LaserQC®

FIRST ARTICLE INSPECTION - STATISTICAL PROCESS CONTROL
REVERSE ENGINEERING - AUTOMATIC FORM MEASUREMENT

VIRTEK
A Gerber Technology Company

LaserQC 1200

LaserQC 800

LaserQC Benefits

LaserQC is the premier self-calibrating Laser Inspection system in its class. LaserQC dramatically increases throughput in precision sheet metal, tubing, precision foam, leather, aerospace and gasket fabrication. The system is designed for First Article Inspection, Quality Reporting (SPC, ISO, Lean, etc.), Reverse Engineering and now provides Automatic Formed Inspection.

LASER FAST

LaserQC captures over 500 data points per second to make part inspections laser-fast, right on the shop floor.

LASER ACCURATE*

The system quickly performs 100% inspections accurate to ± 0.002" (0.05mm) for 2D measurements and ± .010" for Formed (3D) measurements.

SHOP FLOOR FRIENDLY

LaserQC offers a reliable, low-maintenance solution that operates along side your facilities CNC equipment. LaserQC self-calibrates and adjusts system settings to accommodate for environmental changes common to the shop floor.

NEW LASERQC AUTOMATIC FORM MEASUREMENT (AFM) OPTION

The introduction of LaserQC AFM makes 3D measurement simple. The AFM system allows you to measure heights, edge-to-edge or hole-to-hole on interior flanges and raised features on a wide variety of materials including tubing, formed foam and specialty cardboard. AFM option replaces the necessity of using hand tools for measuring formed (3D) parts.

CUSTOMER-PROVEN PERFORMANCE

Insight from industry leaders in precision sheet metal work makes the LaserQC a proven performer on the shop floor. In use by more than 700 companies worldwide, the LaserQC is utilized in applications ranging from aerospace and high-tech to cabinetry and heavy equipment manufacturing.

FAST AND EASY

LaserQC is designed to set up easily so your system is up and running in less than a day. The intuitive user interface allows new operators to become fully proficient within just a few hours.

ADVANCED TECHNOLOGY WITH EXPERT SUPPORT

Our continuous improvement program is rooted on our customers' shop floor, where our worldwide Service and Support teams gain first-hand knowledge, recognizing operational needs and translating them into technical functionality. Our team works closely with engineers, technicians and programmers to ensure production needs and full delivery of LaserQC capabilities.

Get the edge in 2D and formed part inspection

LaserQC delivers the kind of bottom-line benefits that help your shop build and retain business – faster turnaround, increased throughput, lower costs per part, reduced scrap and rework and ultimately higher customer satisfaction.

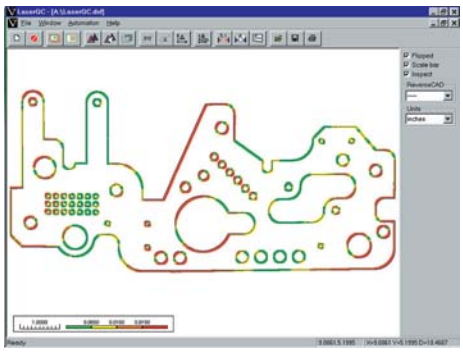
First Article Inspection – Integrating laser inspection on your shop floor translates into more 'green-light' time for your production equipment. LaserQC inspects flat and formed parts on the spot, completing scans in just seconds and comparing every measurement to CAD specifications.

LaserQC delivers the kind of bottom-line benefits that help your shop build and retain business.

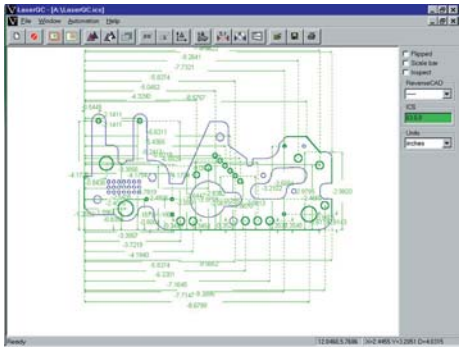
Accuracy Dashboard – LaserQC makes first part inspection fast and easy with no special training required. Laser inspection scans produce a color-coded visual display that illustrates the CAD drawing image and design tolerances along with the scanned part. Any off-spec variance is immediately apparent, even to the untrained eye. For oversized parts, LaserQC automatically merges multiple scans to create a single image and saves the measurement coordinates in vector format.

2D Reverse Engineering is a built-in feature with every LaserQC system. The scanning process captures the complete profile of existing parts or templates at laser speed and stores the data in CAD-compatible files. The software allows you to manipulate the scan data and part profile on screen to optimize the quality of the CAD model. LaserQC eliminates costly hand measurement and CAD programming. Simply export the LaserQC-generated CAD file for post processing or add it to your CAD library.

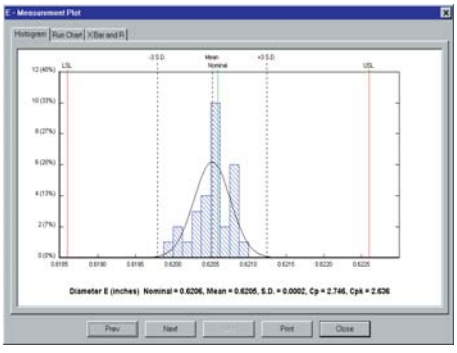
SPC and Quality Reporting – Inspection data from the LaserQC is saved in industry-standard CAD files. From these files, the system generates reports to your exact specifications. The system automatically creates detailed, color-coded inspection records and data files of the scanned part, including CAD data variances. Automatically create documentation and traceability to meet requirements for ISO, TQM, Six Sigma, Lean and QS reporting. Easily export data files into common Windows®-based programs.



Accuracy Dashboard
LaserQC's Quick Inspect format color codes the varying tolerances to show any off-spec variances.



Eliminate your QC bottleneck
Save time by generating a fully dimensioned Inspection Check Sheet in seconds with LaserQC and meet your customers' and your own internal quality requirements.



Analyze your production processes
LaserQC generates detailed color inspection reports to your exact specifications. SPC functions include charting data in a Histogram, Run Chart, and X Bar/Range plot.

"Our customers constantly bring us parts to be reverse engineered. With LaserQC, this process is quick and easy. The system will pay for itself in less than two years."

John Tempelton, General Manager,
Tempelton & Sons Metal Products Ltd.,
Mississauga, Ontario, Canada

"We have been a Virtek LaserQC user for more than 10 years, and upgraded to the new AFM system. The ease of operation, speed, and accuracy sold us. This is a tool every shop needs... (it) checks material thickness as well as our tubing. We are definitely sold on the new technology and are a very satisfied Virtek user."

Mark Lindquist, Owner,
Rapid-Line Inc.,
Grand Rapids, Michigan, USA

"The Virtek LaserQC system has been an accurate and reliable inspection tool. Our flat layout inspection time has been reduced by 75%. The system has paid for itself in less than 6 months."

Brian Ruden, Quality Assurance Manager,
Mi-T-M Corporation,
Peosta, Iowa, USA

"The reporting requirements for our government contracts previously took 2 days. With LaserQC, we can now do it in 25 minutes."

Loren Buck, Manufacturing Manager,
Garlock Gasket and Seal,
New York, New York, USA

LaserQC System Specifications	
Scanning Accuracy*	±0.05mm (0.002") for 2D and ±0.25mm (0.010") for formed inspection
Maximum Part Thickness	200mm (8.0") for 2D, 305mm (12.0") for AFM
Calibration	Automated
Maximum Scan Zone (single scan):	LaserQC 800 - 760mm x 760mm (30" x 30") LaserQC 1200 - 1220mm x 1220mm (48" x 48") LaserQC Expert - 2440mm x 1220mm (96" x 48")
Oversized Parts	Capable with merged scan feature
Overall Dimensions (LxWxH)	**LaserQC 800** - 1575mm x 1220mm x 2440mm (62" x 48" x 96") **LaserQC 1200** - 2007mm x 1651mm x 2440mm (79" x 65" x 96") **LaserQC Expert** - 2870mm x 2057mm x 2612mm (113" x 81" x 103")
Operating Environment	10 - 38°C (50 - 100°F)
Power Requirements	110V/60 Hz or 240V/50 Hz
Laser Device & Output	Laser diode device with maximum 4.5mW output
Laser Class	Class IIIa, meeting the 21CFR 1040 standard for CDRH certification in North America Class 2M, meeting the 60825-1:1993+A1:1997+A2:2001, standard for CE certification in Europe
Software	Includes inspection, SPC and reverse engineering
Computer System	Current model PC with monitor, color printer, keyboard and mouse
Operating System	Windows® XP (Windows® 7: beginning October 2010)
Warranty	One-year warranty on hardware and software
Extended Warranty	Optional**
Extended Support Program	Optional**
Part Stabilizer	Optional**

Due to continuous product improvements, specifications are subject to change without notice.

* Accuracy results are based on tests conducted on standard production machines using a laser-cut part. Results may vary. Contact Virtek for a full report.

** Contact Virtek for details.

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