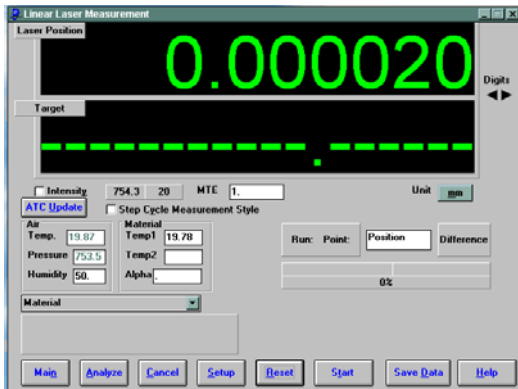


# Laser Doppler Displacement Meter

## LICS-100A



## Laser Interferometer Calibration System

### OPTODYNE

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**OPTODYNE'S LICS-100 Laser Calibration System** calibrates CNC machine tools, CMM's (Coordinate Measuring Machines), and other precision measurement machines and stages.

This new compact calibration system, based on the patented **Laser Doppler Displacement Meter (LDDM™)** technology, is designed for easy setup and operation. The basic system, including Windows™ software, automatic compensation, for air temperature, barometric pressure, and material thermal expansion and accessories are packaged at an **extremely compact and affordable price**. The system has only two main components and fits in one small carrying case.

The Windows™ software, running on any Notebook computer, is user friendly and is designed to collect and analyze data in accordance with a variety of industry standards, such as NMTBA, VDI, ISO and ASME B5.54. The laser system is calibrated and traceable to NIST.

### MAJOR FEATURES AND BENEFITS

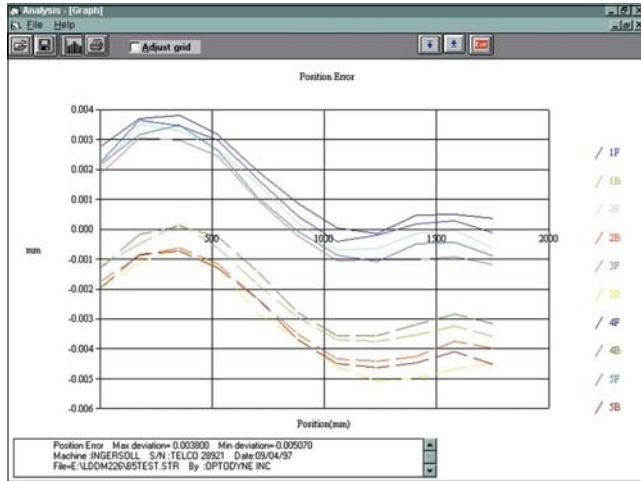
- Compact and light-weight
- Easy to align and set-up
- Automatic data collection
- NIST traceable laser accuracy
- No tripod and no interferometer
- Windows™ software
- USB interface
- Automatic environmental compensation
- Support NMTBA, VDI, ISO and ASME B5.54 standards

### MAJOR APPLICATIONS

- Linear calibration of CNC machine tools, CMM's, lead screws, and DRO's
- Quality control maince
- Ultra precision positioning

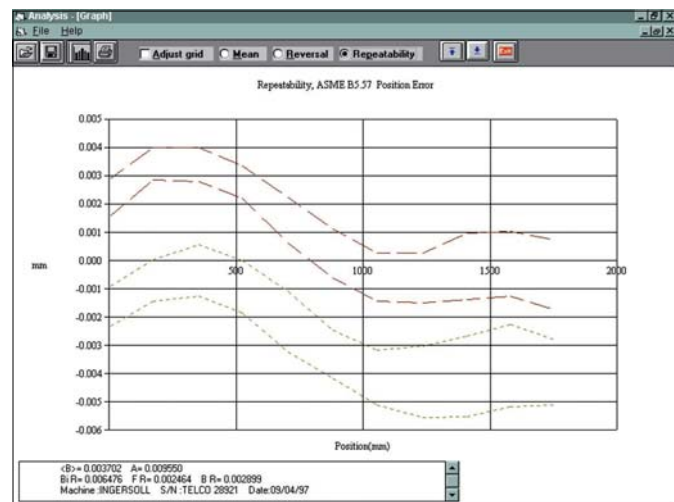
# Specifications

The **LICS-100A Laser Calibration System** features a two main components system. Automatic correction for speed of light changes and material thermal expansion. With the "Automatic Data Collection", the operator programs the table into position, the system automatically senses the table movement and data is collected after a user defined interval.



Average error plot from Optodyne's Metrology software run in accordance with NMTBA standards. (VDI 3441, ISO and B5 standards are also available).

A typical data plot taken by the Windows automatic data collection software.



## LICS-100A

### Configuration:

Single aperture laser head	LP-100
1/2" DIA <i>retroreflecto with holder</i>	LD-105
Metrology/Analysis program	W-100
90 degree beam bender	LB-100
DC power supply and cable set	IP-100
Carrying case (soft)	CC-100
Notebook Computer (not included)	LTC
Adapter Plate	LD-101
Cables	LD-104
Clamps	LD-102
ATC Probe & Box	ATCPA

### Capability:

Laser Stability	0.1 ppm
Resolution	1 microinch (0.01 $\mu$ m)
Range	50 ft. (15 meter)
System Accuracy	2.0 ppm
Slew Rate	40 ips (1 m/s)

### Power:

90 to 230 VAC, 50 to 60 Hz