

NWA Manufacturing Analytics

Advanced data analysis and visualization

You collect data from throughout your manufacturing process. Analyzing that data is the key to making informed decisions that improve processes and reduce costs. Northwest Analytical, the leader in SPC, provides the analysis and visualization software you need to better understand your processes and take effective action.

Quality improvement programs such as lean manufacturing, Six-Sigma, and TQM depend on the accurate collection and analysis of relevant data. When successful, these programs lead to continuous process improvement, confident decision making, quick response to problems, and significant cost reductions. Manufacturing Analytics is essential to this process.

Manufacturing Analytics enables the shift from reactive to predictive process management by detecting potential problems before they affect the process, lower quality, and increase costs. Manufacturers can then reach the ultimate goal of a stable, well understood process. Using Manufacturing Analytics will deliver statistics-based process understanding and make KPIs (Key Performance Indicators) more sensitive to their underlying components and the processes they are measuring allowing managers to react more quickly as conditions and results change.



Manufacturing Analytics is the aggregation, analysis, and role-based visualization and reporting of data representing the manufacturing process. The emergence of technology standards such as OPC, XML, and Web Services combined with the broad adoption of industry-driven standards such as S88 and S95 creates system interoperability and enables Manufacturing Analytics applications to acquire the data they need and deliver the results where they are most effective.

Good Manufacturing Analytics applications connect to disparate sources of data, aggregate and analyze that data, apply statistical and rule-based methods, and deliver role-based output tailored to the needs of each user. By applying well-established statistical techniques used by SPC and Six Sigma programs, Manufacturing Analytics can be implemented at the plant level and used throughout the enterprise.

Proper application of Manufacturing Analytics enables users to separate signals from noise, identify sources of excessive variation, reveal opportunities for improvement, and detect potential problems before they affect process quality or cost. The result is stable, well understood processes, and a shift from reactive to predictive behavior.

Northwest Analytical (NWA) has been delivering advanced SPC solutions for over 20 years. Our SPC Quality Suite is used by over 5000 companies worldwide for plant floor data collection, off-line process data charting and analysis, and web-based reporting. Both end-user organizations and OEM's have used our embedded SPC products to build process data analysis into larger systems for laboratory, plant, or corporate information systems. NWA has both the breadth of manufacturing expertise and the depth of statistics and analytical capability to bring a new generation of Manufacturing Analytics to companies across all industries.

Manufacturing Analytics applications from NWA:

- Are based on proven statistical methods
- Connect to virtually any data source
- Integrate with existing systems
- Deliver clear, easy to interpret results
- Adhere to current and emerging standards for interoperability

When integrated with existing manufacturing systems, NWA software:

- Improves process visualization and understanding
- Detects significant events and problems
- Identifies sources of variation
- Communicates key quality information
- Supports confident decision making

The resulting systems:

- Drive continuous process improvement
- Support development of best practices
- Move from reactive to predictive process management
- Lower costs and increase yield

Contact us for more information about Manufacturing Analytics

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