

MANUFACTURING, PROCUREMENT, AND QUALITY

MANUFACTURING

The Andritz Group operates 51 manufacturing and service sites in Europe, North America, South America, and Asia. These sites produce and assemble the key components for Andritz equipment and systems. In total, Andritz employs approximately 5,400 people in manufacturing worldwide. This highly qualified workforce with long-term experience, as well as state-of-the-art means of production and continuously improved processes, ensure the highest product quality and reliable, on-time order execution.

Manufacturing strategy

In order to remain successful and competitive in the global markets, Andritz pursues a targeted strategy to continually enhance its manufacturing competence and presence. The focus is on expanding Andritz's manufacturing presence in the growth markets of China, India, and South America, and on further developing well-established sites in Europe and North America.

All process-relevant key components for Andritz plants and machines are manufactured and assembled at Andritz's own workshops. Less critical and simple components are sourced from qualified suppliers, who are subjected to regular quality checks and on-time performance monitoring.

Capacity and delivery management

The high order backlog and difficult situation in the material and semi-finished goods markets have presented a great challenge to Andritz Manufacturing. Short lead times and on-time production require precise planning as well as committed and flexible employees. Internally, Andritz uses flextime contracts and also temporary workforce to cope with fluctuations and peaks in workload. In addition, handling of the sourced portion is continuously improved by efficient supplier management; the pool of suppliers is permanently enlarged with new, qualified companies. The make/buy ratio is approximately 1:1.

Professional project management ensures that contractual milestones are met over the entire process chain, from order intake to start-up.

Major developments in 2007

Due to the high order backlog, the focus in 2007 was on maximum utilization of existing manufacturing capacities and on further expansion of manufacturing sourcing. The tight situation in supply markets entailed great challenges with regard to availability and prices of goods.

Procurement management was further reinforced and the semi-finished goods inventory was optimized in accordance with the demand. In addition, investments were effected to modernize manufacturing technologies, to adapt capacities at bottlenecks, and to further automate process steps where suitable.

The program initiated to achieve the global target of establishing World Class Standards at all sites was continued in 2007, and additional individual projects in support of this target were implemented. For instance, at Lenser Filtration's headquarters in Senden, Germany, the manufacturing and logistics processes were successfully reorganized. In electromechanical manufacturing in Weiz, Austria and Bhopal, India, the manufacturing process for generators was optimized and task assignments were modified. For the VA TECH HYDRO sites in Central Europe, an integration and improvement project for manufacturing sourcing was initiated and partially implemented in 2007.

Highlights in 2007

In Foshan, China, manufacturing capacities were increased by 35% at the main facilities as well as through an enlargement of production area in nearby Sanshui to meet the rising demand for local production. The new stainless-steel foundry established in Foshan by Andritz together with Swiss Wolfensberger Group has started operations and successfully delivered its first products.

At the Group's headquarters in Graz, investments focused on the extension and modernization of the manufacturing technology and the entire logistics process was revised.

The Group's manufacturing network was further strengthened with a new important site through the acquisition of Hungarian machine construction company Tígép. →



WELDING OF A REFINER FILLING FOR A CONICAL LOW-CONSISTENCY REFINER AT ANDRITZ PILÃO'S WORKSHOP IN VINHEDO, BRAZIL.



ASSEMBLY OF AN IMPELLER FOR A DOUBLE SUCTION PUMP AT ANDRITZ TECHNOLOGIES' WORKSHOP IN FOSHAN, CHINA.



GRINDING OF A KAPLAN TURBINE BLADE AT ANDRITZ'S WORKSHOP IN GRAZ, AUSTRIA.



1,500 KG OF LIQUID STAINLESS STEEL BEING TAPPED INTO A CASTING LADLE AT THE NEW ANDRITZ-WOLFENSBERGER FOUNDRY IN FOSHAN, CHINA.

PROCUREMENT

The main purpose of the procurement organization is to secure the supply of all goods and services required for running the business processes on time and at competitive prices. These goods and services are to be purchased at the most favorable terms and conditions, are to meet our quality standards, and must be available at a specific date. In addition, procurement is to contribute to strengthening Andritz's competitive position through systematic cost reductions in process costs and procurement costs.

Andritz's procurement policy focuses on markets, suppliers, procurement processes, and resources. It aims to achieve optimum synergies between the Group's different locations and to improve efficiency in the supply chain.

The procurement function of the Andritz Group is decentralized and performed individually by the different project, manufacturing, and service locations. Coordination and cooperation within this decentralized structure are ensured by the global procurement organization. The goal is to achieve substantial cost savings by the pooling of demand, benchmarking, and negotiation of Group-wide contracts. For specific regions (e.g., China, India), the regional sourcing/subcontracting activities are coordinated and supported by special, regional purchasing organizations.

The most important countries for purchases of the Andritz Group are the member states of the European Union, the USA, Brazil, China, and India. The biggest production sites of Andritz are also located in these countries.

The importance of countries for procurement can change quickly due to required local contents, especially for EPC contracts. This fact challenges all procurement organizations in analyzing new procurement markets and in cooperating with new, local suppliers.

QUALITY

The high technical level of Andritz's products and systems requires the highest manufacturing standards, systematic organization, clearly defined business processes, and well-trained employees. Andritz Quality Management plays a major role in implementing operating standards for products, process and personnel management, and in providing continuous feedback on the effects and fulfillment of these standards. Human resources have been considerably enlarged in step with the strong growth of the Andritz Group.

In 2007, the focus of Andritz's quality management activities was again on product quality, with a two-fold approach for quality assurance in the engineering phase and in Andritz's own, and outsourced, manufacturing. A key role is played by product transfers between different sites, as consistent quality assurance in this field can prevent loss of know-how and enable more efficient contract handling.

To support Group growth, a Group-wide function for all quality management and quality assurance activities was created in 2007. Definition and implementation of a Group-wide quality policy contributes to standardizing the internal requirements for products and business processes, and to further enhancing the integration process of newly acquired companies. A Group-wide network of quality managers and engineers has been implemented, and a concept for expansion, particularly in South America, India, and China, has been established.

Special focus was placed on risk management. In the early stages of a customer project, when decisions of great relevance for the outcome of a project are made, it is particularly important to utilize the entire experience available in all relevant units. The business processes have been optimized to this effect and an intensive training program was organized.

By deploying more resources in supplier assessment and management, efficiency in the cooperation with important suppliers has been further increased and Sourcing is supported in the search for and qualification of new suppliers. ○