



Improving Manufacturing Business Operations with Wonderware Production & Performance Management Software Solutions

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Summary

To remain profitable, manufacturers need to continuously improve the efficiency of their plant operations, but true operational excellence cannot be achieved at the plant alone.

Operational excellence requires the alignment of manufacturing operations with the company's overall business objectives.

Wonderware helps manufacturers achieve this alignment by improving two key management processes:

- **Production Management** — The ability to identify and quickly implement operational changes in plant production when required by changes in business objectives and market demand
- **Performance Management** — The ability to monitor and understand how operational processes are impacting the company's business goals and bottom line

While success in both of these areas of management is absolutely necessary for maximum efficiency, many manufacturers don't have the technology and tools they need to succeed in these areas. Wonderware offers industry-leading Production & Performance Management Software Solutions that integrate and accelerate these management processes and close the gap between operational processes and business strategies.

Wonderware provides all the software and partners needed to support the capabilities required for operational excellence. This includes device integration, supervision/control, data collection, tracking, process analysis, KPI, real-time production monitoring/reporting, MES, OEE, SPC, batch management, WIP execution and many other functions — even ERP integration. The software is built on an open information and automation infrastructure called the ArchestrA® architecture. This flexible, scalable technology integrates existing systems to reduce total time to value, total cost of ownership and other operational improvements. Our software solutions can tie together your existing plant, IT and business systems and enable your solution to evolve at your own business pace.

Don't just take our word for it. On the following pages, read the actual testimony of our customers on how they have implemented proven Wonderware solutions to solve operational challenges, and how they've achieved verifiable results like increased profitability, product quality and customer satisfaction.

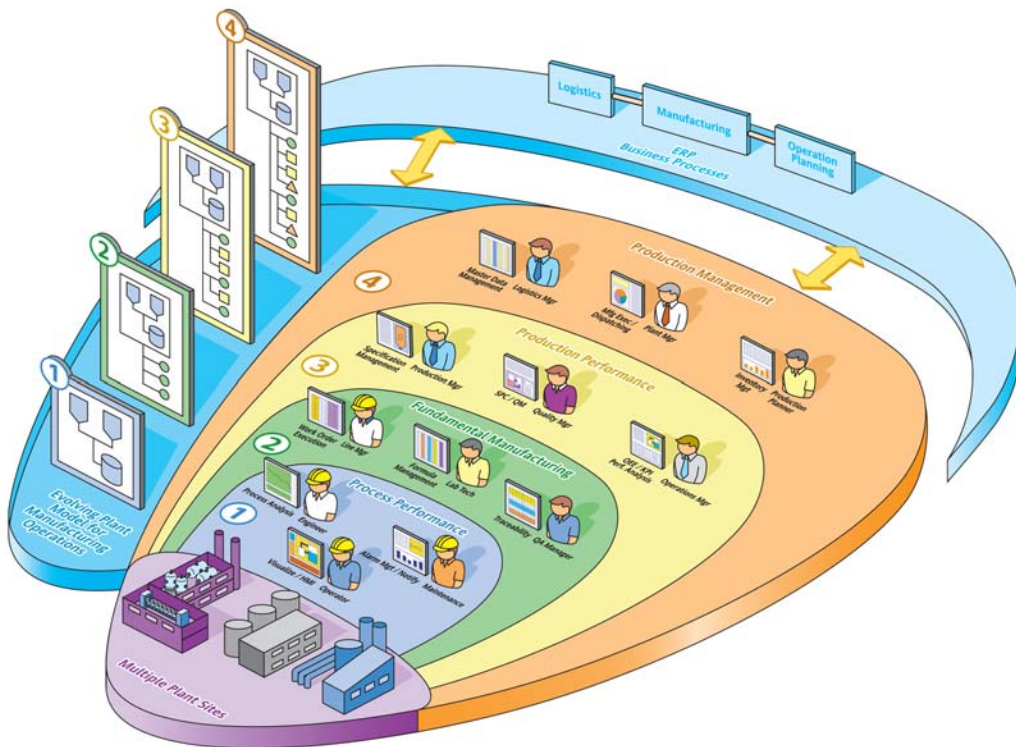


Fig. 1: Wonderware Production & Performance Management Software Solutions – A Flexible Approach to Improve Your Manufacturing Operations

Production and Performance Management – Proven, Verifiable Results

1) Challenge – Reduced Time-to-Market:

SOLUTION: Wonderware Manufacturing Software Solutions are accelerating product time to market by an average of 32%.

Customer Testimony:

“We have accelerated time-to-market for both recipe development and control system implementation. Making a real make-to-order.”

Colgate-Palmolive, Great Britain

“Production capacity is seven times faster than it was before the expansion.”

SBL Vaccin, Sweden

“InSQL enabled Alsace Lait to respond effectively to changes in consumer taste by helping to reduce the time-to-market for new products”

Alsace Lait, France

“The reduced variation in the product [from data provided by Wonderware software] resulted in an increase in finished product pounds each day – with a cost saving of \$72,000 and no impact on product quality.”

Blue Diamond Almonds, USA

“We raised the output of the brew house by 2.5 percent, meaning one-to-two extra brews a week”.

Brewery Martens, Belgium

“Micrel has already leveraged the WIP tracking system to reduce scrap by 20 percent, cut manufacturing cycle times by 50 per cent, improve on-schedule delivery times by 60 percent, increase factory output by 33 percent and reduce inventories by 60 percent.”

Micrel Semiconductors, USA

2) Challenge – Improve Production Efficiency & Throughput

Solution: Wonderware Manufacturing Software Solutions help increase production output and efficiency by an average of 35%.

Customer Testimony:

“After the implementation of this new technology, our productivity increased by more than 100%. So today we can produce up to 300,000 fish cans per shift with only 12 workers.”

Rugen Fisch, Germany

“We have obtained a 25% increase in plant production capacity/throughput as a result of implementing Wonderware automation software.”

Nutramax Laboratories, USA

Using Wonderware software “reduced our rejects over the last nine months by over 50 percent and increased our efficiency by about 30 percent.”

B. Braun, USA

“We have been able to enhance production by increasing line speeds by 8-10% within a few months. Capturing data in the IndustrialSQL Server database and trending it with ActiveFactory software now empowers the staff to see where they can eliminate dead time and speed up the line.”

Huber Engineered Woods, USA

“We've all but eliminated the occurrence of these holes since we got enough data from the system to analyze and identify trends from and that has saved 2-5% productivity loss just through elimination of downtime. It also allowed us to go to more advanced controls where rather than shutting the furnace off, we can just volt the furnace down. That gave us a 5-10% gain in average voltage, which is directly proportional to productivity.”

Nucor Steel, USA

“We lowered energy consumption on the compressors by 25% based on better usage of the air pressure system.”

Stora Enso Fors Paper Mill, Sweden

“The Wonderware system provides us the necessary information, in order to quickly recognize and eliminate weak points in production. Thus it supports us considerably on the way to become the “Best-in-Class” plant and to achieve our challenging goals.”

Nestle Foods, Germany

3) Challenge – Getting More Return on Investment Out of Existing Resources

Solution: Wonderware Manufacturing Software Solutions are producing 5 month average return on investment.

Customer Testimony:

“Pay-off time was 4 months, all costs included.”

SCANIA Automotive, Sweden

“Payback time is between 6-9 months.”

Tine Meieriet Sor, Norway

"... the system really paid for itself within 60 seconds of being started up. The problem was that, previously, their data wasn't detailed enough to bring out what was wrong with a single piece of equipment in the production stream. We

discovered that there was a feed-water heater that had a baffle missing; water was bypassing it. We immediately informed management. Operators brought the unit down to a lower load that night, fixed the baffle and put the heater back in service.”

Kansas City Power & Light, USA

“We wanted to test-run [Wonderware software] for six months to make sure we’re getting data that’s valid and to ensure that our ROI supports implementing the additional stations. Thanks to the IndustrialSQL Server historian and ActiveFactory reporting capabilities, we were able to present valuable data, which was previously unavailable, to management. We just got the go-ahead to add three more stations this year, and we plan to add the other 18 wireless stations during the next budget year.”

NeuCo, USA

“The investment in Wonderware technology has been paid back many times.”

OFS Fitel, Denmark

“Based on the savings achieved in production, disturbance reduction, lowered maintenance time and energy savings, the system had a relatively short return on investment period.”

Stora Enso Fors Paper Mill, Sweden

“The bottom line is that the InSQL/ActiveFactory combination saves time for PCS Nitrogen engineers. I also believe it improves the quality of the decisions that are made by actually having a good quantitative basis for deciding if a certain optimum has been achieved or whether a certain approach we’re using is really paying back so far as incremental production in the plant.”

PCS Nitrogen, USA

4) Challenge – Ability to Integrate Existing & New Systems & Functionality

Solution: Wonderware Manufacturing Software Solutions are integrating production orders, materials and costing between existing ERP and plant systems in 4 months or less.

Customer Testimony:

“Our goal in implementing an enterprise integration application was to create a fully paperless environment and to automate our business and manufacturing

processes, while continuing to adhere to FDA regulations for manufacturing operations. In a matter of four months, the company has successfully achieved several goals outlined at the outset of this project. We've been able to quantify and reduce raw material waste, garner greater control of inventory of production materials and have improved efficiencies in the manufacturing and packaging stages of our product production lines."

Nutramax Manufacturing, Inc. USA

"A significant reduction of the time and cost required to create, modify, expand and manage individual applications achieved by this system was implemented in just four months."

ST Powder Coatings, Italy

"All of the corporate standards are implemented as software objects. These objects promote reuse of engineering for different processes and plants, including products from the various suppliers."

SABMiller, South Africa

"We have been able to reduce our overall inventory value by up to 30 percent and achieve a flow of better and faster management information."

Brewery Martens, Belgium

"The benefits gained at Arla's newly integrated Vimmerby plant will include reduced man-hours, the ensured integrity of information flow both down from the ERP system and back up from the plant floor, and an increased capacity to meet marketplace needs quickly."

Arla Foods, Denmark

"As a result of these objective data [provided by Wonderware's InSQL historian and ActiveFactory analysis software] we are able to make the right decisions for the optimization of our packaging center and achieved a 3% increase in the utilization of our capacities."

Masterfoods GmbH, Germany

5) Challenge – Meeting Regulatory Compliance Requirements for Tracking & Reporting

Solution: Wonderware Manufacturing Software Solutions are providing fast and easy functionality to enable compliance.

Customer Testimony:

“In addition to faster response times, this new level of traceability actually reduces the risk of having to recall a large amount of product because we have detailed information on each batch.”

Arla Foods, Denmark

“Thanks to Wonderware, we now have full traceability according to EU regulation EC178/2002, which requires that all lots can be tracked throughout the process from reception to inventory, production and shipping.”

Brewery Martens, Belgium

“We have been facing the validation issue since 1992, when we installed the first automation and batch management system proposed by Wonderware. Since then we have been updating and upgrading the applications to the next versions and we have never been cited by the FDA for any violations. Following our experience, Wonderware products withstand the scrutiny of the validation requirements, including 21 CFR Part 11 compliancy.”

Pfizer Pharmaceuticals, Germany

“We chose Wonderware after a very accurate software selection among the existing alternatives on the market. The reasons for the choice are: the software flexibility; easy to validate, availability of further functionalities besides the pure plant supervision.”

Astrazeneca Pharmaceuticals, Italy

“The customers are more and more demanding and prepared on food safety issue, they ask for more well-documented and high level quality standards. Choosing appropriate technologies, such as Wonderware, helps us meet these goals.”

Galbani Foods, Italy

There are many more examples of how Wonderware has helped customers tackle their manufacturing problems. They can be found at www.wonderware.com/about_us/success.

We're not interested in only telling you about the past. We are interested in proving to you how we can help you with your present and future manufacturing and operational challenges - whether they be reduced time-to-market, increasing ROI with existing resources, accelerating throughput and efficiency, integrating new and existing systems and functionality, meeting regulatory compliance, or your own unique challenges.

We are asking you to challenge Wonderware to prove that we can improve your bottom line as we have done for others. To get the process started, contact your local Wonderware representative at [www.wonderware.com/about us/contact sales](http://www.wonderware.com/about_us/contact_sales).



Contact Wonderware or your local Wonderware Distributor for more information on industrial automation and information software solutions.

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