

**SYNERGY™**

**2000**

The Power of SPC



**ZONTEC**

Enterprise-Wide Statistical Process Control Software

# Synergy 2000 – Designed to Differentiate You from Competitors

From implementation in minutes, to right click chart navigation, to instant company-wide notifications, customers use one word to describe the Synergy 2000 product – logical. Designed for optimal user efficiency, Synergy 2000 means your employees execute at peak performance while achieving quality goals.

Synergy 2000 is a real-time enterprise-wide Statistical Process Control (SPC) system that combines data collection, charting, monitoring, analysis, communication and flexible reporting – all from a single screen. At a glance, a user can check on the exact status of any process...at any workstation...in any department...at any plant...across the globe. Synergy 2000 enables you to grow your business. "Using the data from Synergy 2000, we can estimate if we can maintain quality requirements for new products," remarked Ted Black of A.P. Plasman.

## Rapid Setup and Faster ROI

Synergy 2000 is known for its rapid implementation that leads to faster ROI. The system has design templates so that you can easily replicate data tables for faster setup. This means users are inputting data quickly while you are collecting data faster without IT department involvement. "Once we implemented Synergy, we immediately saw results. For us, a process that used to take a day was reduced to an hour and a half. Synergy easily paid for itself in a couple of weeks," said Bob Hayes of Foam Design.

Synergy 2000 is built for four types of users: administrators, engineers, managers and operators. Administrators define the level of access the user has as an engineer, manager and operator (if necessary for additional security). Engineers configure the system and perform SPC analyses. Managers oversee

### Synergy 2000 System Architecture

Network Server



Administrator Level

Security & Safeguarding



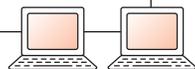
Manager Level

Enterprise Monitoring & Reporting



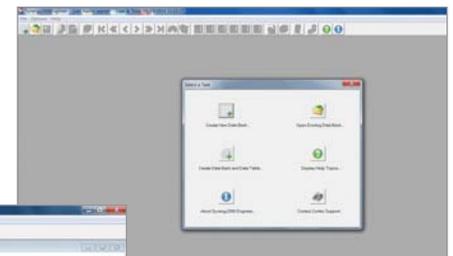
Engineer Level

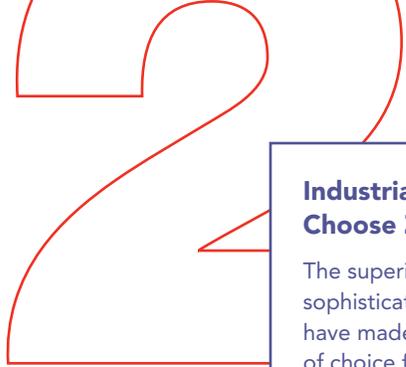
Configuration & Analysis



Operator Level

Data Input





all of the processes from anywhere. Operators input data and take corrective action in real-time.

Also, engineers can design screens so that operators can automatically view diagrams, work instructions or hyperlink files. With the click of a button, Synergy 2000 enables you to display up to three sets of control limits on a chart. Such easy navigation facilitates efficiency, prevents errors and increases customer satisfaction. "Synergy's data entry also utilizes alert detection to operators. If an operator enters an out-of-specification, dimension or typo, the program will recognize this and a pop-up will warn operators of the mistake or out-of-specification entry," remarked Brian Kropp of Fastco Industries Inc.

## Flexible Data Entry and Automated Data Collection

Understanding that each production environment is unique, Synergy 2000 gives you over eight different data entry methods. Faster data collection

means you can quickly begin utilizing your SPC data. Synergy 2000 also enables you to automate data collection with direct input devices such as gage interfaces and a direct connect through Microsoft ODBC. It also excels by integrating some of the most challenging data acquisition configurations like CMMs, PLCs, SCADA, LIMs, CNC, CRM or Supply Chain applications.

The optional Synergy 2000 Multi-function Toolbox is designed as plug-and-play interfaces that let you connect to multi-vendor hardware, process control devices, manufacturing systems and databases. With all of these tools available, Synergy 2000 will seamlessly assimilate into your production environment.

*"Once we implemented Synergy, we immediately saw results. For us, a process that used to take a day was reduced to an hour and a half. Synergy easily paid for itself in a couple of weeks," said Bob Hayes of Foam Design.*

## Industrial Leaders Choose Zontec

The superior scope and technical sophistication of Zontec products have made us the SPC vendor of choice for more than 5,000 companies around the world in virtually every industrial category. We define our success by our customers' high quality products and services.

3M  
Abbott  
American Packaging Corporation  
Amphenol Backplane Systems  
A.P. Plasman  
Armored AutoGroup  
Bard  
Batesville  
Bay Valley Foods  
Berry Plastics  
Burt's Bees  
Carlisle & Finch Co.  
Clorox  
DRT Medical, LLC  
Fastco Industries Inc.  
Freudenberg Group  
GE Lighting  
General Dynamics OTS  
Glad  
Halla Visteon Climate Control  
Hidden Valley  
Jack Daniels  
J.L. Clark  
J.M. Huber Corporation  
KARL STORZ Imaging Inc.  
Kwikset  
Lockheed Martin  
Lovejoy  
MASS Precision, Inc.  
MKS Instruments  
Multicircuits, Inc.  
NACCO Materials Handling Group  
NSK  
Palmetto Brick Company  
Peet's Coffee & Tea  
Phillips 66  
Pilot Chemical  
Prince Manufacturing Corporation  
Schnipke Engraving Company  
Schoeneck Containers, Inc.  
SPIROL International Corporation  
ST Specialty Foods, Inc.  
The Vollrath Company LLC  
United Gear & Assembly Inc.  
Veridiam, Inc.

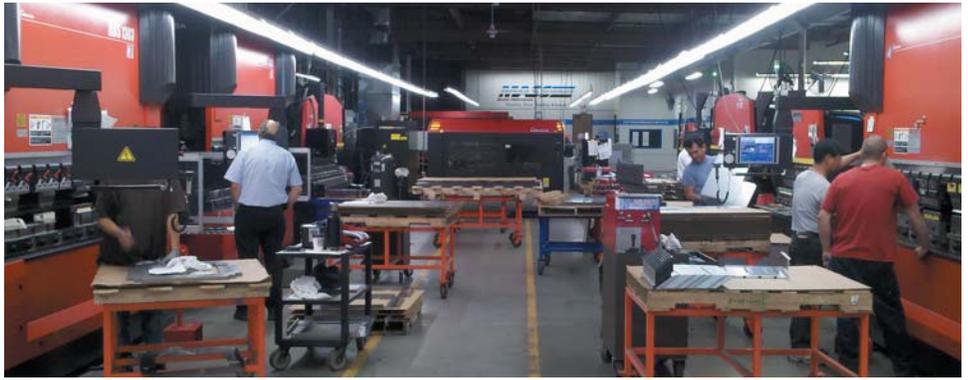
## Easy Navigation – A Click Away

Facilitating instant communication, Synergy 2000 is designed so that with one click of a mouse, you can access a wealth of live SPC data. With a right click, you can access any chart. From the chart or the report you have open, just right click to instantly email the chart or the report to the appropriate person. This provides for immediate communication and a reduction in errors. "Synergy 2000 software gives us the definitive objective measurements in real-time, to improve quality from our suppliers. Being able to reliably collect data facilitates communication between MASS and its supplier base," said Dan Heimann of MASS Precision, Inc.

## Versatile Interactive Charts

For every chart, Synergy 2000 provides color-coded data points so that you can immediately see whether or not your process is out-of-control or out-of-specification. You can also simply click on a data point to get more information.

Standard with Synergy 2000 is a wide variety of charts for each level of user, all available at the click of a mouse. It also provides normal or non-normal data analysis. "I love run charts. It's easy to convert to Cpk's when a customer requests it. It just takes a couple of clicks and you get what



you need. The run charts also detect a trend fast enough to react to it. It is now tracked much easier and the results are more easily controlled," said Wayne Maurer of MET Plastics.

You also have instant access to Comparisons Charts, Overlay Multiple Control Charts or Run Charts, Tool-wear Charts, as well as Multi-axis Overlay Charts to compare three characteristics at once. Because all of these charts are in real-time, you can simultaneously view multiple aspects of your business to keep a pulse on the production process.

## Sophisticated Analytics and Real-Time Math Calculations

When it comes to sophisticated SPC calculations, Zontec wrote the book and built it in Synergy 2000. With Synergy, you can generate charts from estimated or calculated sigma for control limits and process capability calculations. It allows you to experiment with different sample sizes on your data. Establishing custom "specification trend" settings are also available. You can create instant Pareto Charts based on assignable causes and corrective

*"Synergy 2000 software gives us the definitive objective measurements in real-time, to improve quality from our suppliers. Being able to reliably collect data facilitates communication between MASS and its supplier base," said Dan Heimann of MASS Precision, Inc.*

### Synergy 2000 Version 12.0 System Requirements

Computer processor 1GHz or faster

1.0 GB RAM

3.0 GB available disk space

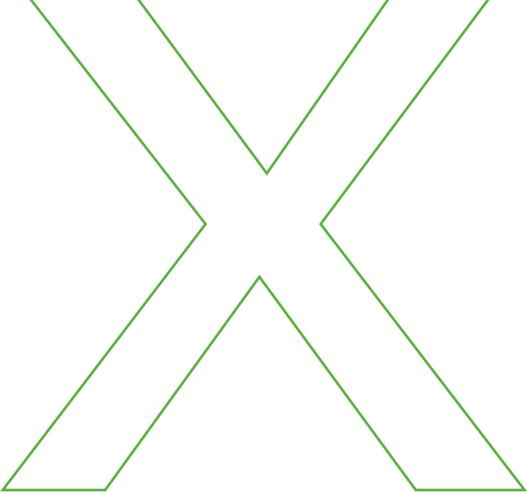
1024 x 768 or higher resolution monitor

Client – Microsoft Windows® XP, Windows 7, 8 or later

Server – Windows Server 2003, 2008, 2012 or later

Windows compatible printer

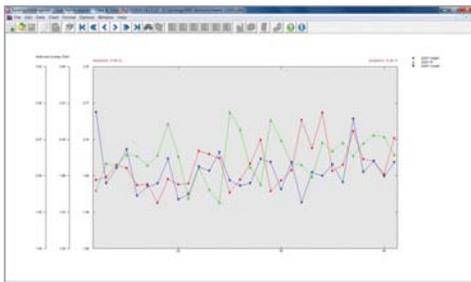
Optional – Microsoft .NET 4.0 for Scoreboard and Cost Analysis Report, gage(s) and/or multiplexers



actions. Incoming data can be run through user-defined formulas, control and specification conditions at the same time. Synergy 2000 provides more than 70 predefined math formulas that can be used to create new formulas. It also integrates with multiple packages such as Statgraphics® and Minitab®.

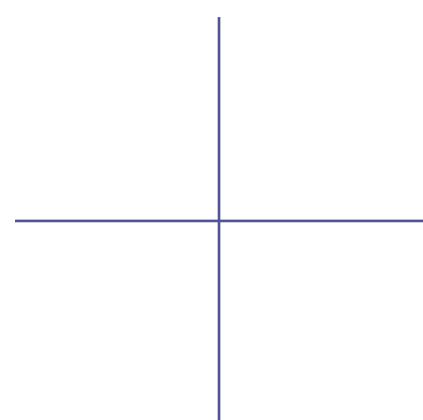
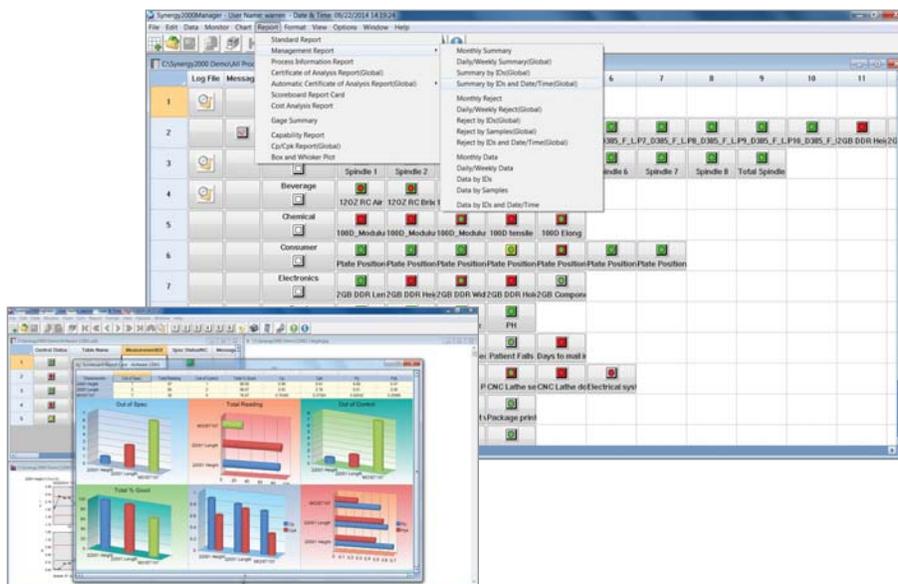
## Instant Extensive Reporting

Whether you're an executive looking at processes across the enterprise or an operator checking on your latest sample, Synergy 2000 houses a plethora of reports for every level of user. Reports are fully customizable, printable, updated automatically and can be scheduled to run regularly. Synergy also provides management reports that can be run by summary, by reject or by data; all on a monthly, daily/weekly, sample or ID basis. Synergy's reporting system enables you to create a new report from any data table with up to eight charts on a page to view instantly.



You can send it to your customer for approval and schedule it to run regularly. Synergy 2000 also provides specialty reports such as an Automatic Certificate of Analysis Report and Cost of Analysis Report, which provides you valuable information about a particular process and gives you costs associated with running a particular process. You can simply preview, print, que or email these reports instantly.

*"I love run charts. It's easy to convert to Cpks when a customer requests it. It just takes a couple of clicks and you get what you need. The run charts also detect a trend fast enough to react to it. It is now tracked much easier and the results are more easily controlled," said Wayne Maurer of MET Plastics.*



*"With Synergy, we can show customers the exact machine used to produce the new product, its tolerances and capability history. This type of information shows them what they need to see before moving forward. Synergy provides us that edge to win the business," said Douglas Winfrey of United Gear & Assembly.*

## Enterprise-Wide Monitoring

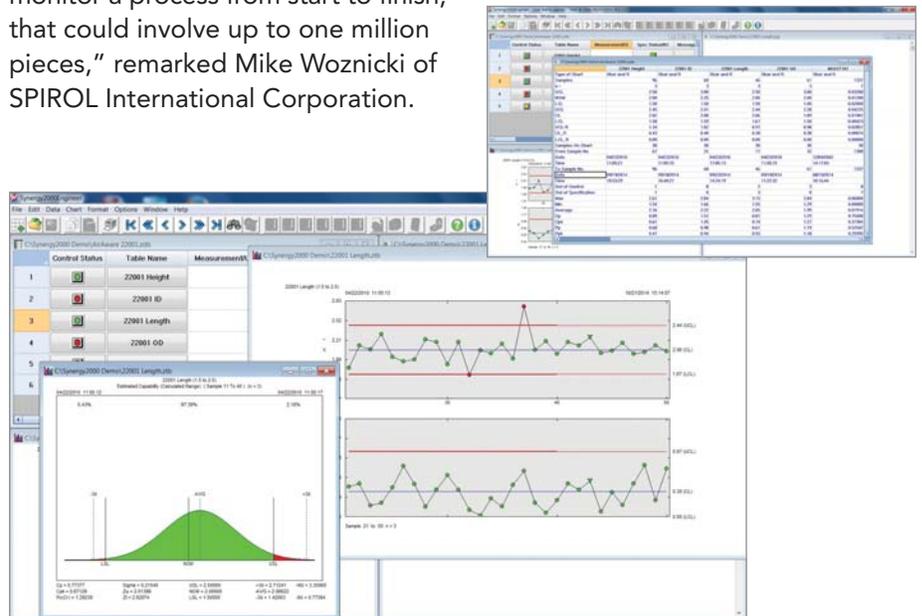
Regardless of the location, Synergy 2000 managers can utilize an enterprise-wide monitoring dash-board and a wide variety of management reports to monitor real-time multiple processes. Synergy 2000 can be implemented so that if an out-of-control or out-of-specification occurs, the appropriate personnel are instantly notified via email. Managers can also email screen shots, charts or reports to individuals inside or outside the company to provide clarification of an error or a trending issue that needs correction. "We have over 110 pieces of equipment with over 22,000 items we monitor. We needed something that could capture this data instantly, enable our operators to monitor their processes up to six machines and, if appropriate, take corrective action. We needed data immediately available that would monitor a process from start to finish, that could involve up to one million pieces," remarked Mike Woznicki of SPIROL International Corporation.

## Enhanced Regulatory Standards

To meet industry standards, you can verify the consistency of your measurement process or conduct three-trial repeatability analysis using the powerful Gage R & R functions in Synergy 2000 that are based on AIAG Measurement Systems Analysis guidelines. Also, ISO, QS-9000 and TS 16949-compliant document control is never easier. Synergy offers up to 12 ID fields for unique identifiers and two Notes fields for tracking assignable causes and corrective action.

## Safety Standards and Optional Security

Synergy 2000 is designed for companies that need to implement stringent access and security controls on their quality data. Optionally, Synergy can contain a closed security





layer whereby an administrator can assign passwords, user privileges and data access. It's unique electronic records/electronic signatures implementation includes date/time-stamped audit trails, logging and tracking of changes to original data, password "aging" provisions and an electronic signature pad to digitally capture and display handwritten signatures alongside the SPC data. Now individual signatures can confirm accountability for every quality control sample entered. Synergy 2000 is designed to satisfy the needs of industries regulated by the U.S. Food and Drug Administration who need to be in full compliance with Title 21 Code of Federal Regulations (CFR) Part 11.

## Investment Retention Program

To control the on-going product development process, Synergy software is created, tested, documented and supported entirely within the company. If a service agreement customer decides to upgrade to the next level of Synergy product suite, they can do so at minimal cost while retaining access to all of their previous data through our 100% Investment Retention program. "We selected Synergy because of its usability, because it was cost-effective and

because of Zontec's 100% Investment Retention program. If we decide to upgrade, all of our data banks and data tables will roll right into the next generation product," remarked Brian Brooks of Domestic Fastener & Forge Inc.

## About Zontec

Since 1983, Zontec has been providing statistical process control (SPC) software to industry-leading companies globally. Zontec is highly respected for its innovation and for integrating new technologies to help businesses address quality issues, achieve continuous improvement and maximize profitability. Only Zontec offers a full suite of products for all size companies. Zontec software has been adopted worldwide by more than 5,000 companies, spanning virtually every industrial category.

# ZONTEC

**1389 Kemper Meadow Drive  
Cincinnati, OH 45240**

**(513) 648-9695**

**(513) 648-0805 FAX**

**(866) 955-0088 Toll-free**

**[www.zontec-spc.com](http://www.zontec-spc.com)**

## Why Synergy 2000

Synergy 2000 is logically designed with the user in mind. It enables you to fine-tune your business by empowering users to recognize and prevent errors at their step in the process. Therefore, you can rapidly implement a solution, saving time and money. Key personnel can supervise the production process from anywhere through company-wide monitoring. Passed through SPC calculations, the data provides live charting and reporting. Synergy provides the tools to integrate with any system in your enterprise. It has enhanced security measures available for industries requiring secure controls over quality data. While making the production process as efficient as possible, you are also gathering valuable production information for future decisions about tool lifecycle management and new product development. "With Synergy, we can show customers the exact machine used to produce the new product, its tolerances and capability history. This type of information shows them what they need to see before moving forward. Synergy provides us that edge to win the business," said Douglas Winfrey of United Gear & Assembly. Synergy 2000 helps orchestrate your business now and for the future.

# Synergy 2000 Version 11.0

## Features and Functions

### General Features

- Accepts foreign language characters
- Added security system with access set by administrator according to user level
- All IDs defined before opening Data Bank
- Create part/process and variable characteristics
- Customizable screen displays
- Define keywords for foreign language or industry specific terms
- Enhanced graphics within the program
- FDA validation requirements to document when log file entries, data display, and user name or electronic signatures are needed
- 'Hyperlink' often-referenced documents, images, videos, websites or other software applications for one-click access
- Instant access to documents, drawings, text and video content
- Microsoft .NET compatible
- Modified Auto Note with automatic event triggers to document assignable causes, corrective actions
- Real-time production-based performance
- Real-time visual status flags for control, specification conditions
- Simultaneous viewing of multiple charts, tables, worksheets
- Verification option that ensures all IDs have been defined before opening a Data Bank

### Data Acquisition and Management

- Auto ID prompts user for entry
- Automatic date/time stamping
- COM Port interface for testing incoming data
- Coded notes
- Copy/paste function
- Closed-loop control with feedback for corrective action
- Customizable ID column labels
- Data automatically saved to guard against accidental loss
- Data Banks capable of combining variable and attribute data
- Data Boundaries (gates)
- Data entry and charting available without switching to separate program modes
- Data entry via keyboard, asynchronous RS-232 devices, USB Interface or other software applications
- Data markers for referencing notes/assignable causes/corrective actions
- Direct import of TXT and CSV files
- Display auto queried (ID1) data on the Run Chart during data entry
- Easy Data Entry feature
- Enterprise view of all processes
- Merge and Trim files
- Multiple gage input
- On screen numeric keypad option for data input
- Operator reminder to collect data
- Out-of-control and out-of-specification warnings
- Over eight data input options
- Rapid file modification
- Real-time interface with OSI Soft's PI Process Book RDBMS

- Sample size  $n = 1$  up to 25
- Serial interface with two-way I/O using device command strings
- Simultaneous multi-user access
- Trend Test violation warnings
- Up to 12 ID fields for traceability
- Up to 2 Notes columns for logging assignable cause, corrective actions
- Unlimited tables
- Variable data input
- Withhold samples from calculation of control limits

### Charting

- Attribute Charts (c, p, np, u, DPMO)
- Box and Whisker Chart generated for each observation within a Data Table
- Charts savable in graphics format
- Chart scrolling by user defined increments
- Charts update instantly
- Charts update instantly in unlimited combination
- Charting on ranges of data or entire data sets
- Clickable data points on Control, Run Charts
- Control Chart snapshot view from user-defined selection
- Gage R & R Charts (Repeatability range, Part by operator, Part by operator average)
- High/Low Run Chart
- Moving Average and Moving Range Chart
- Multi-Axis Overlay Chart to compare up to three characteristics on one Control Chart
- Nominals Chart for short-run data
- Overlay Control and Run Charts
- Pareto, Composite Pareto, Notes Pareto Charts
- Separate data point sizing controls
- Six Sigma Capability for  $C_p$ ,  $C_{pk}$ ,  $P_p$ ,  $P_{pk}$  with distribution curve
- Stylized, color-coded data points for marked, held and annotated data
- Variable charts (Xbar & R, Rainbow, Xbar & S, Median & R, X & Moving R, EWMA, Poisson EWMA)
- Vertical and Horizontal Histograms with curves
- Y-axis scaling option for Control, Run Charts

### Calculation and Analysis

- Access to third-party software applications
- Capability studies providing calculated capability ( $n$  or  $n-1$ ), estimated capability with or without calculated range
- Change date, time
- Change sample size
- Control limit calculation on multiple tables
- Decimal place definition
- Direct interface to Statgraphics® and Minitab®
- Eight types of trend tests
- Estimated or calculated sigma for control limit and process capability calculation
- Gage R & R in accordance with AIAG MSA standards
- Gage R & R scheduler
- Historical analysis or charting on entire data
- Johnson and Lognormal distribution analysis
- Math Tables for calculations also include Prompt Spec Warnings and your custom labels
- Modifiable specification trend settings
- More than 70 predefined math functions
- Non-normal data analysis

- OEE and KPI Dashboards
- Pareto analysis with up to 100 categories
- Query results charting
- Query by ID, notes fields, date and time
- Real-time Notes Pareto
- Save queried results
- Short run
- Single mode math function
- Unilateral and bilateral specifications charted

### Enterprise-wide Monitoring and Communications

- Active/inactive process status
- Adjustable system timer for updating latest process conditions
- Automatic Data Log posting for every out-of-control condition
- Automatic emails for out-of-control, out-of-specification, control trends and/or  $C_{pk}$  levels
- Automatic network update cycling among tables
- Cpk Alarm Dashboard
- Data Change Log with note of original data
- Email for out-of-control and out-of-specification conditions by table
- ID values included in automatic email notifications sent for out-of-control or out-of-specification
- Immediately modify specification limits for multiple tables
- Integrated messaging system for communicating online to all users
- Message log
- Monitoring by elapsed timeframe
- Monitoring of data collection, charts and process status from anywhere
- One view of notes, control and specification limits
- Spec status dashboard for last measurement

### Reporting

- Automatic Certificate of Analysis Report
- Comprehensive traceability/audit trails for ISO, QS-9000 and TS 16949
- Cost Analysis Report using Six Sigma methodology to project total costs in PPM
- Custom configurable report layouts with 1-8 charts/spreadsheets per page
- Email all reports and charts
- Gage R & R Report and Summary
- Print utility for charts, spreadsheets, worksheets, reports and individual windows
- Process Information Report
- Reports (Monthly Summary, Global Daily/Weekly Summary, Global Summary by ID, Global Summary by IDs and Date/time, Monthly Reject, Global Daily/Weekly Reject, Global Reject by ID, Global Reject by Samples, Global Reject by IDs and Date/time, Monthly Data, Daily/Weekly Data, Data by IDs, Data by Samples, Data by IDS and Time/Date, Capability Report, Global  $C_p/C_{pk}$ , Box and Whisker Plot)
- Report save options for Excel, HTML or TXT
- Reports by multiple characteristics
- Reports previewed and updated automatically
- Scoreboard Report Card to compare performance of multiple tables
- Universal crossing feature for time periods before and after midnight