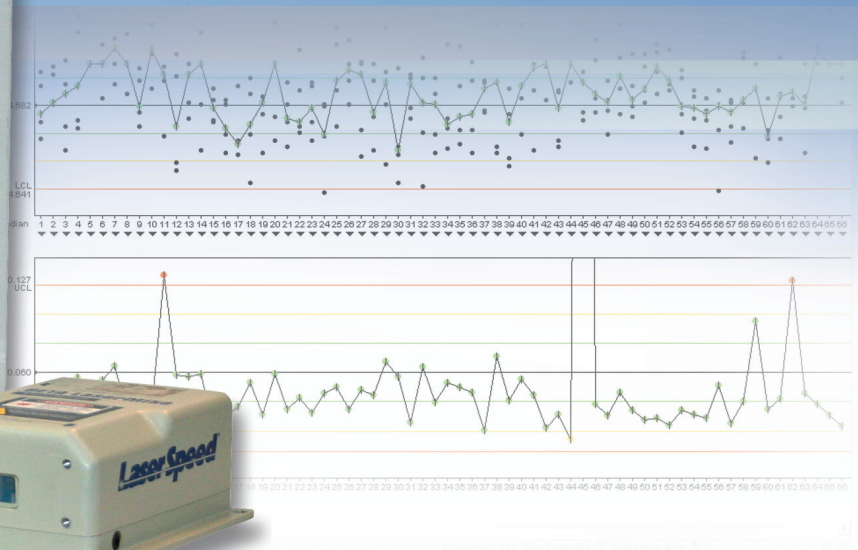
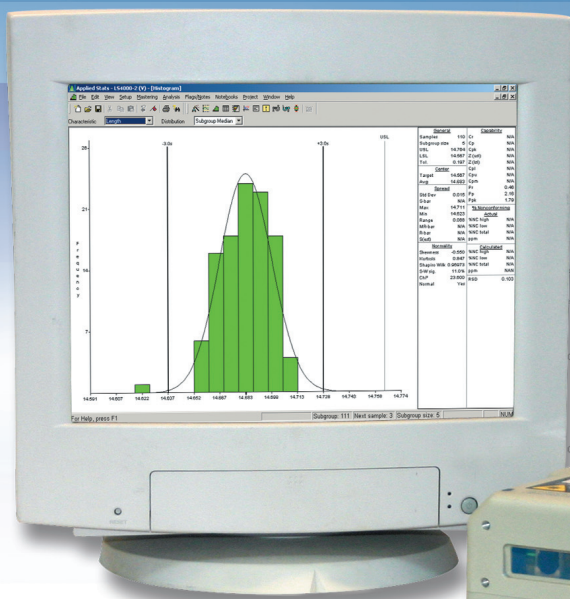


LaserSpeed[®]

100% Discrete Part Length Inspection System

LS4000-QCS

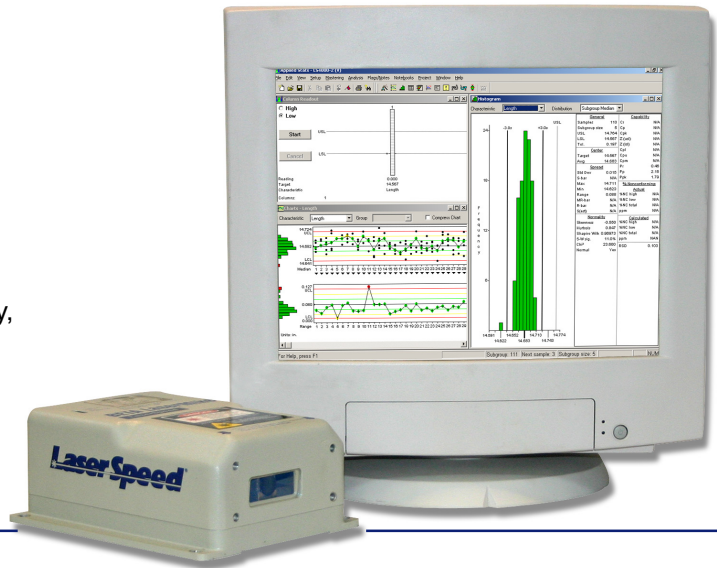


BETA LaserMike

Length Inspection System

A Complete System in One Convenient Package

Beta LaserMike's LaserSpeed® 4000-QCS Discrete Part Length Inspection System is a revolutionary product delivering the most accurate 100% length inspection capability available today. More importantly, the LS4000-QCS turnkey system allows you to document and deliver the "0 defect" advantage to your customers.



Experience the power of the **100% Inspection Advantage**

Unlike time-consuming manual measurements or complex CCD camera systems, the LS4000-QCS is a fully integrated length inspection system designed to measure all parts quickly and accurately. In addition, it provides full measurement statistics, report generation, and alarm capabilities.

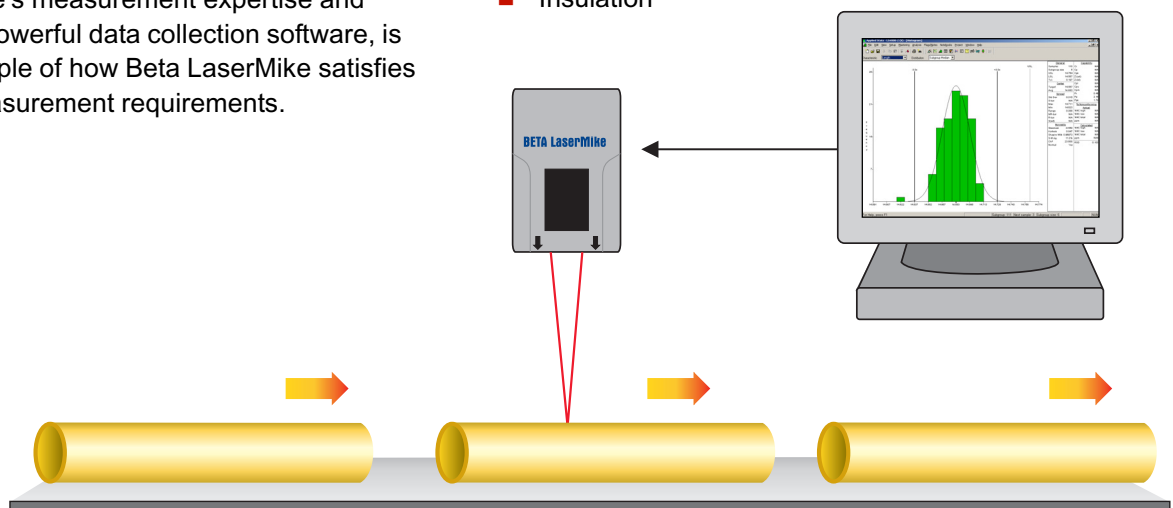
The LS4000-QCS is the result of combining Beta LaserMike's ultra-high precision LaserSpeed 4000 technology with the powerful Applied Stats™ Statistical Process Control (SPC) and Data Collection software from ASI DataMyte®.

For more than 15 years, LaserSpeed systems have provided the most accurate, non-contact length and speed measurements to the steel, aluminum, tube, textile and wire/cable industries. The combination of Beta LaserMike's measurement expertise and ASI DataMyte's powerful data collection software, is yet another example of how Beta LaserMike satisfies your process measurement requirements.

Applications:

Beta LaserMike stands behind the LS4000-QCS system with over 30 years of experience in laser-based measurement technology crossing a wide range of industries and materials:

- Automotive hose and tubing
- Medical tubing
- Discrete piece part measurements
- Metal and plastic tubes
- Bar stock
- Food products
- Metal and plastic sheets
- Textiles
- Wood products
- Insulation



Experience the power of **Fast, Easy Operation**

The LS4000-QCS combines Beta LaserMike's powerful measurement capabilities with ASI DataMyte's® industry-leading SPC software. The Applied Stats™ software acquires the length measurements in real time and performs statistical analysis of the data. This software package is among the most comprehensive, user-friendly SPC software packages available today and provides the following capabilities:

Length Measurement Display

- Bar chart display
- Control Charts: X-bar, R; X-bar, standard deviation; and more
- Histogram display
- Scatter plots

Length Measurement Summary

- Gauge capability analysis
- Pareto analysis of alarm causes and defects
- Select data subsets to analyze
- DDE link sends links results to other Windows applications

Length Measurement Analysis

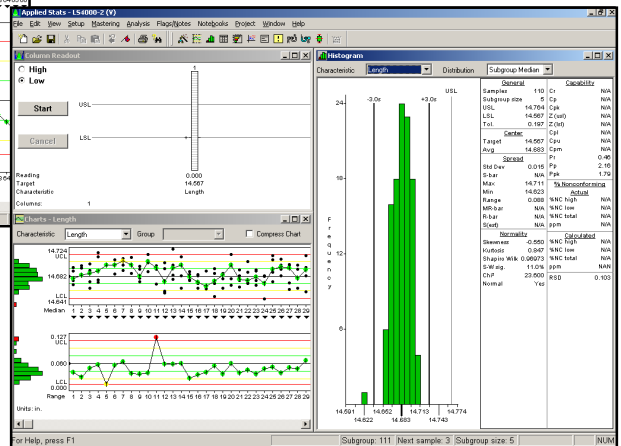
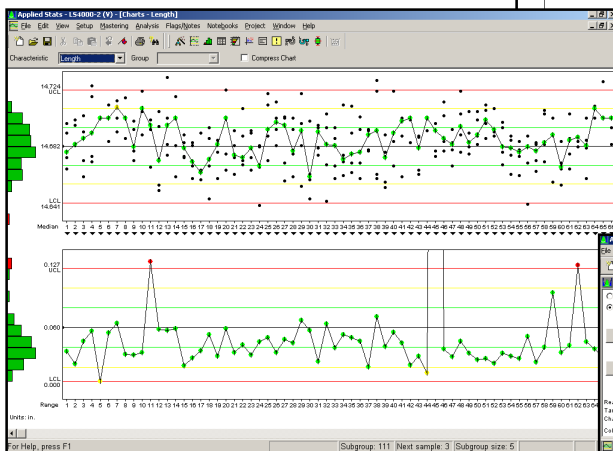
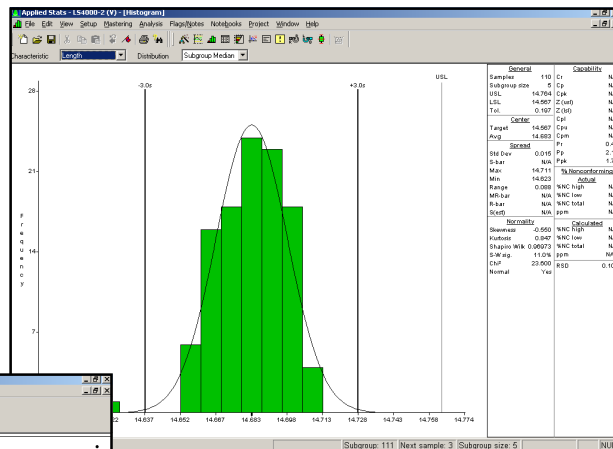
- Capability: Cr, Cp, Cpk
- Normality: Kurtosis, Skewness, Chi-square
- Performance: Pr, Pp, Ppk, % Non-conforming

Out of Tolerance Indicator

- Contact relay alarm output
- Display Indicator

Connectivity

- Fully functional with any Windows compatible network
- Import/Export delimited ASCII text files
- DDE capability



| LS4000-QCS | 100 mm | 300 mm | 600 mm |
|----------------------------|---|--|--|
| Standoff Distance | 100 mm (4 in.) | 300 mm (12 in.) | 600 mm (24 in.) |
| Speed Range | 0.2 to 1700 m/min (0.7 to 5500 ft/min) | 0.4 to 4000 m/min (1.3 to 13100 ft/min) | 0.8 to 8000 m/min (2.6 to 26200 ft/min) |
| Measurement Depth of Field | 15 mm (0.6 in.) | 35 mm (1.4 in.) | 50 mm (2 in.) |

Specifications

Compact Optical Head

| | |
|-----------------------------|--|
| User Isolated Voltage | 5 to 24 VDC (300mA) |
| Dimensions | 203 X 159 X 81 mm (8.0 X 6.3 X 3.2 in.) |
| Operating Temperature Range | 5 to 40°C (41 to 104°F) |
| Relative Humidity | Non-condensing |

| Accuracy (mm) | Maximum Length | |
|---------------|----------------|--------|
| 0.2 mm | 750 mm | 0.75 m |
| 0.5 mm | 2450 mm | 2.45 m |
| 1 mm | 4900 mm | 4.9 m |
| 2 mm | 9950 mm | 9.9 m |
| 5 mm | 24500 mm | 24.5 m |

| Accuracy (in.) | Maximum Length | |
|----------------|----------------|-----------|
| 1/64 in. | 75 in. | 6.25 ft. |
| 1/32 in. | 150 in. | 12.5 ft. |
| 1/16 in. | 306 in. | 25.5 ft. |
| 1/8 in. | 621 in. | 51.75 ft. |
| 1/4 in. | 1248 in. | 104 ft. |

For higher accuracy requirements, please consult factory.

System Configurations:

Standard System Components (Included as part of the standard LS4000-QCS system):

- LaserSpeed 4000 Sensor
- 20 m (65 ft.) cable between sensor and processor
- RS232 cables (2)
- Relay Box
- ASI DataMyte® Applied Stats™ Software

Options:

- Industrial PC with touch-screen
- Tower case PC with monitor
- Adjustable height stand for sensor

LaserSpeed is a registered trademark of Beta LaserMike.
ASI DataMyte and Applied Stats are trademarks of ASI DataMyte.

This unit is a class IIIB laser product and Complies with EN60825-1:2001.
Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated July 26, 2001.



The following safety features required to comply with the Bureau of Radiological Health Class IIIB laser requirements are included:

- Key-operated power switch on optional controller
- Laser indicator light on supply and laser
- Delayed laser startup-laser indicator light on prior to laser radiation
- Laser beam blocking device
- Interlock capability for remote shut-off

BETA LaserMike

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