



CONTROL

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## DataLyzer Gage Management

Software for calibration, MSA and managing gages and tools

**DATALYZER**  
**International**  
Partners in Continuous Improvement

# DataLyzer Gage Management

SPC analysis can be greatly affected by measurement system error. Gaging instruments, inspection techniques and fixturing all make up a measuring system. Any of these components can introduce variation. This variation in the measuring system can be an important cause of out of controls and is also reflected as part of total process variation in the SPC analysis and negatively affects key quality statistics like Cpk and Ppk.

In all major quality approaches controlling measurement system variation is an essential first step. DataLyzer® Spectrum Gage Management quantifies this measurement system variation and provides the required information for reducing it. The DataLyzer® Spectrum Gage Management system works according to ISO/TS 16949:2009 requirements.

DataLyzer® Gage Management will operate alone or it will link to the DataLyzer® Spectrum SPC module. When linked, the Gage Management module shares the Spectrum database offering access to common setup information like characteristic specifications along with process information like variation. This integration makes it possible to provide reports where the gage variation and process variation can be compared and printed instantly in one report.

The system allows for individual and “generalized” Gage R&R studies. “Generalized” studies apply results from one gage’s study to all gages of the same type according to certain constraints.

There are 3 components to this system:

- 1 Gage Calibration and Bias Studies
- 2 Gage Repeatability and Reproducibility Studies
- 3 Supplier Records (sourcing for supplies, replacement and repair)

## 1 Gage Calibration and Bias studies

Calibration is often the largest ongoing cost of a quality assurance department.

DataLyzer’s Gage Management system allows you to manage those costs, as well as the gages themselves. Determines whether or not bias exists, and whether it exceeds acceptable

Trial	Mean 1	Mean 2	Mean 3	Mean 4	Mean 5	Average	Bias	Status
1	2.90	2.91	2.91	2.91	2.91	2.91	0.000	Pass
2	10.30	10.30	10.30	10.30	10.30	10.300	0.000	Pass
3	25.00	25.00	25.00	25.00	25.00	25.000	0.000	Pass
4	50.00	50.00	50.00	50.00	50.00	50.000	0.000	Pass
5	100.00	100.00	100.00	100.00	100.00	100.000	0.000	Pass
6	150.00	150.00	150.00	150.00	150.00	150.004	0.004	Pass

limits. DataLyzer® Gage Management software further maintains a history of these calibration studies so that trends can be observed.

### Calibration:

User selectable number of calibration points within the measuring range along with the flexibility to substitute an available standard nearest each calibration point.

There is the option to include measurement or master uncertainty in the study.

Simple, color coded pass/fail status indication on the study when complete. User definable criteria for pass fail includes passing % limit of Tolerance, or process variation.

Reports clearly indicate the gage details for example pass fail status and the date of study. User definable customer name titles and graphical logo can be included in each report header.

Calibration Study history is maintained for each gage. View historical studies or print them for distribution.

Calibrations Due Reports are also available designating which group of gages need to be studied or re-studied during any given week or month.

Calibration procedure can be user-defined and applied to all desired gages.

Information about external calibrations can be stored and calibration results can be attached to the gage record so the reports are quickly accessible.

Calibration stickers can be printed.

## 2 Gage Repeatability and Reproducibility studies

Even if a measurement system calibrates without bias, how consistently does it measure production parts...

- When used by one individual at different times (repeatability)
- When used by more than one individual over time (reproducibility).

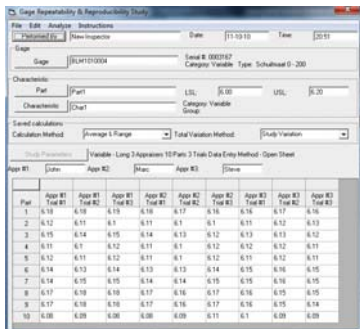
The Gage R&R functionality of the DataLyzer Gage Management system provides the possibility to perform and manage gage R&R studies. The use of gage types and characteristic groups allows you to perform studies for representative gages and characteristics which can be used in reports.

**Features:**

**Simplified data entry:** Open sheet, by trial and randomized for all variable

**Multiple clear analyses and Reports:** ANOVA, Long and short, variable and attribute studies, complimented by performance curves, Range charts, Average & Run charts, Error charts, Normalized Individuals Charts, Whisker charts, X-Y plots and Scatter plots of the data. R&R percentage can be based on process variation, Study variation or specific characteristic tolerance.

The system allows fast and convenient study creation with a format which makes the studies easy to perform. Study results can be reviewed from a historical list.



Report Options include numerous preformatted forms with your company title and graphical logo.

**3 Supplier information for several categories of supplier**

Each gage must be entered as a record in the system. Thereafter, it can be referenced by either the Calibration or Gage R & R studies.

Each gage is defined in the DataLyzer® Gage Management system with a significant amount of descriptive information related to the gage and the gage supplier. For each gage you can define in which location the gage can be found.

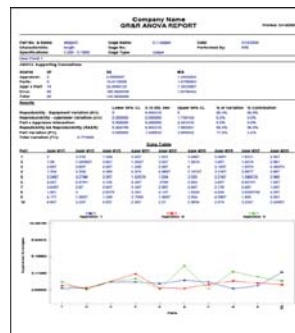
Contact information, product costs, service and supplies availability, etc. can be entered. These records are maintained to allow quick reference for instrument service, supplies or replacement.



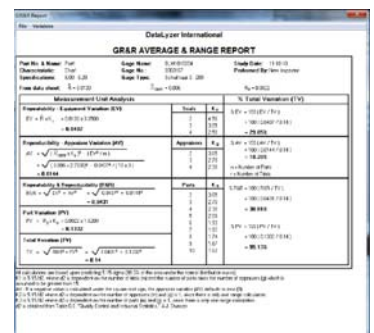
Performance curve



Error chart



ANOVA report with supplements



GRR Variable - Long

**COMPANY HISTORY**

DataLyzer International, Inc. was organized in the late 1970's to develop quality software for industry. Since that time we have established a solid reputation for innovation and customer responsiveness. DataLyzer International has contributed many firsts to its industry.

DataLyzer International was one of the first companies to provide a commercial SPC software package for industry in the early 1980's. Soon after, we developed the first commercial Gage Repeatability and Reproducibility software package. DataLyzer International was the first to introduce real-time data entry to its SPC packages and the first to introduce enterprise-wide solutions via local area networks as early as 1987. More recently, DataLyzer International was the first to offer multilingual SPC software products on multiple database platforms.

**OUR MISSION**

DataLyzer International, Inc. is in business to develop software for continuous improvement of quality and productivity.

Our progress depends on successfully pursuing the following principles:

- Listen and respond to customers with strong, maintenance-free products and features.
- Offer maximum value in personal service with each customer contact, whether it be sales, support, documentation, consultancy or customer training.
- Be alert for opportunities to improve.
- Support customers for the long run.

## Customer Support

Technical support for the DataLyzer Spectrum system is available by phone, fax, or e-mail.

USA: Monday through Friday, 8:30 to 5:30 ET

Europe: Monday through Friday, 8:30 to 6:30 GMT -1

Other continents: Contact local reseller

Software purchases include no-charge updates for six months.

Support agreements are renewable annually for a modest fee. Services include new versions upon request and personal telephone, fax or e-mail support.

Training seminars are available in our offices or on site. We can also combine the gage management training with a MSA training and support with the implementation of calibration and MSA. Contact your salesperson for more information.

Custom software modifications can be quoted individually.

All registered users may access the DataLyzer International knowledgebase website. It contains hundreds of application notes about product support, industry specific applications, and suggestions for optimizing system performance.

## Database Compatibility

DataLyzer Spectrum software versions are available for use with Microsoft Access databases, Microsoft SQL Server databases and Oracle databases (prices vary).

## Operating System Compatibility

DataLyzer Spectrum modules work with the following Microsoft Windows operating systems: Windows 98, Windows 2000, Windows Me, Windows XP, Windows NT, Windows Vista and Windows 7. DataLyzer Spectrum is network-compatible with Windows NT and Novell® NetWare®. Citrix® and Microsoft Terminal Services thin client/server configurations can also be used.

## Associated Modules

- DataLyzer Spectrum SPC module
- DataLyzer SPC Wizard (data analysis and training module)

## Download demonstration versions at [www.DataLyzer.com](http://www.DataLyzer.com)

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### International Distributors

DataLyzer International has a very capable international distributor network. Most distributors have a long term relationship with our company and years of experience with the implementation of SPC and DataLyzer software. For your local distributor look at [www.spc-itk.com/reseller](http://www.spc-itk.com/reseller).

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