



# **ENTERPRISE MANAGEMENT AND SUPPORT IN THE MILL PRODUCTS INDUSTRY**

## **The Mill Products Industry**

Companies that produce metals, paper, wood, building materials, and textile products must contend with globalization challenges, volatile supply prices, fierce competition, and an increasingly demanding customer base. To address these issues, companies in the mill products industry need ways to optimize operating and production processes and realize faster time to market.

Processing customer orders at optimal efficiency, in the correct quantity and quality, on the required date, and at the lowest possible cost requires systems and processes that enable integrated planning, real-time control, event-oriented ordering, and utilization of material stock data from all production areas. To successfully compete in today's environment, companies in the mill products industry will benefit from the following:

- Improving the transparency of integrated production processes
- Increasing productivity and cost-efficiency and optimizing the use of operating facilities
- Meeting customers' requirements for product and service quality
- Continually comparing target data with actual data relating to quality, materials consumption, time, and expenses

For more than 10 years, SAP has worked with companies in the mill products industry to help them meet their business goals. Leveraging this expertise, SAP provides comprehensive solutions that can be tailored to address the unique operating and production requirements of these businesses. mySAP™ ERP – flexible, scalable, and effective software for enterprise resource planning – is a key element of SAP® solutions for the mill products industry, supporting financials, operations, human capital management, and corporate services as well as all complex business processes associated with planning, production, inventory management, quality management, costing, and sales.

## **Enterprise Management and Support in the Mill Products Industry**

For organizations whose primary business is the production of metals, paper, wood, building materials, and textile products, mySAP ERP provides capabilities that help optimize the entire supply chain, from product design and configuration to preliminary planning and order processing, capacity planning, and production and delivery. By streamlining processes and delivering enhanced insight into costs, the solution enables companies in the mill products industry to succeed in today's marketplace.

### **Order Confirmation with Available-to-Promise Check**

The make-to-order environment in the mill products industry requires an interactive available-to-promise (ATP) check during sales order entry. mySAP ERP offers an ATP check function that delivers the information needed to confirm product availability for new orders. The ATP check recognizes various standard packs, such as groups of multiple units or pallets, and allows sales order entry clerks to match packs to different production units. ATP check enhancements can be activated that allow clerks to substitute product or location, check for production resource capability while determining product availability, and check for unassigned stock. Clerks can also determine real-time multilevel material availability, as well as multilevel capacity availability, through a capable-to-promise check.

## **Production Management**

Because multilevel production is commonplace in the mill products industry, mySAP ERP enables orders for the various levels to be linked with one another. As a result, companies can perform integrated planning and scheduling at all levels. Manufacturers can also integrate certified plant data collection systems using standard interfaces so that confirmations, such as the movements of scrap and remnant products, can be recorded automatically. Production planning capabilities allow detailed information flow between mySAP ERP and process control systems. Input and output data can also be customized, allowing each operation to capture process-relevant data, such as temperature, speed, and pressure, and product data, such as grade, dimension, and size.

## **Quality Management**

mySAP ERP provides integrated quality management functions that support quality planning, inspections, and control. The solution manages quality documents and drawings, protects against low-quality shipments, supports material inspections, controls the handling of problem cases, and optimizes the inspection effort for samples. An inspection lot – or a quality inspection order – can be automatically generated for production, goods receipt, or goods issue. Inspection lots provide management of all inspections, results entry, and formulation of usage decisions. Single and multiple inspection lots can be generated for each production batch. Inspection characteristics are copied from the customer order to the production order and directly to the inspection lot. Once the results have been entered, personnel can view the characteristic analyses at any time.

## **Inventory Management**

mySAP ERP supports the entry of inventory quantities in various units of measure on the batch level, not only in inventory management, but also in sales, planning, and production. Dimensions such as weight, height, and length, as well as other detailed information about stock units, are stored as characteristics in batch records. Companies can generate reports that provide a quick overview of materials and stock with certain characteristics, such as the grade or color.

In addition, mySAP ERP streamlines offcut processing by allowing companies to split a given batch into several batches according to the number of slit pieces occurring in the cutting process. This process is handled without a production process order, yet covers handling scrap or offcuts, as well as tracing affected batches so that companies can include the cutting operation in capacity planning and costing.

## **Multiple Output Planning**

Organizations that plan and carry out production for product that is ultimately divided into multiple goods benefit from multiple output planning (MOP) capabilities. In conjunction with available support for MOP, mySAP ERP facilitates selection of production receipts or stocks to cover order requirements, creation of additional receipts produced (such as offcuts in cutting operations), and value assignment of the characteristics of these receipts. When planned orders are being created, MOP can support consideration of component receipts and customer-specific requirements and combine requirements from different sales orders.

## **Nonferrous Metal Pricing**

In conjunction with available support for nonferrous metal pricing, mySAP ERP helps companies respond rapidly to short-term changes in pricing. Whether used within the sales or purchasing department, capabilities will enable organizations to manage specific and flexible price agreements internally or with business partners. Companies will be able to handle provisions such as processing metal owned by a customer or provided to a supplier. An Internet interface will provide access to data feeds such as the London Metal Exchange and enable simple maintenance of nonferrous metal rates (including fixed, key date, and average), which are based on stock exchange prices.

## **Transportation**

Transportation costs for mill products companies often contribute significantly to the total price of finished goods. Efficient transportation planning, combined with optimized delivery processes that lower costs, can increase both customer satisfaction and company profits. mySAP ERP provides a set of transportation planning and vehicle scheduling capabilities that allow companies to generate a detailed transportation schedule for inbound and outbound shipments, as well as optimize multiple transportation legs and carrier selection. mySAP ERP also helps execute transportation plans and handle freight accruals and settlement.

## **Accounting**

Many companies in the mill products industry use an array of disconnected, stand-alone systems for a variety of business applications. As a result, processing data for financial accounting or cost accounting functions requires that companies either implement complex interface programs or pay for manual, repeated entry of information at various work centers. This wastes time, increases the potential for error, and restricts the flow of information. mySAP ERP provides a comprehensive set of tools that support critical, financial-related functions, including the following:

- **Financial accounting** – mySAP ERP provides a comprehensive set of financial accounting functions that can support international operations and companies of any size. These functions address all accounting-relevant transactions, guarantee complete documentation, and serve as a foundation for company-wide planning and control tasks. Individual documents are entered centrally, inspected, and synchronously updated during the integrated processing of business transactions. Financial accounting also addresses all asset management requirements. For instance, through integrated investment controlling, organizations can link measures for planning and controlling of capital investment to asset management. At the same time, asset management can be linked with the management of maintenance tasks.
- **Cost accounting** – mySAP ERP supports all common cost accounting practices, from absorption to activity-based costing. The solution provides a system of finely tuned planning tools and control instruments for coordinating the contents and workflow of internal company processes, guaranteeing continuous updating and accounting of costs and revenues. In addition, mySAP ERP enables companies to plan costs and revenues across different functional areas and track them in real time. Deviations between planned and actual costs can be spotted quickly, allowing personnel to take appropriate actions. The solution also provides a uniform reporting system that provides the necessary decision-making information for planning and implementation processes, cost elements, and cost centers.

## **New and Enhanced Capabilities for the Mill Products Industry**

mySAP ERP offers new and enhanced capabilities designed to improve business processes in the mill products industry.

### **Variant Configuration Modeling**

The sheer number of variations among products, which are specified in customer orders and passed through the entire supply chain from sales to purchasing, poses a particular challenge for companies in the mill products industry. To help companies manage and leverage this data, mySAP ERP provides an integrated variant configuration capability that can describe product attributes and assign them to the product master. Configurable material master records are defined for each product group, raw material, and semifinished product group, and each material master record is assigned to a variant class. A separate product master record can be created for each production level, further increasing transparency and simplifying management of intermediate orders for planning purposes. Different production steps are linked with one another through material lists, which provide information about starting materials, required quantities, and planned material waste at every step. To assist with material planning and variant procurement, information regarding customer orders is automatically forwarded to requirements planning. In addition, the system uses planned orders to help employees determine material requirements and schedule them uniformly for all production steps.

### **Material Tracking and Characteristics**

The batch tracking function in mySAP ERP provides detailed proof of material usage at each level of the production process and supports analysis of all product data made in a single production run. With each individual transaction, manufacturers can change the status of all batches issuing from the original batch. In addition, for faster data maintenance, they can trigger all necessary material postings – from nonrestricted stock to quality stock – for all related batches.

To find only those batches associated with the same original batch, organizations can select based on the purity of the original batch within a material or based on the purity of different materials that have been produced by the same original batch. In make-to-order production, manufacturers can specify the original batch in the sales order, which will then be used to determine the batches for the production orders that belong to that sales order. The solution manages all required data, such as material tracking numbers, to help companies comply with legal regulations. By supporting the traceability of material flow, mySAP ERP helps reduce total cost of ownership.

### **Why mySAP ERP in the Mill Products Industry?**

With a broad customer base of over 2,100 companies in the mill products industry, mySAP ERP offers proven solutions that help businesses achieve the agility and flexibility needed to meet today's customer and partner requirements. By streamlining processes and providing enhanced insight into company finances, mySAP ERP enables organizations to lower procurement and production costs and respond rapidly to production issues or changes in demand, while maintaining high levels of customer satisfaction and accelerating time to market.

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