Chemicals

Ascend Performance Materials

Pensacola, Florida

Goals

- Eliminate manual input of data
- Visualize the overall manufacturing process
- Accurately record all relevant manufacturing data

Challenges

- The business was not tracking data to ensure production efficiency and product quality
- There was a lack of process consistency throughout the plants

Results

- The company achieved a savings of $500,000 in utilities and materials costs
- More than $1 million in savings was achieved in maintenance costs
- Avoided potential plant shutdowns which equates to a savings of $2 million
- Overall technology implementation took only 90 days

Industry: Chemicals

"We've found a great benefit in being able to maintain a core user group and consistency throughout the plants."

Terry Unruh
PE Production and Maintenance
Ascend Performance Materials

Azoty Tarnow S.A

Poland

Goals

- Increase the production effectiveness, traceability and safety by installing a central control and monitoring system

Challenges

- Very high maintenance costs (energy, methane consumption)

Results

- Manufacturing costs has been reduced as a result of the new Monitoring System
- Access to key media parameters analysis (quality, consumption) in real-time resulted in more efficient manufacturing
- Improved information flow (delivering actual data to technology engineers) has been achieved.

Industry: Chemicals

“Using the latest technology and IT solutions to build a telemetry and monitoring system shows that Azoty Tarnów is a modern company that is concerned about high quality and low production costs. This is reflected in the competitiveness of our products, the desire to have a safe workplace and a company that is concerned about the environment.”

Lucjan Knapczyk
Technology Specialist at Automatyka Sp. Z.O.O

Bayer CropScience AG

France

Goals

- Increase the treatment capacity of the Biology department
- Reduce biologists' contact with the treated plants
- Implement a new organization within 18 months
- Provide operators with tools that are easy to use

Challenges

- Referral agent partners for each business are involved in the project
- Bayer/SITAM work group - a commitment for the success of the project
- An open software environment

Results

- Complied with all priorities and deadlines for implementing and deploying the solution
- Cost of the solution was controlled thanks to the stringency of the SITAM management processes
- Quick familiarization with the system
- Control and transparency of the information which enabled successful collaboration

Industry: Chemicals

"The Schneider Electric solution provided the plant with reliable production, increased safety and improved product quality. As a result of the implementation, the Dorogobuzh plant far exceeded its NPK production targets."

Vadim Kovtunenko

Strategic Direct Sales Executive Schneider Electric

Bodycote Hot Isostatic Pressing Plant
London, Ohio

Goals

- Improve control and consistency of furnace temperatures
- Enact a proactive maintenance program to save equipment costs
- Provide better tools to increase operator efficiency and accuracy
- Reduce product re-runs

Challenges

- Existing data system did not provide historical information or useful reports
- Uniformity of temperatures difficult to control between furnace units of different sizes
- Maintenance scheduling based on calendar dates, not run times or performance data

Results

- Proactive maintenance program enabled steady productivity and better planning of capital expenditures
- Recipes have increased run-over-run product consistency and customer satisfaction
- Operator efficiency improved; fewer operators accomplish more work with better accuracy
- Reports provide more visibility and help facilitate better decision making

Industry: Chemicals

"Since getting System Platform, we've noticed a decrease in product run-wrongs and parts that need re-processing."

Shawn Crawford
Plant Engineer

Brisa Bridgestone Sabanci Lastik

Istanbul, Turkey

Goals

- Create a flexible and user friendly solution that will measure the performance of the machines used in manufacturing
- Ensure the effectiveness and efficiency of the production processes

Challenges

- Make sure that the solution will allow that operators perform the work in the right time and order

Results

- The new Manufacturing Execution System allows for the measurement of performance
- Plant management can accurately measure and analyze all production information
- Best manufacturing decisions being taken

Industry: Chemicals

"Thanks to InTouch HMI and Performance, we are able to monitor manufacturing better and we are assured that the right products are being made. This enables us to conduct accurate analysesand make the right decisions."

Mustafa Tacettin

Factory Automation Systems Manager of Brisa

BÜFA Reinigungssysteme GmbH Co. Ltd.
Oldenberg, Germany

Goals

- Preservation of normally high availability
- Expansion of Manufacturing Execution System functionalities in interaction with Microsoft Dynamics NAV (ERP software)
- Optimization of the visualization system
- New software architecture, consisting of individual Manufacturing Execution System, batch and HMI/SCADA functions

Challenges

- System modernization (network and PC components)
- Fault-free system transition with no impact on production
- Higher flexibility in recipe production
- Replacement of existing visualization through a full-featured HMI client

Results

- Fault-free transition to a new batching and recipe management system that involves the manufacture of 500 different products
- Largely improved visibility through enterprise-wide MES

Industry: Chemicals

“We transitioned smoothly to the new system based on a proven and successful solution for the modernization and expansion of our recipe management.”

Jörn von Wieding
CEO of BÜFA

CF Industries

United States

Goals

Locate software to deliver continue maintenance planning functionality while providing the flexibility for growth and costs savings

Challenge

The investment to keep homegrown application in pace with growing business is expensive (well over $1 million)

Results

- Approximate cost savings of $2 million through improved sourcing and contract negotiations
- Reduced inventory management and purchasing costs by several million dollars
- This system automates maintenance planning and tracking activities on nearly 50,000 asset entities and 60,000 items in the four manufacturing locations

Industry: Chemicals

"We've installed the Schneider Electric Software solution and it paid for itself almost immediately. It turns raw data into business intelligence and that improves our performance."

Dave Wiedenfeld
Group Project Leader, IT

Cray Valley

Spain

Goals

- Cray Valley's key objective was to update the control and monitoring of its three alkyd resin production manufacturing lines, replacing aging PLC and SCADA systems with current technology

Challenges

- Deployment of the new software infrastructure needed to be quick and seamless to minimize the impact on plant production cycles and delivery schedules
- The semiautomatic production infrastructure required precise programming of the command objects to ensure correct management of all plant operations

Results

- Access to production data has been greatly improved, as well as integration of plant and control hardware connectivity
- The System Platform infrastructure fully supports future expansion by accommodating new production functions and product requirements
- The engineering team can more easily revise and implement new production settings as needed to maintain manufacturing schedules

Industry: Chemicals

"Cray Valley has achieved a rapid and straightforward migration of its automation infrastructure with System Platform, enabling the company to scale manufacturing operations to meet future market demands."

Xavier Pujol
Head of Engineering

Imperator

France

Goals

- Automate the batch production lines for lubricating greases in order to limit the influence of human factors
- Obtain improved regularity in the quality of the grease produced
- Increase the production Infrastructure' efficiency and avoid losses of production lots
- Develop a tool that enables Imperator personnel to develop and execute themselves their new formulations, without using the integrator

Challenges

- Adapt to the constraints of the company, which has a weak culture in automated operations and industrial data processing
- Develop a solution that makes it possible to apply the same formulation on different production lines

Results

- Fewer variations in the quality of the greases produced
- Production Infrastructure optimized with 16,000 metric tons produced every year
- Dialogue facilitated between the formulator and the "machine" technicians using the same man-machine interface

Industry: Chemicals

"We have a huge project to automate our 10 batch production lines for lubricating greases. Batch Management gives us the open technical standard, in compliance with standard S88, that we were looking for."

Vincent Duthoit,
Imperator's Manufacturing Manager

Legrand

France

Goals

- Revamping the supervision of a powders' production unit for the manufacturing of cable trays;
- Simplifying the use of the control station by keeping manual data entry to a minimum;
- Editing production reports and making them easily accessible;
- Being able to carry out operations on the supervision application in the event of minor modifications being required.

Challenges

- Assimilating the software tools in order to work efficiently with the integrator;
- Scrutinizing the entire existing supervision application and adding new functions, considering requests formulated by all departments concerned in the factory;
- Meeting very short implementation deadlines;
- Providing secure operation in the event of the 'loss' of a supervision station.

Results

- The control stations are more user-friendly;
- The recipes are centralized on a single server and are easy to update;
- Thanks to the production reports, it is possible to highlight process malfunctions and envisage process upgrades;
- It is no longer necessary to call in the integrator for making modifications to the supervision application.

Industry: Chemicals

"In the framework of the revamping of our control/command installation, InTouch HMI was the obvious choice because it had been used successfully on other Legrand sites. We wanted to push the envelope further and adopted System Platform".

Michel Gatinois
Responsable du bureau d'études 'process extrusion'
Legrand

PG Monitoring System AB

Sweden

Goals

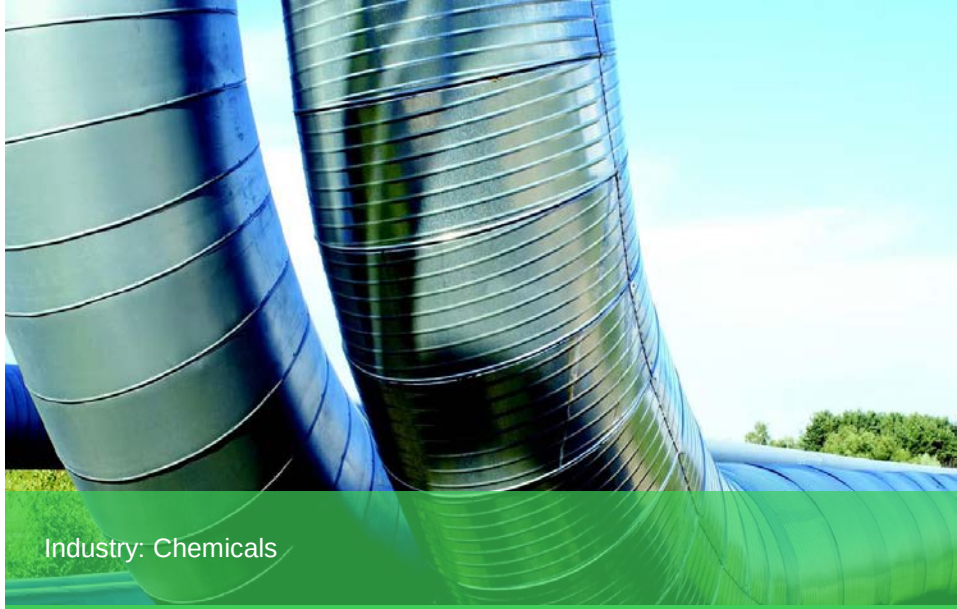
- To increase safety using a more effective warning system to prevent leaks by detecting decomposition at an early stage
- To streamline the implementation phase for new projects

Challenges

- Geographically dispersed PLCs and continuous development of Stockholm's district heating network require a high degree of flexibility and a comprehensive overview
- With approximately 10,000 I/Os, a system is required which provides operations personnel with information that is updated in real time

Results

- Thanks to a greater degree of insight, leaks are avoided which would otherwise have cost anywhere between five thousand and several million euros
- The Schneider Electric scalable software solution mean that it only takes a few days to develop and configure the monitoring system in a new geographical area by reusing modules that communicate with the PLC units
- An improved overview and a wireless Geo SCADA system warn operations personnel of potential leaks within a minute rather than them performing manual checks a few times a year



Industry: Chemicals

"To begin with the new system was viewed as a way of cutting back on staff, but instead it has helped create a totally new way of thinking at most energy companies. By preventing problems and working with the maintenance of the pipes, they can detect and repair problems they never knew existed. "

Håkan Klarin,
CEO, PG Monitoring System AB

ST Powder Coatings S.p.A.

Montecchio maggiore (VIC), Italy

Goals

- To enable the company to ramp up and begin fulfilling orders within 4 months
- Keeping production efficiency and product quality consistently high

Challenges

- To get the plant up and running as quickly as possible
- Very short development time available

Results

- Remain consistently competitive by quickly delivering the highest-quality thermosetting powders based on complex customer requirements
- Software‘s integration attributes enable him to focus on his core competency: getting the most out of the factory

Industry: Chemicals

“Using Schneider Electric software, we've increased our productivity by 30%.”

Massimiliano Nicoli
Plant Manager for ST Powder Coatings

PVC Compounders
Texas, USA

Goals

- Ensure that the recipe for each compound is accurate and consistent
- Easy access of plant operators to compound formulations
- Increase plant productivity but still maintain high product quality

Challenges

- All products are built to order and inventory is always at a minimum
- Plants from different states need to communicate and pass information
- Extreme temperature fluctuations at plant site
- Language problems with local labor force

Results

- Less than 1% internal failure
- Reduction in downtime by 15-20%

Industry: Life Sciences

"With System Platform and Performance in place, our internal failures have really reduced. Our goals for internal failures is less than 1%, and we've been meeting these goals."

Subburaman Ananthanarayanan
Quality Manager

Wonderware Finland & Baltics

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