

3B-THE FIBREGLASS COMPANY

Case study



Images courtesy of 3B-Fibreglass company

Challenge

To meet increasing global demand for composite materials, 3B needed a modern, more powerful and scalable solution to pilot its three glass fibre production facilities that operate without interruption 24/7.

Solution

The company uses Dassault Systèmes' DELMIA Ortems advanced planning and scheduling solution to create optimum schedules of its production sequences and to monitor work over the various plant resources.

Benefits

With a coherent and overall view of its plants, 3B can plan production according to sales forecasts, stock levels on a global scale and production constraints, so as to always respond to customers specific product needs.



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— Françoise Beckers, Global Planning Leader,
3B

LEADING SUPPLIER OF GLASS FIBRE SOLUTIONS

The need for a greener planet requires companies to develop products that take advantage of innovative materials and solutions to reduce their carbon footprint. Glass fibre is a material of choice for the production of composite materials, which are widely used in cars, wind turbines or other everyday products.

Belgium-based 3B-the fibreglass company develops high-performing glass fibres, used for automotive and wind energy applications. Glass fibre reinforced composite parts are an alternative to heavier metallic parts. It is key for the automotive industry, as it continuously seeks ways to lighten parts, in an effort to reduce fuel consumption and CO2 emissions. In the wind industry, the new generations of wind turbines are larger and larger to produce cost-effective green energy: high-modulus glass fibre reinforcements are required. 3B is committed to working hand in hand with its customers to help them address these very challenges. Sustainability is the main growth driver for this business.

3B has acquired extensive glass fibre expertise in its 50-year existence. It has manufacturing facilities in Belgium, Norway and India, an R&D facility in Battice, Belgium, as well as a customer service centre in Brussels, Belgium.

The fibreglass products manufactured by 3B are:

- Long fibres or direct rovings, either made of E-CR glass or of high-modulus glass (HiPer-tex®)
- short fibres, also called chopped strands
- non-woven mats.

CONTINUOUS IN LINE PRODUCTION

3B has a well-defined and proven production process. "Production runs 24/7 with no interruptions, with a major part of our products being make-to-stock. Therefore, my job consists in defining the production schedule for all three factories and making sure our stock is sufficient and well-balanced to meet customer demand. I also closely follow the quantity of raw materials available for the manufacture of our glass fibre products" says Françoise Beckers, Global Planning Leader.



DELMIA Ortems defines an optimal schedule for each production process

"DELMIA Ortems is a powerful and scalable solution with an intuitive and easy to understand user interface that can evolve with us over time"

— Françoise Beckers, Global Planning Leader , 3B

Until recently the company was using a scheduling solution developed 25 years ago and originally customized to fit their specific processes at the time. However, this solution was no longer maintained, rendering it obsolete. "The tool we were using did not cover our evolving needs or the software evolutions of SAP" explains Charlotte Neumann, Supply Chain Specialist at 3B. "So we set out to find a new solution, starting with 12 prospects and narrowing the list down to three, two of which were eventually found to either be too dependent on customizations or too expensive. The solution that we finally chose was Dassault Systèmes DELMIA Ortems. We saw it as a powerful and scalable software able to evolve with us over time. We also found that it had an intuitive and easy-to-understand user interface, that it could integrate beautifully with SAP. It was also in line with our budget."

Today, DELMIA defines an optimal schedule for each production process and pop-up messages inform production planners when their attention is required. "For example, if the initial planning suggests a production change during the weekend - which actually is not feasible in our organisation - DELMIA requires the manual intervention of the scheduler in advance", Beckers explains.

“Now with that visibility in the solution, we can better anticipate”

— Françoise Beckers, Global Planning Leader

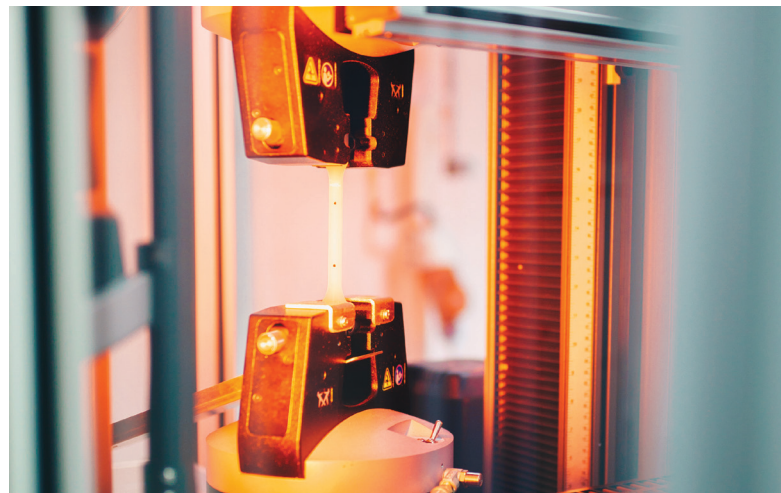
“Moreover, what DELMIA Supply Chain Planning & Operations Solution does that our previous solution didn’t is to pre-create production orders in accordance with our forecasts. By entering a forecast in the system, DELMIA will look at the customer orders, the forecasts, as well as our stocks, and create a production order if stocks are below critical levels. DELMIA offers a useful overview of all parameters. Another advantage: a production report for each plant can be issued automatically. Now with that visibility in the solution, we can better anticipate”, says Beckers.

The tool’s user-friendliness is a major asset that enables a new employee to prepare a production schedule without requiring extensive planning experience. “With our previous tool, only an expert planner with thorough knowledge of the production process would have been able to generate a planning that could be accepted by production,” Beckers said.

3B first deployed DELMIA in its Belgian plant, then in Norway. Implementation will be done in India in a few months. “75% of the core model of our Belgian facility will be used in our two other facilities, which we will then tailor to their specific production constraints,” Beckers said. “When this is done, we will have better visibility over our global operations. We’ll be able to react faster to sales requests. Moreover, we will have a real-time view of where we are with respect to raw material availability because it is linked to the forecast. DELMIA is a great support for our scheduling teams and it will go along with the future evolution of our organisation and our processes.”



DELMIA Ortems takes into account customer orders and forecasts to create a production order



Focus on 3B Fibreglass

Leading developer and supplier of glass fibre solutions for the reinforcement of thermoplastic and thermoset polymers.

Products: dry-used chopped strand, wet chopped strand, direct rovings, continuous filament mat, choppable roving, chopped strand mat

Employees: 1,000

Headquarters: Battice, Belgium

For more information
www.3b-fibreglass.com/



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