AKZONOBEL: MULTIPLE SITES OPERATING IN UNISON
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Beyond the flexibility of the software, the DELMIA Quintiq Business Consultants provided us with realistic advice, advanced mathematical solutions and challenged us all the time. This was key to the successful implementation of the DELMIA Quintiq system.”

– Pierre Versailles, Operations Excellence Manager, AkzoNobel Powder Coatings
AkzoNobel Powder Coatings is a division of AkzoNobel, the world’s largest paints and coatings company and a major producer of specialty chemicals. With a history that spans nearly 400 years of technical and product innovation, today AkzoNobel is a Global Fortune 500 company consistently ranked as one of the leaders on the Dow Jones Sustainability Indexes. It has operations in more than 80 countries and a portfolio that includes well-known brands such as Dulux, Sikkens, Interpon, International and Eka.

AkzoNobel Powder Coatings is the largest global manufacturer of powder coatings, manufacturing at over 32 factories around the world. Inherently sustainable and used on everything from metal furniture and window frames, to radiators, pipes and cars and even wood and plastic.

The customer

Fast facts

Products: Powder coatings

Main markets: Architectural, automotive, domestic appliance, furniture, general metal furnishing and IT

Revenue: €1218 million (2018) *

* AkzoNobel Report 2018
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The challenge

Historically organized by country, AkzoNobel Powder Coatings Europe West’s planning strategy was de-centralized and using different SAP systems. Consequently, the Europe West business unit was facing the problem of very high inventory levels, sub-optimal utilization of plants, inconsistent service levels, a lack of supply chain visibility, and a duplication of planning tasks across the various plants.

The implementation of the DELMIA Quintiq solution took place at seven factories of the Europe West unit. Initially, these factories had different scheduling systems in use and no integration with its SAP systems. Data for the seven plants was split into seven Excel files with no easy way to access information or create synergy between the sites. Consequently, it was difficult to handle all supply chain and production complexity, even at a local level. Centrally, it was impossible to get efficient cross-plant visibility or optimize plant capacities.

The challenge AkzoNobel Powder Coatings faced was matching the demand with the production capacity of the different factories. The company didn’t want one plant operating for too many hours if another had available capacity. At the same time, the business needed to link the SAP MRP output to detailed line schedules in order to improve customer service levels and maximize productivity.
The choice

AkzoNobel chose the DELMIA Quintiq platform because of its proven ability to handle the highly complex planning associated with process and batch manufacturing, as well as the production techniques employed at AkzoNobel’s Powder Coatings’ facilities. The DELMIA Quintiq team demonstrated the Scheduler’s capabilities. These capabilities included:

- Integration of complex multi-stage process routings
- Scenario modelling with regards to productivity and service levels
- Networking which allowed multiple plants to access and update the system
- Interfacing with SAP, reducing daily planning efforts while improving scheduling adherence and reliability
- Reporting with a comprehensive and configurable suite of reports
- Full transparency and cross-plant visibility for central planning activities.

The complex production processes of coatings manufacturers such as AkzoNobel require sophisticated scheduling solutions to reap the most from manufacturing capabilities – an ideal match for the capabilities of DELMIA Quintiq’s scheduler solution.

The DELMIA Quintiq scheduler is designed to address tactical planning needs, helping to optimize the interactions between production capacities and customer orders, as well as manage day-to-day planning challenges. With an overview of the entire manufacturing process – from raw materials to finished goods, the scheduler would enable each site to optimally plan the manufacturing process to increase efficiency and to reduce cleaning and setup times after running a batch.

With KPI-driven planning, AkzoNobel’s managers would also be able to foresee the effects of scheduling decisions across the entire supply chain, enabling more effective decision making.
Implementation

The DELMIA Quintiq kick-off meeting for the Europe West unit took place in March 2011. After the six-month analysis and modeling phase, the system went live in September 2011 at the factory in Vallirana, Spain. This made the rollout to the rest of the plants much easier. The DELMIA Quintiq system went live at all plants in 2012, ahead of schedule, following a smooth and straightforward implementation process.

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Beyond the flexibility of the software, the DELMIA Quintiq Business Consultants provided us with realistic advice, advanced mathematical solutions and challenged us all the time. This was key to the successful implementation of the DELMIA Quintiq system” said Pierre Versailles, who was in charge of the DELMIA Quintiq projects.
“In short, we can say that the DELMIA Quintiq system allows us to react in real time to changing market demand and this major benefit is now being reflected in our performance results,” says Pierre Versailles.

DELMIA Quintiq supports AkzoNobel in managing its scheduling processes as if its plants were operating at a central site.

Pierre Versailles adds: “Full transparency has been achieved through the combination of centralized planning and de-centralized scheduling in the seven plants. We have seen results in capacity balancing as well as improvements in scheduling. This has further resulted in improved customer service and optimized productivity.”
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