

Asia-Pacific Petrochemical Leader Frees \$14M Worth of Inventory with Integrated Supply Chain

SCG Chemicals relies on aspenONE® Supply Chain to integrate operations and increase market responsiveness while reducing finished goods inventory 25 percent.

SCG Chemicals is a subsidiary of the Siam Cement Group (SCG) and is one of five core businesses encompassing chemicals, paper, cement, building materials, and distribution. SCG Chemicals manufactures and supplies a full range of products including upstream, intermediate, and downstream petrochemicals. The company is now one of the largest integrated petrochemical companies in Thailand and a key industry leader in the Asia-Pacific region.

SCG Chemicals' first supply chain implementation went live in 2001 with aspenONE Supply Chain for Chemicals. As a user of the full aspenONE portfolio, SCG Chemicals has been able to realize significant benefits integrating supply chain management and plant operations to control losses during made-to-order transitions. In 2004, SCG Chemicals won the Deming Application Prize for distinctive performance improvement through the application of Total Quality Management (TQM). Annual audits show significant benefits received each year.

“The responsiveness of this system has enabled SCG Chemicals to reduce finished-goods inventory 25 percent below the normal level without creating problems in order-taking and order-fulfillment processes.”

—Chainarong Tangsangiamvisai, eBusiness Manager, SCG Chemicals

Customer Profile

SCG Chemicals
Petrochemical Manufacturer

Challenge:

Lack of speed and accuracy limited manufacturer's ability to adjust to customer requests and changing market conditions

Solution:

aspenONE Supply Chain for Chemicals enables manufacturer to integrate the supply chain and handle order fulfillment in a volatile market.

Best Practice:

Integrated supply chain provides forward visibility to enhance customer responsiveness

Benefits:

- Reduce finished goods inventory by 25 percent
- Ensure a high level of customer service
- Reduce transition losses



Chasing Market Opportunities

In the past, SCG Chemicals had a manual, labor-intensive process for creating production schedules. To create a new production schedule or respond to a new business condition, planners had to painstakingly run through several Excel models, a process that would take a week to complete. Frequently, planners would discover that the market opportunity had changed yet again once the new production schedule had been completed.

During a shift to an up-trend period in the Thai polyethylene/polypropylene market, a new order could fill a few months of SCG Chemicals' production capacity within a few days. Ensuring a quick, accurate adjustment to the production schedule is a key capability that affects the bottom line of the business. Before moving to aspenONE Supply Chain, SCG Chemicals had limited order promising capabilities. They could only book orders from inventory, limiting their order promising horizon to about a month.

Customer Responsiveness with an Integrated Supply Chain

The integration of Aspen Collaborative Demand Manager, Aspen Supply Chain Planner, Aspen Plant Scheduler, and the SAP interface helps SCG Chemicals be more responsive to the market.

aspenONE gives SCG Chemicals the agility to reschedule the production schedule quickly, taking into account thousands of constraints, with the assurance that the result is an optimum production mix, produced at the right time in just a few hours.

Order promising capabilities enable SCG Chemicals to tackle order taking and order fulfillment in volatile markets. SCG Chemicals can now promise orders three months in advance based on an inventory level equivalent to less than one month of sales. This is because aspenONE enables them to look at current inventory levels as well as forecasted inventory based on capacity. This responsiveness earns them business and customer loyalty.

Reduced Inventory and Streamlined Supply Chain

The responsiveness provided by aspenONE Supply Chain has enabled SCG Chemicals to reduce finished-goods inventory by 25 percent during downturns, freeing \$14 million worth of inventory. During up-trends, SCG Chemicals can fill their warehouses with profitable products.

The fact that SCG Chemicals is able to reduce inventory levels significantly without creating problems in the order-taking and order-fulfillment processes shows the efficiency and agility of their supply chain.



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