



Case: Stalatube

Efficient and real-time production management

STALATUBE IN SHORT

Stalatube Oy is world-renowned manufacturer of stainless steel tubes. The headquarters and plant of Stalatube Oy are located in Lahti, Finland. The company has subsidiaries serving as sales units in Holland and the USA as well as sales representatives in various countries.

SOLUTION BENEFITS

- More efficient optimization of production capacity and faster turnaround time
- Real-time warehouse monitoring and control
- Improvement of traceability
- Real-time production monitoring
- Coincident timing of orders and loads
- System flexibility and user friendliness
- Reduction of error situations
- History data in one system in a centralised manner
- More efficient reporting
- Improvement of electronic integration

System for managing large production volumes

Stalatube Oy produces stainless steel and acid-resistant tubes for the needs of the construction industry. Their competitive advantages include a wide range of products, fast delivery and excellent customer service. The product range includes steel tubes of varying sizes and finishes. The speciality is the world's largest continuous-weld tube at 300x300x12.5mm. The Stalatube factories manufacture 5 full truckloads of tubes per day. The production volume of the plants was 24,500 tonnes in 2004. More than 90 per cent of the company's products are exported. Stalatube delivers to more than 35 countries worldwide.

The global competition in the industry, the increasingly critical stance adopted by customers in regard to quality and delivery speed as well as the increasing quantity of end user deliveries provide challenges for the company. The sign-based information system previously employed by Stalatube could not provide the efficiency required in current market conditions. Information was spread over the system, some of it being located in different databases, creating obstacles relating to data transfer and production management.

The production of steel tubes is controlled at Stalatube Oy by means of the Digia Enterprise ERP system. This system has enabled the monitoring of production in real time, facilitated the optimization of the production line utilisation rate, and made reporting easier and faster.

Uninterrupted order-delivery chain

Stalatube has used the Digia Enterprise ERP system since 2004. This system has improved order-delivery chain management and increased chain transparency. The solution is used for managing the information relating to sales, purchases, production, warehouse management and customer relationship management (CRM) in a centralised manner. Since the various parts are tightly interlinked all parties of the chain have the same information at their disposal in real time. The fact that the production chain is uninterrupted has facilitated traceability. Currently the information regarding from which material batch a product was produced from is delivered with the product through the production chain all the way to the dispatch centre," says logistics manager Sami Kaijanen of Stalatube.

The tube material is purchased from suppliers as large material coils six weeks prior to delivery. The average size of material warehouse is equivalent to three weeks' production. Due to the large size and mass of the material coils it is crucial that a warehouse houses the exactly the right amount of material. The ERP system helps the purchaser remain aware of what has been sold and of what are the material needs of the production. This has facilitated the work of the purchaser and warehouse optimization. Moreover, the analysis and reporting tools of the system also facilitate the predictability of future needs.

Digia Enterprise enables faster production turnaround times. "This system has boosted the efficiency of our operations. It has been used to improve the optimization of the job queues of 11 production lines and to streamline information flow," Kaijanen says. "Production capacity planning and management are particularly particularly critical to our company since there are many products and we wish the turnaround volume to be as high as possible," he continues. Stalatube production is order-driven. Digia Enterprise uses the job queue in order to suggest the most suitable products to lines, taking into account within the schedule of which line and at which time it would be most efficient to manufacture the product. Deviations in the lines trigger automatic alerts in the system.

In order to ensure a high level of delivery reliability, the dispatch centre must be aware of the production status at all times. The dispatch centre collects around 100 tonnes of tubes per day. It is vital with regard to the delivery functions that order completion and loading are timed to coincide. Digia Enterprise includes a special shipment management module, the user-friendly workdesk of which can be used in order to manage vehicle loading, bills of freight and dispatch centre functions in a centralised manner. Automatic collection check-ups have reduced the number of errors occurring in dispatch centre functions.

Solution supporting business requirements

Certain features adjusted to fit the special requirements of Stalatube's business operations were created within the Digia Enterprise ERP system.

Sales functionalities are able to manage double pricing that calculates the price and the estimated margin by combining both sales and alloy surcharge prices and required additives (including valid alloy price for purchased material). The price calculation allows different currencies and measuring units e.g. metric and imperial sizes. From customer's point of view the price can be quoted as including or excluding the alloy surcharge.

The system enables customer specific configurations of products that include measures and different finishes. Configuration affects the product structure, margin calculation, pricing and production chain. Warehouse personnel carry out their daily work, such as warehouse transportation and inventories, using the Digia Warehouse@Hand hand-held terminal solution, integrated into the system.

Digia Enterprise includes ready-made interfaces for instance to the Cognos PowerPlay software that has been used to bring the analysis and control of business operations to a new level. The maintenance module manages the periodic maintenance of production lines and the related devices. This module monitors the fact that periodic maintenance is performed on time.

"We use Enterprise to boost the efficiency of all our operations. It is our goal to produce double the volume through the order-delivery chain with the same number of personnel and at the same time. After the implementation of Enterprise I have not viewed this goal as being unattainable at all." Logistics manager Sami Kaijanen, Stalatube Oy

SOLUTION TECHNOLOGY

- Digia Enterprise ERP system
- Digia eEngine Web order tracking
- Digia CRM
- Digia Warehouse@Hand – wireless warehouse hand-held terminal solution
- Digia Observer – deviation and alert reporting
- Cognos PowerPlay – reporting and analysis
- Digia iSuite – integration and connections

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