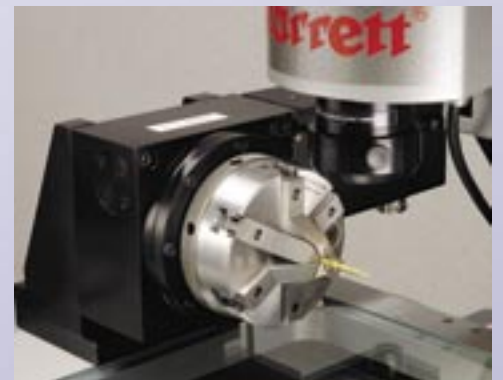
Note: Specifications are subject to change without notice.



Optional 4 Quadrant LED Ring Light



Optional Touch Probe



Optional CNC Rotary Positioning Device

Starrett®

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Starrett®

The Power of Video Measuring



**Fast, simple, powerful,
accurate and cost effective
video based measuring
systems.**

The Power of Video Measuring

With the unbeatable combination of precision mechanics, powerful and intuitive software, and support from the most respected name in measurement, Starrett's Galileo Video Measuring Systems take video-based measuring to the next level.

From simple, manual, single feature operation to complex, automated part measurements, Galileo combines high resolution images with the latest in computer software technology, and a precision mechanical platform to deliver superb accuracy for a wide range of measuring applications.

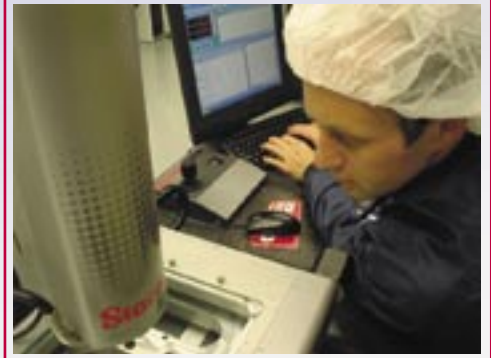
Galileo systems are available in a number of configurations to meet different measuring applications. Choices include manual control or fully automated systems, as well as several options for lighting and magnification.

Galileo is easy to use, versatile, and accurate; with a wide range of options you can configure a Galileo system that's just right for your budget.

Work envelope
X: 150mm/6" or 300mm/12"
Y: 150mm/6"
Z: 140mm/5.5"



Galileo - A User's Experience



After carefully comparing several video measuring systems Ultrasource recently purchased a Galileo CNC system.

Daniel Tessier, Ultrasource Quality Assurance Manager, said:

"I decided to see demonstrations of four systems. Two of the systems didn't have the necessary accuracy or precision and had unacceptable repeatability limitations, another system met the requirements but was almost twice the cost of the Starrett Galileo QC-5000 Automated Video Measurement System."

"Galileo's software is easy to understand. Within days we were able to design and write complex programmes for our highest volume customers and the software is flexible enough that our lower volume semi repeat jobs can be programmed in a few hours."

"Training was fast and excellent by Starrett personnel."

"The Starrett system will easily pay for itself in saved inspection time alone."

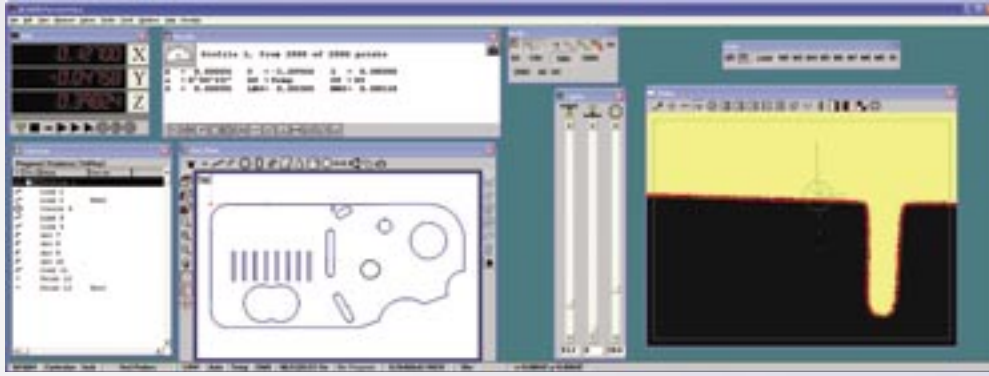
"With the Starrett Galileo Video Measurement System, total gauge repeatability and reproducibility error was reduced - an improvement of over 85%."

"I would highly recommend this system to any company searching for a cost effective package that can inspect in automated and manual modes."



Cover picture: 300mm/12" CNC system.
Above: Galileo 150mm/6" CNC system.

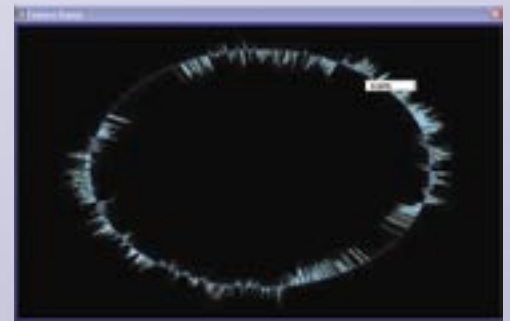
Control Systems and Metrology Software



Galileo CNC Systems include the powerful, industry leading Metronics Quadra-Chek QC-5000 software with dual monitors. This full featured and intuitive metrology software features the familiar MS Windows™ operating system.

Quadra Check® QC5000 3-D Metrology Software

- Measure Magic allowing automatic feature recognition.
- Drag and drop report generator.
- Video Image capture (.jpg, .bmp) with graphical reporting capabilities.
- Data import (.dxf, .iges) for part programming and export for reverse engineering.
- Result data export to Microsoft Access, Excel, .csv and .txt formats for data collection and pc applications.
- Integrated Video Scanning with 2-D Profiling/Best Fit Software.
- Full geometric feature measurement.
- Full geometrical tolerancing.
- Fully customizable screen layout spread over two monitors.
- Lockable screen layouts.
- Available in multiple languages.
- Full suite of Video Edge Detection (VED) Tools.
- Integrated image processing tools.
- Intuitive yet powerful part programming with point and click editing capabilities.
- Interactive 3-D part view.
- Definable user access privilege levels.
- Form graphics/features.
- Free software updates.



Form Graphics



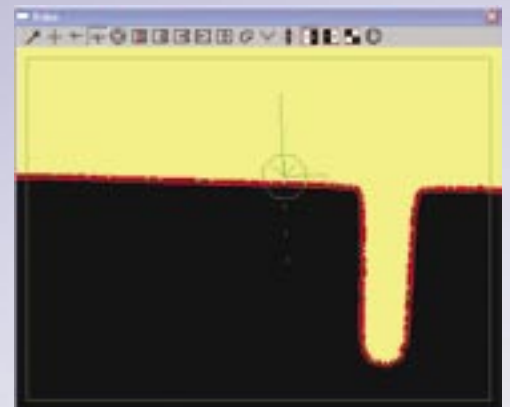
Video Capture Report

Manual System with Quadra-Chek® 200 Series

Galileo manual systems include a versatile and powerful Quadra-Chek 200 Series two or three axes digital readout with:



- Inch/metric conversion.
- Incremental or absolute measurement.
- Zero reset.
- Segmented and non-linear error compensation.
- RS232C interface for SPC data collection.
- Skew function for part alignment correction.
- Form indication (roundness, etc.)
- Part programming.
- Point, Arc, Circle, Distance, and Angle measuring ability.



Scanning with the worm tool

