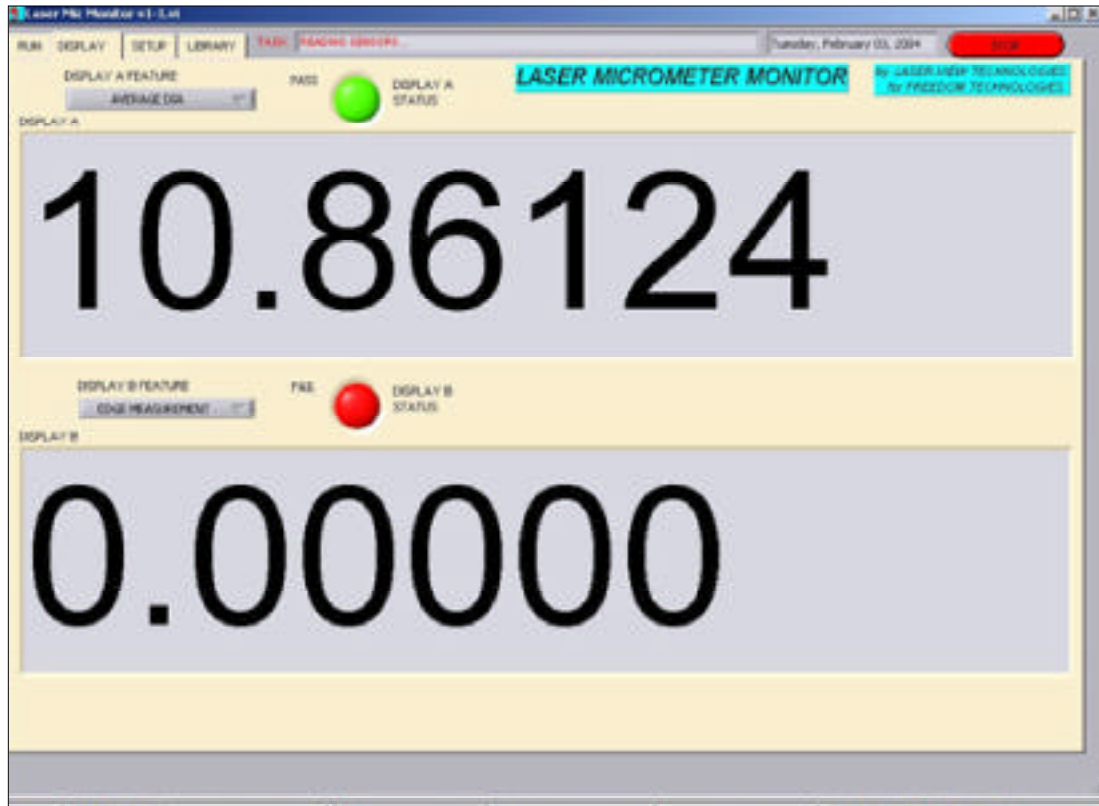


## Laser Micrometer Monitor Software



Pictured above is the display screen. The top dimension (in mm) is the diameter while the lower dimension is ovality.

## General Description

The Laser Micrometer Monitor Software package is designed to be used with both the ILS series of laser micrometers and/or with any of the laser gauges when connected to the CE 10 controller. A PC with a comm port and Windows is all that is required.

The Laser Micrometer Monitor software can be used in both off line and in process applications. It has simple menus which allow the user to store any number of parts by job number, product type. It has a data base which can be searched to find the particular part as well. When a product or job is selected, the associated measurement settings are automatically down loaded to the laser gauge.

These data can be archived, automatically dumped onto an Excel™ spread sheet and exported to Prolink's QC-Calc statistical software package for seamless operation.

In summary, the Laser Micrometer Monitor software enables complete control of the laser micrometer while providing the user with flexibility to setup the desired measurements, reporting and comprehensive statistical analysis

## Features

- Displays up to two measurements simultaneously in large font
- Display all available gauge measurements simultaneously on Run screen
- Large red and green pass/fail indicators for each measurement
- Inch/millimeter selection
- View data in histograms, x-bar charts with cp, cpk with optional Prolink's QC-Calc software.
- Store results in Excel™ with the laser monitor software
- Store and download gauge settings by customer and/or part number in an infinite library on a PC for recall
- Accepts mouse/keyboard or bar code scanner input to store parts
- Stream measurement data to TCPIP port for live access by other systems
- Easy to use point and click graphical interface

## Benefits

- Cost effective data storage and retrieval system
- Remastering is not required for different size parts
- Patented self calibration guarantees accuracy
- Can be used with any of our laser gauges

## Laser Micrometer Monitor Software

The laser monitor software is for use with a standard PC running Windows. Only a comm port is required on the PC.

The remote gauge programming enables the user to set a variety of parameters, including: the measurement time, number of laser scans, tolerances, go/no go settings, etc. These settings can be recalled for use with a batch of particular parts for fast and easy setup. The measurement data can automatically be dumped into Excel. As an option, the Prolink SPC software package can be directly linked into the Laser Monitor Software.

In summary, the Laser Monitor Software enables complete control of the laser micrometer while providing the user with flexibility to setup the desired measurements, reporting and comprehensive statistical analysis.

### Display Screen

The display screen shown on page 1 enables the user to see two measurements at the same time. The entire PC monitor display is filled with this screen. There is a red and green colored button (pass/fail) above the measured value indicating whether or not the measurement is within tolerance. In this example, the lower display shows the ovality measurement. The measurements are in millimeters. According to the limits, the diameter (upper display) is in tolerance and the ovality is out of tolerance. The type of gauge used for the data was the ILS 35 dual axis laser gauge. If a single axis gauge was used, the display could show diameter and TIR.

### Run Menu

The Run Menu is the main menu. This is the first menu you see when you start the Laser Micrometer Monitor Software. From this menu, you can go to the Display Menu, the Setup Menu and the Library Menu. From the run menu you can select a variety of features, including:

- The specific table top model laser gauge
- The desired measurement(s) from the laser gauge
- Select a customer and/or part number file
- Enter a new customer and/or part number file
- Displays the desired measurement(s)
- Gauge status (number of measurements, etc.)
- Upper and lower tolerance settings
- Setting a nominal dimension
- Continuous or single measurement

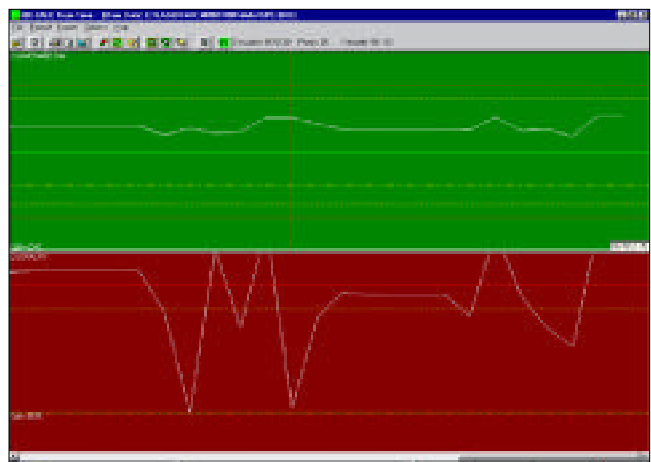
## Setup Menu

The setup menu is used for the major settings. It has five (5) major tabs with sub menus.

- **Data Display Tab**
  - measurement resolution (mm or inches)
  - measurement time or number of scans to average
  - enable/disable alarm outputs
  - diagnostics mode
- **Hardware Tab**
  - measurement source, emulation mode, RS 232, ethernet
  - Baud rate, TCPIP, comm port, etc
- **Program Storage**
  - On/off of program storage
- **Streaming Data Output**
  - Prolink data base file path
  - Output data text file path
  - Data output stream format
- **Data Archive**
  - Type of measurement to report
  - Archive data on/off
  - Excel on/off

## Statistics

The chart below represents data taken with the ILS 35xy using the Laser Micrometer Monitor Software linked to QC- Calc by Prolink Software. It is a seamless link. Measurements along with related specification limits are sent to QC-Calc in real time. QC-Calc can plot multiple features simultaneously and set statistical limits. QC-Calc can also be used to convert and send SPC data to other popular SPC programs.



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