Invensys
is now

Schneider
Electric

Summary

Wonderware QI Analyst software provides a complete SPC software system, combining ease of use, powerful statistical techniques, real-time communications to shop floor systems and data source openness that empowers every member of your team – from operators to quality professionals to decision makers.
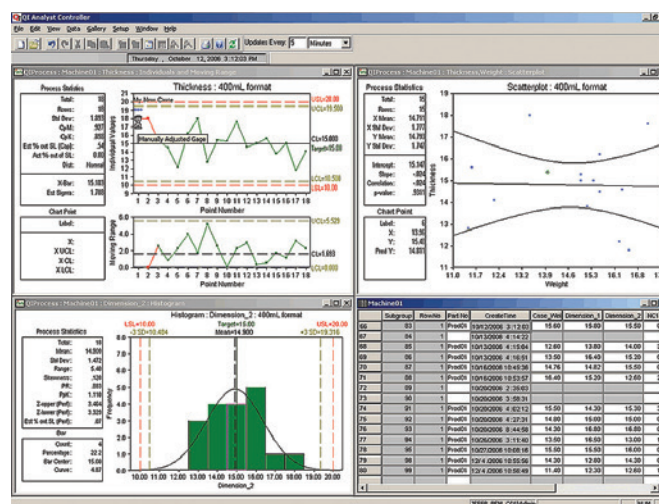
Business Value

QI Analyst software can help you "predict" problems, before they cost you time and money! The results – improved product quality, increased productivity and reduced costs – can be dramatic. And they all can lead to higher profits!

Wonderware QI Analyst

IMPROVE PRODUCT QUALITY AND ACCELERATE MARGINS

Manufacturing high-quality products at a competitive price requires a team effort. Wonderware® QI Analyst™ software provides a versatile tool for collaborative decision making. QI Analyst software connects your entire quality team with near real-time Statistical Process Control (SPC) information, enabling everyone to proactively reduce excessive process variations – instead of reacting to them after a problem occurs. In fact, with real-time SPC data, QI Analyst software can help you "predict" problems, before they cost you time and money!

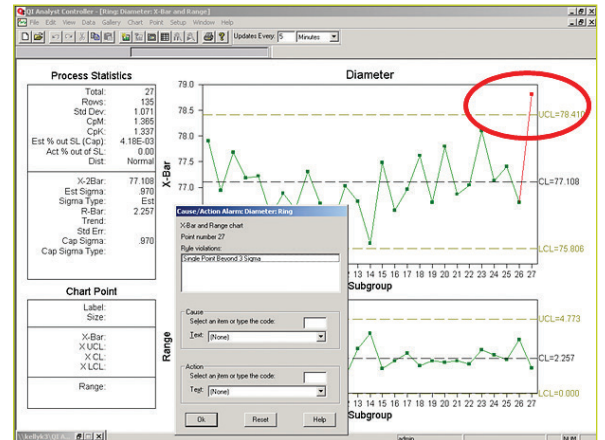## MANAGE PRODUCT QUALITY TO INCREASE PLANT PERFORMANCE

Wonderware QI Analyst software gives manufacturers the ability to monitor process variation in real time – an important indicator of product quality. Using powerful SPC analysis techniques, operators and plant decision-makers can make immediate online adjustments to proactively ensure production quality and consistency.

The software gives your production team the quality information and notifications it needs to adjust process parameters on the fly – lowering costs and improving product quality. Contrast with traditional off-line SPC systems – they use historical process data and don't allow real-time corrections of process excursions.

In addition, QI Analyst software can leverage historical data from most data sources within the plant, empowering manufacturers to transform common process data into actionable process information. The software can quickly analyze data, plot variations and provide information about the performance of your critical plant processes.

Wonderware®

GET YOUR FIRST LINE OF DEFENSE INTO THE GAME

Operators are a plant's first line of defense when if comes to product quality. However, operators demand software solutions that do not adversely affect their activities. QI Analyst software can be easily configured to provide the real-time SPC information operators need to visualize and "steer" real-time product quality. SPC information can be tailored to each user's individualized needs, so there is less to learn and less resistance when implementing a real-time SPC system. The bottom line is that QI Analyst software can give operators the quality information they need in real time, to positively affect product quality and plant profitability.

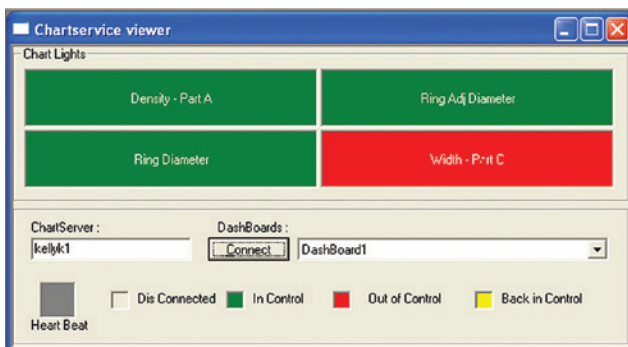## MAKE CONSISTENT, REAL-TIME DECISIONS ORGANIZATION WIDE

Wonderware QI Analyst software offers a rich selection of communication options, giving each member of your team immediate access to the same information – for consistent decision-making throughout the organization. Customizable alarms can immediately alert key plant personnel regarding important quality issues (e.g., by sending dynamic messages to a pager).

VIEW SPC CHARTS FROM ANYWHERE IN THE PLANT

QI Analyst's ChartService, a Microsoft® Windows® service, automatically monitors your process data and reports on alarm status via a new alarm dashboard. This control can be embedded in an HMI, like Wonderware InTouch® HMI or a customized industrial application to automatically communicate SPC alarm status. It can accommodate a large number of critical process parameters and send information to a wide range of plant personnel.

Operators and plant decision-makers can keep tabs on key process parameters, enabling them to proactively manage product quality and plant performance. The alarm dashboard control can be configured to meet each user's unique information needs.

YOU DON'T HAVE TO BE A STATISTICS EXPERT TO USE QI ANALYST

Wonderware QI Analyst software was created with ease of use as a primary goal, resulting in a product that is intuitive and is very easy to configure and use. Based on the Microsoft Windows operating system,

QI Analyst software usually offers more than one way to accomplish the same task – minimizing training time.

Users across the globe rave about the QI Analyst software's ease of configuration and use. You don't need to be an expert in statistics to use the product. Set up functional charts in minutes. The new Products/Parts feature empowers you to configure charts for hundreds of your products quickly and efficiently. Help is always just a click away, with an online tutorial and glossary to accelerate results.

A COMPREHENSIVE SELECTION OF SPC CHARTS AND POWERFUL STATISTICAL TOOLS

QI Analyst software automatically tests real-time process data against statistical rules to detect trends, runs, patterns and outliers. When a rule violation occurs, QI Analyst software immediately charts the point in red. In addition, customizable alarms alert you whenever key data goes out of specification; so you can start solving quality problems immediately. For example, if a rule violation occurs, the software can call your pager or send you an email. QI Analyst software is also integrated with Wonderware InTouch HMI and the Industrial Application Server's alarm management features. So, if an SPC rule is violated, QI Analyst software can serve alarm information to these important plant information systems.

You're never more than a glance or an alarm away from critical information. A large library of statistics can be displayed for the overall process, or for any individual process parameter – aiding in continuous improvement efforts. Limit sets allow for the easy comparison of two sets of data, accelerating process analysis efforts. Lastly, save charts and workspaces as HTML files for easy posting within web-based applications.

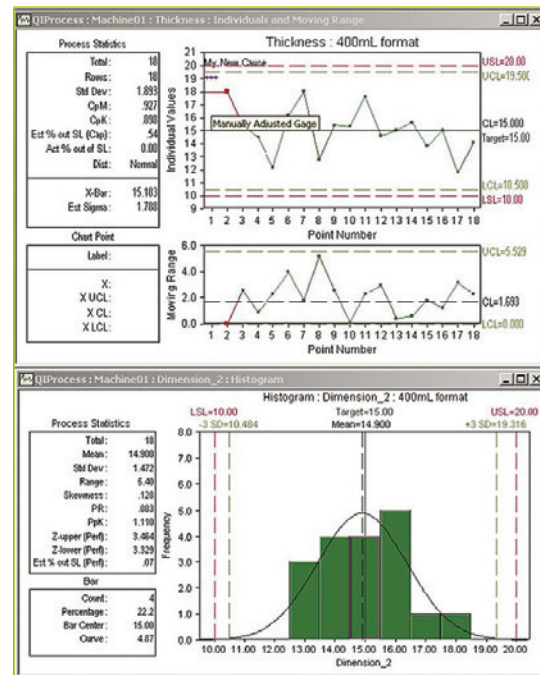All standard SPC charts are included in QI Analyst software:

- Variable Charts
- X-bar and Range or Sigma
- X-individual and Moving Range
- Moving Average and Range or Sigma
- Cumulative Summation of Means or Individuals
- EWMA of Means or Individuals

Attribute Charts:
- p
- np
- c
- u
- Defects Per Million Opportunities (DPMO)

Special Charts and Analysis Tools:
- Run
- Histogram (view the data distribution)
- Scatter plot (view the correlation between characteristics)
- Paretos of Nonconformities, Causes, Actions or Rule Violations

TAILOR STATISTICAL RULE SETS TO FIT YOUR UNIQUE APPLICATION

A number of industry-specific rule sets are delivered with QI Analyst software, including Western Electric, AIAG, Juran, Hughes, and Gitlow & Duncan. These rule sets automatically detect process excursions for a host of different industries. QI Analyst software also facilitates the modification of supplied rule sets –or you can design your own rule sets to achieve the most precise statistical analysis of your unique processes.

PUT YOUR PRODUCT QUALITY AND PROCESS CAPABILITIES IN CONTEXT

The tighter integration of QI Analyst software with Wonderware InTouch HMI, Wonderware Historian and the state-of-the-art Wonderware System Platform enhances your system visualization capabilities. QI Analyst software can also relate production and process-quality information to traceability, equipment performance and overall manufacturing success. This integration of production information enables improved documentation and improved production processes. So, in essence, QI Analyst software facilitates improvements in operational excellence and brand integrity, and fosters an integrated approach to production and performance management.

ACHIEVE ENTERPRISE-LEVEL SCALABILITY WITH ONE CONSISTENT SPC SOLUTION

QI Analyst's architecture can integrate with your current IT set up, enabling enterprise-level scalability. As a result, all of your plants can use the same SPC solution, minimizing long-term ownership costs. The distributed architecture of QI Analyst can place real-time information at the fingertips of every person in your organization — without disrupting your current IT infrastructure.

POWER USERS AND SYSTEM OPERATORS CAN ACCESS SPC INFORMATION

The QI Analyst Controller assists power users to create a broad range of SPC charts, and to perform many types of statistical analysis. The Controller also enables setup and maintenance capabilities. The QI Analyst Workstation helps less technical users like system operators get access to real-time SPC charts and alarms, enabling them to act on process issues before they get out of control.

CONNECT TO LEGACY DATA SOURCES

Virtually any open process database that's accessible on your plant or enterprise network can be used as a data source by QI Analyst software. As a result, the majority of your plant's legacy plant sources can be tapped for valuable SPC monitoring and analysis. Plant performance monitoring efforts can therefore be increased – driving greater awareness of real-time product quality and plant performance.

USE QI ANALYST SOFTWARE THROUGHOUT MULTINATIONAL MANUFACTURING ENTERPRISES

QI Analyst software has been localized in many major languages so that applications can be used throughout modern multi-national manufacturing enterprises.

INTEGRATE QI ANALYST SOFTWARE WITH YOUR IT SYSTEM

You can integrate the software with your IT system using centralized setup and security features, with the extra benefit of flexibility for system customization.

Wonderware QI Analyst software is designed for organizations with large and varied data sets, a complex IT structure, and a need for flexible system management.

FDA 21 CFR PART 11 READY

Product quality is a key manufacturing concern in today's regulated industries, such as the pharmaceutical and food and beverage industries. Regulated industries have special recordkeeping requirements that must be built into a SPC tool to allow for validating SPC applications. QI Analyst software provides audit trails for changes in parameters, alarms and data, and supports Windows Integrated Security, making QI Analyst software a good fit for your plant's existing user security model.

That's why Wonderware QI Analyst software is FDA 21 CFR Part 11 ready. It simplifies and lowers the costs of creating SPC systems in regulated industries such as Pharmaceutical, Food and Beverage, Power-Generation and others.

A VARIETY OF PLANT PERSONNEL CAN BENEFIT FROM QI ANALYST SOFTWARE

QI Analyst software is designed to enhance today's most powerful enterprise-wide manufacturing systems, benefitting a wide range of functional groups.

QUALITY MANAGERS

Using the QI Analyst Controller, Quality Managers can set up data tables (logical groupings of variables and/or attributes to be collected and analyzed), charts, statistical rules, and alarms to maintain real-time control of online manufacturing processes. They can also analyze "old" process data off-line, manipulating limits and probing the data for useful process improvement information.

PLANT FLOOR OPERATORS

Using the QI Analyst Workstation, plant floor operators can watch the various process charts, enter data — manually if not already automatically collected via direct communication links — and receive alarm notification if any of the charts they are monitoring violate statistical rules. User workspaces can be set up for each operator so that, upon login, the software automatically pulls up that operator's charts, re-establishes data links, and begins charting and alarming. Alarm dashboards linked to the new Alarm Status Service can be configured to enable quick verifications of SPC alarm status via red-light/green-light displays.
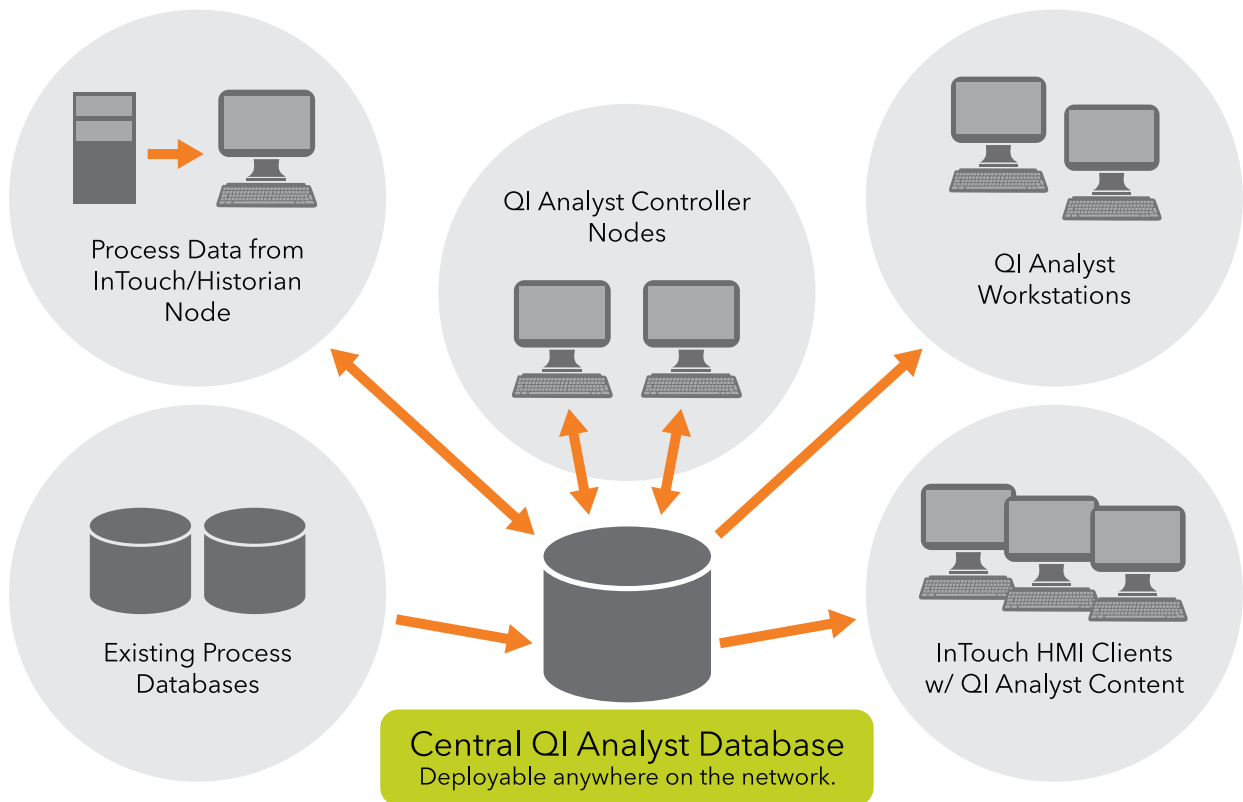
QUALITY PERSONNEL

The QI Analyst Workstation enables quality personnel to take measurements, enter data automatically through their gages, or enter data manually to verify that the variables or attributes entered yield a process that is stable and in control. Custom SPC reports using Microsoft Excel spreadsheet software or Word can be created and distributed to plant personnel.

IT MANAGERS

Using QI Analyst Controller, IT managers can use QI Analyst software to manage all user accounts. The manager can set rights, define log-on profiles, and maintain the QI Analyst network through a few intuitive, easy-to-use dialog boxes. The flexible security model is also easy-to-use. Plus , because all the administrative data is maintained in one database, one person should be able to easily manage the QI Analyst network, regardless of how large it gets.

CORPORATE PERSONNEL

Corporate personnel can use QI Analyst charts, alarms and tables to analyze real-time SPC information when making decisions about valuable plant assets and how to increase profitably.

Process Data from InTouch/Historian Node

QI Analyst Controller Nodes

QI Analyst Workstations

Existing Process Databases

InTouch HMI Clients w/ QI Analyst Content

Central QI Analyst Database
Deployable anywhere on the network.

QI ANALYST PRODUCT HIGHLIGHTS

• Complete range of real-time and historical SPC charts and alarms

• Broad connectivity to plant data sources

• Integration to ArchestrA Industrial Application Server data sources

• Enhanced access to data in the InTouch HMI and Wonderware Historian

• Rapid system and chart configuration

• User-configurable SPC rules

• Versatile ActiveX SPC chart control for integration into the InTouch HMI, Internet Explorer browser and other applications

• Powerful background monitoring of process data and alarms

• ActiveX alarm status and dashboard control

• Rapid set up support for large numbers of products and parts

• Multi-lingual support

• FDA 21 CFR Part 11 ready

• Powerful system administration functionality

QI ANALYST CONSISTS OF:

• **QI Analyst Controller** – A full-featured desktop application enables all basic SPC activities (data entry, charting, statistical calculations, rule evaluations and alarming), as well as complete set up, configuration and administration capabilities. The Controllers are recommended for Power Users, Quality Engineers and Administrators. The Controller can run on a specific device (PC) on a concurrent basis or on a Terminal Services Server.

• **QI Analyst Workstation** – Typically used on the plant floor, the Workstation enables basic SPC activities like data entry, charting, statistical calculations, rule evaluations and alarming. The Workstation can run on a specific device (PC), on a concurrent basis or on a Terminal Services Server.

TECHNICAL SPECIFICATIONS

Operating Systems

QI Analyst software supports the following operating systems: Microsoft® Windows® 2012 Server, Microsoft® Windows® 8, Microsoft® Windows® 2008 Server with Service Pack 2; Microsoft Windows 2008 R2 with Service Pack 1 (x86 & 64 bit); Microsoft Windows 7 with Service Pack 1 (x86 & 64 bit); Microsoft Windows XP Professional with Service Pack 3; Microsoft Windows Server 2003 with Service Pack 2.

Database Technology

The following RDBM systems are supported for QI Analyst Admin and Process Databases: Database Requirements (for QI Analyst Admin and Process Databases): Microsoft Access (for single node systems), Microsoft SQL Server 2008 SP3, 2008 R2 SP2, and 2012 SP1 (Express, Standard, Enterprise editions for 32-bit and 64-bit versions where applicable); Oracle 10g, and 11g R2.

For more information on Wonderware QI Analyst software, please contact your local Wonderware salesperson, or visit http://global.wonderware.com/EN/Pages/WonderwareQIAnalystSoftware.aspx.

Rev. 05/15   PN WW-4096