Chemicals Leader Standardizes Supply Chain and Increases Scheduling Horizon by 100 Percent

NOVA Chemicals' polyethylene business relies on aspenONE® Supply Chain to improve visibility and reduce maintenance and overall IT ownership costs.

NOVA Chemicals produces plastics and chemicals essential to everyday life. Their current businesses and joint ventures focus on ethylene, polyethylene, and Performance Styrenic polymers production in manufacturing sites strategically located throughout Canada, the United States, and South America.

As a legacy MIMI customer, NOVA Chemicals recognized AspenTech's supply chain capabilities, but over time, their installation had grown to more than 25 unique models with no standardization or integration. From a change management perspective, any form of modification became overwhelming for both IT support and end users.

By committing to a new, standard set of business processes for all parts of the polyethylene business, NOVA Chemicals was able to migrate to six standard aspenONE Supply Chain applications with a single design throughout. The new business processes were automated and integrated, enabling NOVA Chemicals to react quickly to changing business conditions and determine the best course of action across the supply chain.

"Due to forward visibility, the scheduling horizon doubled, increasing from 90 days to 180 days. This gave the schedulers better raw material visibility and a better product wheel."

— Zoran Stojcevski, Systems Analyst and Developer, NOVA Chemicals

Customer Profile

NOVA Chemicals
Plastics and chemicals producer

Challenge:

Lack of standardization limited ability to react to changing business conditions

Solution:

Migrate from 25 unique models to six standard aspenONE Supply Chain applications

Best Practice:

Implement business processes and software models that are standardized and integrated

Benefits:

- Increase length of scheduling horizon by 100 percent
- Reduce overall IT ownership cost
- Reduce maintenance by more than 80 percent
- Enable data sharing and collaboration between all models, regions, and businesses

Lack of Standardization

Due to fragmented business processes and a lack of automation, NOVA Chemicals was forced to manage their supply chain manually via emails and phone calls, making it difficult to react to any type of business change. They had no way of evaluating the impact or determining the best course of action to respond to events such as price changes, shutdowns, raw material constraints, and weather-related impacts. Further, the lack of uniformity between models broke down synergies between groups and made change management very difficult.

Redefining Business Processes and Tools

As part of their Integrated Demand and Supply Planning (IDSP) project, NOVA Chemicals set out to redefine their business processes to be consistent with the Supply Chain Operations Reference (SCOR) model, a best-practice framework developed by the Supply Chain Council. Once the newly defined "To-Be" business process was agreed upon by all stakeholders, NOVA went from 25 unique models to six aspenONE Supply Chain applications.

For implementation, the team focused on a specific business area and worked to prototype each application to meet the business needs. Once the prototype was completed, the system was reviewed by the business and recommendations were made. The recommendations were ported into the other areas and a full implementation was conducted, resulting in all business units having the same tool with the same process.

Standardization and Integration

NOVA Chemicals' new standardized set of software tools supports a single set of business processes while still allowing for user flexibility. Fourteen scheduling models have been reduced to one, providing a similar design and common look and feel that significantly reduced the effort required when schedulers cover for each other. The standardization across models also reduced NOVA's overall IT ownership cost. Change management/ maintenance requests such as deploying changes and resolving issues went from one week to less than one day in duration.

NOVA's newly integrated process allows upstream changes to propagate downstream to other models. A central data repository now enables a single source of data sharing and collaboration between all IDSP modules and allows for dynamic reporting across all regions and businesses. NOVA's initial focus has been primarily on the execution side (scheduling). Their next area of focus will be more strategic, long-term planning.

© 2010 Aspen Technology, Inc. AspenTech®, aspenONE®, the Aspen leaf logo, and the 7 Best Practices of Engineering Excellence are trademarks of Aspen Technology, Inc. All rights reserved. 2264-30-1110

About AspenTech

AspenTech is a leading supplier of software that optimizes process manufacturing — including oil and gas, petroleum, chemicals, pharmaceuticals and other industries that manufacture and produce products from a chemical process. With integrated solutions, process manufacturers can implement best practices for optimizing their engineering, manufacturing and supply chain operations. As a result, AspenTech customers are better able to increase capacity, improve margins, reduce costs and become more energy efficient. To see how the world's leading process manufacturers rely on AspenTech to achieve their operational excellence goals, visit www.aspentech.com.

aspenONE®

Worldwide Headquarters

Aspen Technology, Inc.
200 Wheeler Road
Burlington, MA 01803

phone: +1-781-221-6400
fax: +1-781-221-6410
info@aspentech.com

EMEA Headquarters

AspenTech Ltd.
C1, Reading Int'l Business Park
Basingstoke Road
Reading, Berkshire
RG2 6DT United Kingdom

phone: +44-(0)-1189-226400
fax: +44-(0)-1189-226401
ATE_info@aspentech.com

APAC Headquarters

AspenTech (Shanghai) Co., Ltd.
3rd Floor, North Wing
Zhe Da Wang Xin Building
2966 Jin Ke Road
Zhangjiang High-Tech Zone
Pudong, Shanghai
201203, China

phone: +86-21-5137-5000
fax: +86-21-5137-5100
apac_marketing@aspentech.com