

S-T INDUSTRIES, INC.

SCHERR-TUMICO

VIDEO INSPECTION SYSTEMS



See the
Quality

OVER **70** YEARS OF
Manufacturing Scherr-Tumico Precision Instruments



VIDEO INSPECTION SYSTEMS

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The S-T Industries Story

Since 1942, S-T Industries, Inc. has been manufacturing fine measuring instruments. From micrometers to optical comparators to video inspection systems, the SCHERR-TUMICO name continues to be a hallmark of quality around the world. When S-T introduced the Model 1500 vertical beam optical comparator in the 1950s, it allowed companies of all sizes to afford the technology of profile projection. As we look forward to the 21st century, S-T Industries is committed to providing high-quality products for metrology at reasonable prices.

Quality

Every SCHERR-TUMICO video inspection system receives a thorough inspection and certification before it leaves our factory. This assures you there will be no surprises at your factory. These products are hand-built and tested through each step of the process to guarantee that you will receive a reliable and proven instrument.

Performance

SCHERR-TUMICO video inspection systems are designed to give you the best value for your investment. We have a unit for any job or budget. From small, economical machines to large CNC measuring systems, you'll find we have just the right product to fit your needs. We'll even modify an existing system if we don't have exactly what you want.

Innovation

S-T Industries has incorporated many unique features into its products. Our CNC products all have a digital positioning system that allows table movements of 1 micron. We will continue to add new ideas and technology to our products, because at S-T Industries, our design engineer is our customer.

International Operations

SCHERR-TUMICO video inspection systems are available throughout the industrialized world. S-T Industries maintains a service and distribution network with factory qualified sales and service representatives in the following countries. Call or write for your representative.

Australia	Canada	China	Denmark
Germany	Great Britain	Holland	Hong Kong
India	Indonesia	Ireland	Israel
Malaysia	Mexico	Norway	Pakistan
Philippines	Scotland	Singapore	South America
South Korea	Sweden	Taiwan	Thailand
Turkey			

Service and Warranty

All S-T Industries Video Inspection Systems include a two-year warranty on parts and labor, installation and training at your facility, and a certificate to NIST. There are no additional hidden costs for this service.

SCHERR-TUMICO for Quality, Service and Value



- Heavy-duty steel column
- High-resolution zoom optics
- Electronic crosshair generator
- LED profile and surface lighting
- LCD, Flat Panel Displays
- Large 4" x 8" and 4" x 12" stage travel
- Choice of Quadra-Chek and Metlogix DRO's
- Z-axis measurements available
- 70 years' manufacturing experience in USA
- Optional Motorized Stage
- Optional 3-axis CNC Controls

Shown Above:

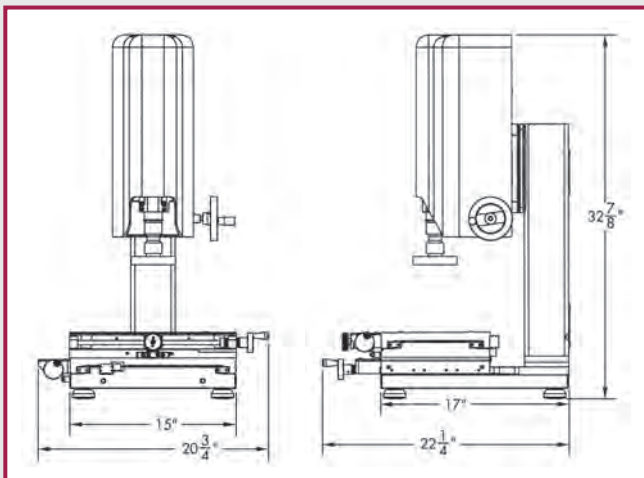
Model 20-8700-33 with M3 23" Touch Screen Computer. The M3 Controller is the easiest and fastest to use system available in today's market. Just touch the screen for instant measurements. The touch screen computer includes a Windows® 7 operating system and a wireless keyboard and mouse.

Touch screen based graphic interface, pan and zoom by touch, works with live video feeds and active part views. The video touch probe allows you to capture features and complex points and determines features and dimension by touching the screen. You can annotate several features simultaneously on the fly. Feature views provide drawings displaying point cloud distributions as well as nominal deviations and tolerance results.



Shown above with Quadra-Chek 320

- High Precision 4" x 8" or 4" x 12" travel measuring stages with .00005"/.001 mm resolution precision glass scales with quick release on X axis
- Heavy-duty steel column
- High-resolution 30X to 180X Par Focus zoom optics
- LED profile and surface illumination
- Flat Screen Color Monitor
- Digital crosshair generator with automatic edge indicator
- 6" Focus travel with optional Z-axis measuring scales
- Choice of Quadra-Chek and Metlogix DRO Systems
- Optional 2-axis or 3-axis Motor Controls
- Optional full CNC 3-axis Controls with Auto Focus, video edge detection, image capturing, and programmable lighting with joystick and trackball controls and fine-adjust knobs, allowing movements to .00005"/.001 mm.



Specifications

Work Table: 10" x 14" or 10" x 18" - Black Anodized

Measuring Range: (X)--8" (Y)--4" (Z)--6" or
(X)--12" (Y)--4" (Z)--6"

Allowable Work Load: 25 lb

Illumination: Profile - LED
Surface - LED

Magnification Lens: 30–180X Parfocal Zoom

Electrical: 100–240 V, 50/60 Hz Compatible

Weight: Manual 150 lb Crated 225 lb
CNC 180 lb Crated 285 lb



- Integrated granite base and column
- Large 6" x 12" travel stage
- High-resolution zoom optics
- LED profile and surface illumination
- Electronic crosshair generator
- 17" LCD Flat Screen Monitor
- Z-axis measurements available
- Choice of Quadra-Chek and Metlogix DRO's
- Optional Motorized Stage
- Optional 3-axis CNC Controls

Shown Above:

**Model 20-9100-33 with M3 23" Touch Screen Computer and optional
20-1413-33 Console Base.**

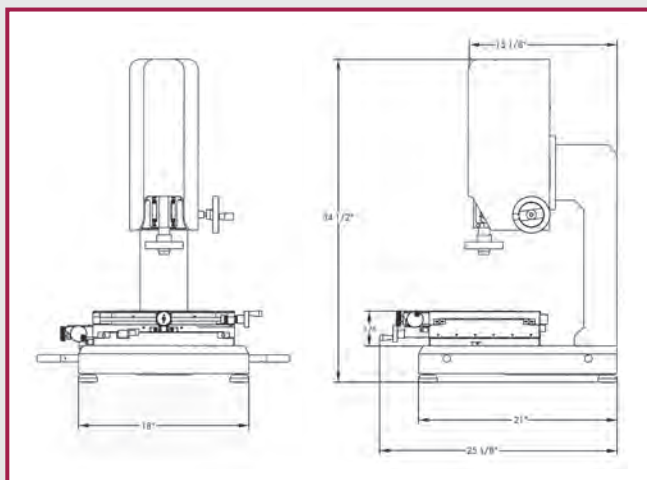


Shown Above:

**Model 20-9188-00 with Quadra-Chek
323 and 3-axis CNC Controls**

The 9100 Series Video Inspection System is our mid-range model.

- High Precision 6" x 12" travel measuring stages with .00005"/.001 mm resolution precision glass scales with quick release on X axis
- Integrated granite base and column
- High-resolution 30X to 180X Par Focus zoom optics
- LED profile and surface illumination
- 17" Flat Screen Color Monitor
- Digital crosshair generator with automatic edge indicator
- 6" Focus travel with optional Z-axis measuring scales
- Choice of Quadra-Chek and Metlogix DRO's
- Optional 2-axis or 3-axis Motor Controls
- Optional full CNC 3-axis controls with Auto Focus, video edge detection and programmable lighting with joystick and trackball controls and fine adjust knobs allowing movements to .00005"/.001 mm.



Specifications

Work Table: 12" x 18" - Black Anodized

Measuring Range: (X)--12" (Y)--6" (Z)--6"

Allowable Work Load: 25 lb

Illumination: Profile - LED
Surface - LED

Magnification Lens: 30–180X Parfocal Zoom

Electrical: 100–240 V, 50/60 Hz Compatible

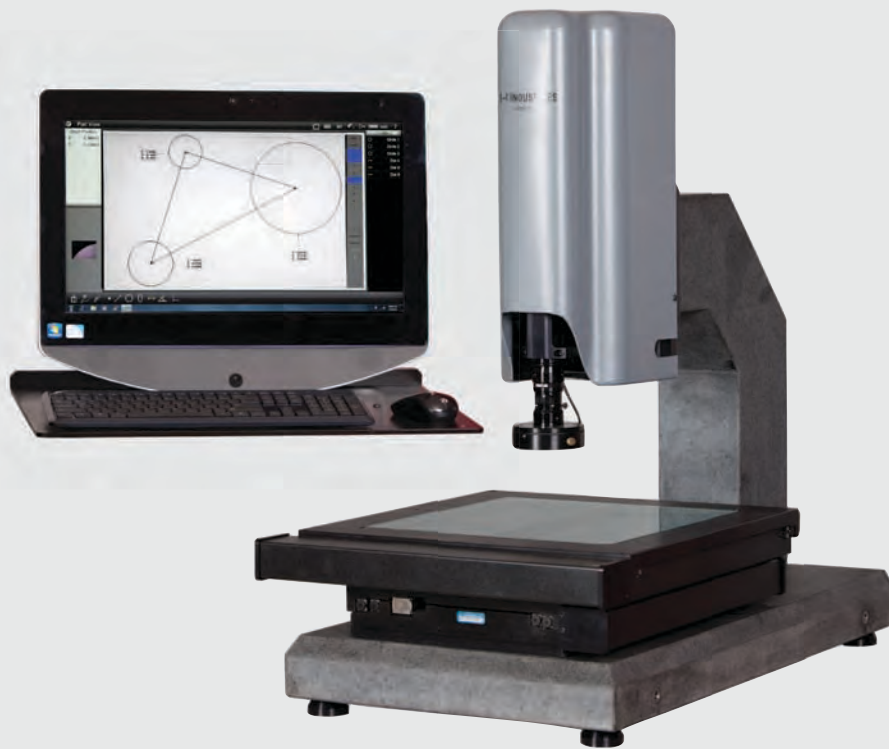
Weight: Manual 330 lb Crated 365 lb
CNC 390 lb Crated 425 lb



- Heavy-duty integrated granite base and column
- Large 12" x 12" travel stage
- High-resolution zoom optics
- LED profile and surface illumination
- Electronic crosshair generator
- 17" LCD Flat Screen Monitor
- Z-axis measurements available
- Choice of Quadra-Chek and Metlogix DRO's
- Optional Motorized Stage
- Optional 3-axis CNC Controls

Shown Above:

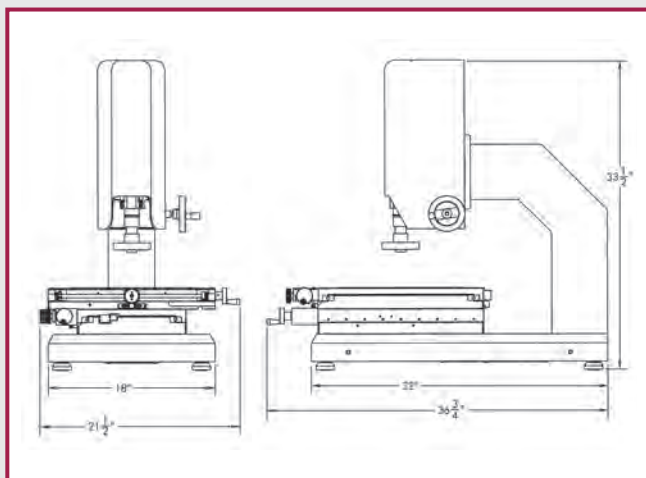
20-9780-01 3-axis CNC Model with Quadra-Chek 5000 PC Computer-Based Digital Readout System with optional 20-1414 Console and 20-1415-00 Computer Desk.



Shown Above:
9700 Series with M3 Touch
Screen Computer

The 9700 Series Video Inspection System is our largest heavy-duty model.

- High Precision 12" x 12" travel measuring stages with .00005"/.001 mm resolution precision glass scales with quick release on X axis
- Heavy-duty granite base and column
- High-resolution 30X to 180X Par Focus Zoom Optics
- LED profile and surface illumination
- 17" Flat Screen Color Monitor
- Digital crosshair generator with automatic edge indicator
- 6" Focus travel with optional Z-axis measuring scales
- Choice of Quadra-Chek and Metlogix DRO's
- Optional 2-axis or 3-axis Motor Controls
- Optional full CNC 3-axis Controls with Auto Focus, video edge detection, image capturing, and programmable lighting with joystick and trackball controls and fine-adjust knobs allowing movements to .00005"/.001 mm.



Specifications

Work Table: 18" x 18" - Black Anodized

Measuring Range: (X)--12" (Y)--12" (Z)--6"

Allowable Work Load: 25 lb

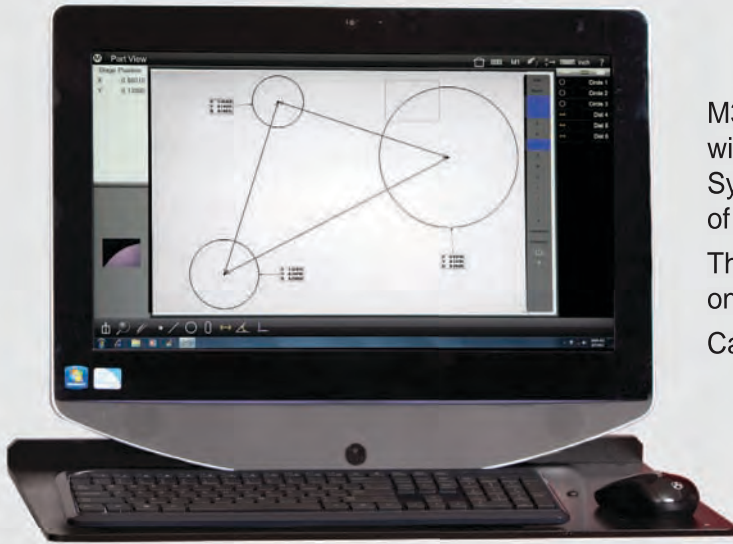
Illumination: Profile - LED
 Surface - LED

Magnification Lens: 30–180X Parfocal Zoom

Electrical: 100–240 V, 50/60 Hz Compatible

Weight: Manual 455 lb Crated 500 lb
 CNC 515 lb Crated 560 lb

Digital Readouts



M3 Windows 7 based Touch Screen Computer with Metrology software for Video Measuring Systems with video edge detection at the touch of a finger.

The fastest, easiest to use software available on the market today.

Call or email for a free demonstration.

M3 Windows 7 based Touch Screen Metrology Software For Video Measuring Systems and Optical Comparators

- **Designed for Multi-Touch software control:** In addition to conventional mouse interface, the expanded Multi-Touch logic allows for versatile pan and zoom of both live video feeds and active part view with a pinch, swipe, or press.
- **Advanced probe toolbox:** A selection from four varying probe types ensures successful capture of part characteristics. The custom **EyeMeasure™** probe ensures capture of complex edges. This custom created video probe is generated according to the finger path drawn on your touch screen enabled system. The **Measure Logic™** probes 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 points on a feature's edge, just a press or click away.
- **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.
- **Quick Annotate:** Gain access to instant feature markup tools using the part view "Gesture Menu". Add customized feature data on the fly displaying only the desired coefficients. Annotate one or several features simultaneously with smart marquee feature selection.
- **Industry-leading support for additional tolerance conventions:** Tolerances can be applied in the standard feature to feature fashion, or by using a more traditional "place tolerancing" system. Engineering drawings may indicate that all features reported to 2 significant digits will get one tolerance value, where all features reported to 3 digits will get another. The M3 software allows for the entry and application of universal tolerance values according to these feature resolution groupings.
- **Feature Detail Graphics:** Individual feature views provide informative drawings displaying point cloud distributions, as well as 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.
- **Support for all current industry standard software methodologies for Stage and Camera calibration:** Simple machine/camera calibration can be achieved using popular machine and video correction methods. (LEC, SLEC, NLEC, Orthogonality, Pixel Size, Camera Skew, Field of View).
- **Industry leading Operating System platform:** The Windows® 7 operating system represents the current enterprise solution for personal computer based software operating systems. You gain the performance and reliability of a globally recognized software solution as part of your measuring machine package.
- **Additional Windows based functionality:** Other Windows functionality may also be utilized to meet and address specific application requirements. Flexibility in exporting data, printing reports and interfacing to third party windows applications will be enhanced under this widely supported operating system.

Digital Readouts



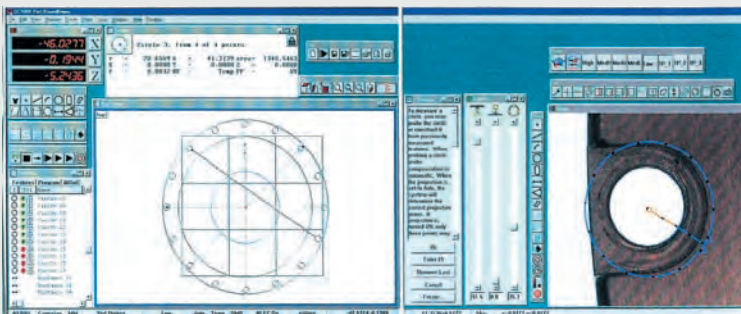
Quadra-Chek 220

This powerful digital readout provides fast geometric computations in a simple, easy-to-use format. Functions include point, line, circle, distance, angle, skew alignment and Measure Magic. Other features include Inch/MM, Cartesian/Polar, nearest/farthest distance, complementary angles, serial and parallel ports and 200-feature memory. Large, high-contrast LCD screen graphically displays measurement features and construction. Housing tilts backward or forward for best angle of operation.



Quadra-Chek 320

The QC 320 features a touch screen, high-resolution color display. This digital readout also provides the video display including a built-in crosshair generator and video edge detection tools. Its functions include all the same standard geometric features as QC-220 Series; part programming, reporting, and an image capture capability.



Quadra-Chek 5000

PC computer-based 3-D geometric readout system with on-screen 3-dimensional graphic representation of the part or part segment as it is measured. Includes color camera and LCD monitor. Auto-focus on Z-axis, color video edge detection, programmable lighting, CAD interface, unlimited part and feature memory and Microsoft® Windows®. Includes computer, keyboard and mouse.

Console Bases



**"1413" Series
Console Base,
38" tall to use in
standing up position.
24" x 36"**

- 20-1413-00 Console only**
- 20-1413-01 Console w/ DRO Mount, for QC-320**
- 20-1413-02 Console w/ DRO and Monitor Mount, for QC-220**
- 20-1413-03 Console w/ DRO, Monitor and Joystick Mount for QC-220 with motor drives**
- 20-1413-04 Console w/ DRO and Joystick Mount for QC-320 with motor drives and/or with CNC controls**
- 20-1413-33 Console with Mount for M3 Computer**



20-1414-00 Console Base

This console base is 30" tall, to use in the sitting position. Can be used with all Video System models.



20-1415-00 Computer Desk

This computer desk is for use with CNC units using the QC-5000. Can be used with both consoles.

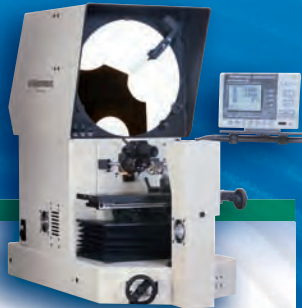
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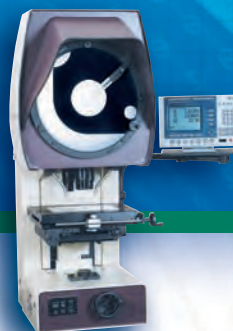
OPTICAL COMPARATORS



3500 SERIES
14" HORIZONTAL BEAM



3700 SERIES
14" HORIZONTAL BEAM



4600 SERIES
14" VERTICAL BEAM



1600 SERIES
16" HORIZONTAL BEAM



2450 SERIES
24" HORIZONTAL BEAM



2400 SERIES
24" VERTICAL BEAM



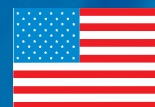
5600 SERIES
30" HORIZONTAL BEAM



2600 SERIES
30" HORIZONTAL BEAM

See the
Quality

OVER 70 YEARS OF
Manufacturing Scherr-Tumico Precision Instruments



MADE IN U.S.A.

S-T INDUSTRIES, INC.
SCHERR-TUMICO

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Philippines	Scotland	Singapore	South America
South Korea	Sweden	Taiwan	Thailand
Turkey			