

# RT Automation

## MeasureOD<sup>®</sup>

Including Proportional/Integral (PI)  
Feedback Controller



The MeasureOD<sup>®</sup> System is the Software solution for measuring the outside diameter of tubing and/or wire related products. This Software tool was developed and optimized to take advantage of the Keyence LS-9501P Controller paired with a Keyence P/N LS-9XXX measurement heads.

This advanced version of the Software includes a PI Feedback Controller. The PI Controller software interfaces to our RTA-550 Hardware box that provides two (2) 0-10V output signals that may be interfaced to your extrusion line puller system.

The MeasureOD<sup>®</sup> PID Software offers the following features:

- Directly connects and automatically programs the Keyence LS-9501P controller for the required measurement function. Support for single and dual axis measurement heads
- Includes a Proportional-Integral (PI) Controller with dual 0-10V output signal
- Includes tunable cubic dead-zone algorithm as well as exponential filtering of the input signal to the controller
- Includes automatic PI tuning algorithm based on open-loop step response
- Support for Direct Acting and Reverse Acting Control Systems
- Exporting of the measurements to Microsoft Excel in a "Ready to Print Format"
- Time Domain Graphical results of the measurements (Global and Local)
- Real time Statistical Analysis of the Measurements (Global and Local)
- Software operates in English and/or Metric Units



### Experience-based design

- Developed and designed by a team that has over thirty years of experience in Mechatronics/DAQ/automation/software field
- Provides Uniform User Interface independent of connected Laser Micrometer System

### Robust, Validated Software

- Designed to run for days/months/years - 24/7 operation w/ no software issues
- Proven track record at a medical device manufacturing firm

### Low Cost of Implementation.

- Runs on Windows XP/7/10 environment – eliminates the need for proprietary (expensive) workstation/hardware
- Single, competitive purchase price with no periodic subscription costs
- Low-cost communication cabling

### Standard Interface

- Includes support for single and dual axis Keyence LS-9XXX measurement heads
- Includes single and double measurement planes
- Updates to the software implemented at no charge to support any Laser Micrometer system

**RT Automation**

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