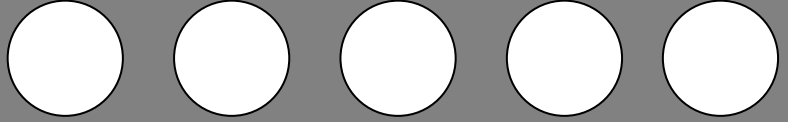




Quality Control Solutions, Inc.

SEEBREZ®

SB24126 24"X 12"X 6"



Simple and Brilliant



THE MANTRA:

Quality Control Solutions Inc. (QCSI) , is a design and manufacturing company providing products and solutions for a variety of measurement and inspection requirements in the world of manufacturing for over 20 years.

QCSI has engineered our SEEMIC®(2-D vision measurement and inspection) and SEEBREZ® (3-D multi-sensing (vision, touch probe and laser)) to be more reliable and longer lasting than systems you may have owned in the past.

We believe our Quality, Flexibility, Performance, and Support is simply the Best Overall Value.

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SO WHY SEEBREZ® MULTI-SENSING SYSTEMS?

QUALITY

- **SOLID FOUNDATION:** each SEEBREZ® is built on granite (our competitors use a cast base and some offer as an option, granite).
- **SOLID BILLET:** (6061-T6 aluminum) all our machined stage components start out as a solid billet. (We use no castings; our competitors use castings and standard sheet metal in their X, Y, Z staging and supports).
- **CROSS ROLLER BEARINGS:** used on each X, Y, Z axis. (our competitors use monorail, ball bearings that do not match up to the life expectancy or accuracy of our cross roller bearings).
- **UNIQUE ARCH DESIGN:** minimizes cantilever of the optics. We maintain the best offset bearing to optics ratio across our full range of stage sizes. (our competitors exceed our ratio by 20% to 200%). Simply put, this means we have our optics closer to our bearing support than our competitors.
- **STATE OF THE ART DC LIGHT SOURCES:** Our white light fiber optics produces a true image of your part or feature in a realistic view.
- **SUPERIOR COLOR IMAGE,** our system utilizes a unique calibrated optical assembly designed to provide the user with a dynamic sharp color image. We also place our light sources far away from the machine to minimize any heat build up. Some of our competitors place these heat sources inside the head stock or back plate, resulting in a change of accuracy over time.

FLEXIBILITY

Each SEEBREZ® is engineered with a "building block" foundation. This design feature allows the customer the opportunity to choose a system that is capable for their current measurement and inspection requirements and financial budget and also has the opportunity to up-grade functionality as needed in the future.

MULTI TASKING MACHINES:

SEEBREZ® has been engineered as a true multi-sensing solution. Based on our solid foundation X,Y,Z coordinate stage you may choose 1, 2 or all 3 sensors. (VIDEO, TOUCH PROBE, or LASER) and yes, you can add sensors in the future as needed.

PERFORMANCE

A manual, motorized or fully automated multi-sensing SEEBREZ® eliminates the fatigue and cumbersome approaches of conventional hand held devices.

AUTOMATION SELLS ITSELF:

Accuracy automation eliminates bias regardless of who inspects the job; the inspection process remains the same.

CAPABILITY: Automation gives you the freedom to move people when they are needed the most, any level of inspector is able to inspect a job regardless of difficulty.

REDUCE SET UP TIMES: Production control of a repeated job is a single matter of recalling your program and telling your system to measure.

AUTOMATED DATA COLLECTION: Each control allows you to capture tolerance and output data the way you want it. Our PC based systems utilize Dynamic Data Exchange (DDE) to talk directly to most 32 bit applications or simply send data real-time to Excel®.

SUPPORT

QCSI products and systems are backed by a responsive network of factory direct technicians and factory trained distributors located throughout the US and other countries throughout the world, to offer you outstanding user support, and system maintenance and calibrations.

SYSTEM MAINTENANCE AND CALIBRATIONS: Each system is covered with a standard two year warranty on all hardware. (See QCSI standard warranty for more complete details).

Our strategic partnerships with key suppliers allow QCSI to provide FREE software upgrades for LIFE. (Installed by factory authorized personnel). This gives the customer peace of mind that their investment in technology today will not be obsolete tomorrow. Each new and up-graded system comes with a comprehensive training package on site, on your parts.

BEST OVERALL VALUE

- A system built to last;
- A system built to grow as needed;
- A system with software technology that continues to be updated with no additional cost;
- A system that comes with a standard two year warranty;
- A system that will improve your accuracy;
- A system that retains its value;
- A direct relationship with the factory; that is equipped to provide you with the support needed to make the most of your investment with SEEBREZ® multi-sensing systems.

Quality Control Solutions Inc., truly pays attention to the details. We strive to develop a partnership with each of our customers and enjoy working together to solve their measurement and inspection requirements.



Quality Control Solutions, Inc.

SEEBREZ®

TECHNICAL SPECIFICATIONS



Accuracy: (X or Y) Axis

$$E1 = 1.0 + 5L/1000 \mu\text{m}^*$$

(XY) Axis

$$E2 = 1.5 + 5L/1000 \mu\text{m}^*$$

(Z) Axis

$$E1 = 3.5 + 5L/1000 \mu\text{m} \text{ with standard auto focus zoom lens}^*$$

$$E1 = 2.5 + 5L/1000 \mu\text{m} \text{ with optional 2.0x lens attachment}^*$$

* L = measuring length in mm. Applies to thermally stable system at 20° C, maximum zoom lens setting, and evenly distributed 5 kg load. Depending on stage loading, accuracy of at maximum rated load may be different than the standard accuracy.

Software: Standard: QC5000 multi-sensing ready metrology software

Standard Features:

Datum Magic® Automate part alignment (level, skew and zero), the first step in any measurement. Complete the zeroing and alignment of complex parts automatically by entering the minimum number of probed features. Datum magic is an extension of patented Measure Magic technology.

Advanced calculations Customize results fields for special measurement needs and complex calculations by embedding formulas. For example, automatically calculate area or circumference dimensions with each circle measurement or perform compound calculations based on coefficients extracted from multiple features.

Uncomplicated constructions Simply select two or more features to create an intersection or construct a new feature, eliminating the need for confusing construction menus.

Simplified program creation Simply record all the measurement steps performed on a first sample or standard part. The Quadra-Chek software stores the datum, measuring sequence, tolerances and reporting functions for playback on subsequent parts.

Guided program use Visual and audio cues guide operators through programmed sequences, simplifying the measurement process for entire parts (on fully automated systems) or for specific sequences.

Program editing interface Reduce time spent editing programs with an easy-to-learn graphic user interface that organizes measurement steps for visual review. Troubleshoot long and complex programming sequences with intuitive debugging tools. Integrate advanced programming tools including advanced looping, conditional branching, and palletizing controls.

CAD file import and auto programming Import part specifications from CAD programs and then use auto programming to create programs of feature measurement steps that speed the part programming process and eliminate transcription errors.

Optics:

Standard:
12:1 programmable zoom lens
0.5x, 1.5x and 2.0x lens attachments optional.
1/2" format color CCD camera with 768 x 494 array
Surface illuminator: DC regulated fiber-optic white light
Coaxial illuminator: DC regulated fiber-optic white light
Profile illuminator: DC regulated fiber-optic white light

Measuring: 600 x 300 x 150 mm (24" x 12" x 6") measuring range

Stage 300 mm (12") Z-axis optional
Anodized aluminum work surface with fixture holes and removable stage glass
DC stepper drives with variable speed joystick control
30 kg (65 lb) load capacity
Scale resolution 0.5 μm (0.00002"), 0.1 μm (0.00001") optional

System Footprint:

Width	X	Depth	X	Height	X	Weight
50"		X	41"	X	70"	750 lbs

Computer:

Industrial designed rack mount with lock out:
Computer specifications change often. Call or email now for the latest details.

Warranty: All systems covered under the terms of the QCSI 2 year domestic warranty statement. Call for details.

As part of our ongoing effort to improve the value of our products, we reserve the right to change specifications without notice.

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