

Measurement Data Management

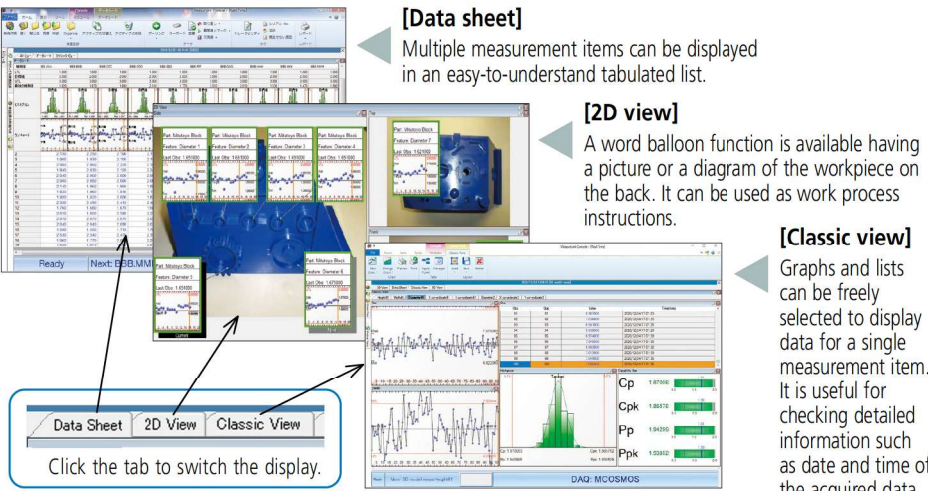
MeasurLink® Data Collection/Analysis Software

- Real-Time Standard (RT Std)
- Real-Time Professional (RT Pro)
- Real-Time Professional 3D (RT Pro 3D)

• **Real-Time** is the Statistical Process Control (SPC) MeasurLink® module that collects data from Mitutoyo and third-party measuring devices and systems to provide analysis functionality in real-time by displaying control charts or process capability indexes.

Various data views

Collected data can be displayed in various views, such as data lists, work instruction images, statistical analysis results, etc. The views can be switched easily according to the needs of the operator.

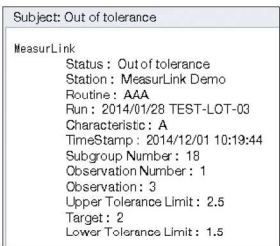


Adding traceability information

Traceability information for each workpiece can be added, for example, serial no., lot no., inspector name, machine no., or cause of problems and remedies. Traceability will also support Barcode scanners for easy error free entry.
This information can be used as search criteria when extracting data using the filtering function (**RT Pro/RT Pro 3D**) when a problem occurs.

Alarm function

The operator and management are notified when an "Out of Tolerance" or other events occur.
The method of notification can be selected from a pop-up window, E-mail (Fig. 1), audible alarm or log file.



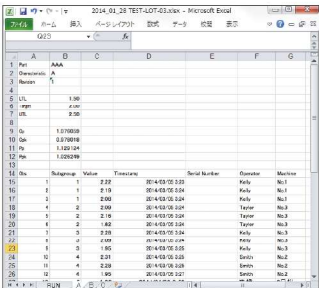
(Fig. 1) Alarm notification by E-mail

Events possible to be logged

- Measurement data
- Retake/modify data
- Failed data tests
- Assignable Cause and Corrective Action

Exporting data to an Excel file

Measurement data can output to an Excel file. This function is useful if the data needs to be used in a department that does not have **MeasurLink®**. (Fig. 2)



(Fig. 2) Export to Excel

MeasurLink® System Requirements

- Operating environments
- [Operating System]
 - Microsoft Windows 7 (32-bit/64-bit)
 - Microsoft Windows 7 SP1
 - Microsoft Windows 8.1 (32-bit/64-bit)
 - (Microsoft Windows 8.1 RT is not supported)
 - Windows 10 (32-bit/64-bit)
 - (Windows 10 Mobile and IoT editions are not supported)
- [Database]
 - Microsoft SQL Server 2017 Standard/Enterprise Edition
 - Microsoft SQL Server 2016 Standard/Enterprise Edition
 - Microsoft SQL Server 2014 Standard/Business Intelligence/Enterprise Edition
 - SQL 2019 Standard/Enterprise

RT Std/RT Pro/RT Pro 3D Common Functions

- Connectable measuring instruments
- Measuring tool with Digimatic output (equipped with PC data processing unit)
- [Supported interfaces]
 - Wireless (USB) **U-WAVE/U-WAVE fit** (VCP)
 - Wired (USB) **IT-020U/USB-ITN** (VCP or HID)
 - Wireless (D-sub 9 pin) **IT-007R, MUX-10F, DP-1VA LOGGER**, and others
- Various RS-232C devices (partially restricted)
- Screen display mode when collecting data
 - Classic view
 - Data sheet
 - 2D view
 - Part data sheet, etc.
 - Statistical Analysis result
- [Chart]
 - Xbar-R, Xbar-S, X-Rs control charts, Histogram, Run chart, Pre-control chart, Tier chart, Box plot chart, Meter chart, Indicator bar, Multivariate data control chart, etc.
- [Statistics]
 - Maximum value, Minimum value, Standard deviation, Average $\pm 3\sigma/4\sigma/6\sigma$, Process capability indexes (Cp, Cpk, Pp, Ppk), Defect ratio, etc.
- Alarm function
- [Target items]
 - Out of tolerance
 - 1 point exceeds control limit line (following are related to management chart)
 - Consecutive 9 points on one side of center line
 - 6 points successively increasing or decreasing
 - Others including 8 judgment criteria for Shewhart control chart
- Adding traceability information
 - Measurement date (automatically added)
 - Serial No. (Keyboard entry)
 - Special causes and remedies
 - Selection from comment list registered as an option
 - Enter from keyboard when measuring classified title registered as an option (e.g. Lot No. LOT 001)
- Report print out function
 - Measurement values, analysis calculation results and various charts can be arranged to output according to requirements.
- Export function of measurement results
 - Excel
 - Text
 - QIF
 - AQDEF
- Security function
 - Once the access authorization is set, it requires "User name" and "Password" input before the program will start. Data editing actions such as reference, entry and changes require authorization according to the user's role in order to preserve data integrity.
- Operation languages (19 languages)
 - English, Japanese, French, German, Dutch, Spanish, Swedish, Polish, Italian, Turkish, Korean, Chinese (simplified/traditional), Thai, Hungarian, Czech, Finnish, Portuguese, Russian