KLABIN

MAXIMIZING ASSET UTILIZATION AND QUALITY WITH INTELLIGENCE

QUICK FACTS

Industry
Mill products – pulp and paper

Revenue
US$1.3 billion

Employees
7,384

Headquarters
São Paulo, Brazil

Web Site
www.klabin.com.br

SAP® Solutions and Services
SAP® Manufacturing Integration and Intelligence application

Implementation Partner
Neoris

Brazilian pulp and paper industry leader Klabin SA had isolated manufacturing monitoring and control applications throughout its 17 plants. To increase asset utilization, reduce waste, and improve quality, the firm implemented the SAP® Manufacturing Integration and Intelligence application. The integration of this software with manufacturing execution systems and Klabin's core SAP business applications is allowing the firm to save millions of dollars annually.

Key Challenges

- Maximize asset utilization by optimizing setups and maintenance
- Improve quality and minimize scrap
- Standardize processes across plants to scale up best practices
- Provide visibility into disparate data sources, easy information access, and analytics to support processes
- Replace labor-intensive analytics
- Establish reliable, nonstop IT environment

Why SAP Was Selected

- Ease of integration with core SAP® software and manufacturing execution systems
- Web-based collaboration with external parties
- Agility to build graphs and dashboards
- Capacity to integrate with equipment robotics
- Reliability of SAP support

Implementation Best Practices

- Implemented at 1 plant initially, followed by gradual rollouts to other plants
- Assigned a team of 40, including 8 from integrator
- Rewrote all processes for the SAP Manufacturing Integration and Intelligence application

Low Total Cost of Ownership

- Completed 1st plant implementation in 5 months, on schedule and within budget
- Automated reporting, saving labor
- Avoided costly development and maintenance of interfaces
- Reduced number of systems, applications, and IT resources needed to maintain them

Financial and Strategic Benefits

- Saved millions of dollars annually
- Reduced scrap by 700 tons, worth US$500,000, per year (1st plant only)
- Maximized asset utilization
- Implemented an advanced static process control application fed with accurate, online information
- Improved and streamlined connectivity with 1 application to integrate many data sources
- Streamlined communication with external parties via the Web

Operational Benefits

Key Performance Indicator	Impact
Manufacturing throughput through reduction of scrap*	+1%
Overall equipment effectiveness**	+60% to 70%
Plant personnel productivity	+8%
Frequency of setups*	Greatly reduced

*For the Telemaco Borba plant
**For some equipment

Klabin

"Before we had two-hour meetings to find the root cause of our issues, but now we have half-hour meetings to decide the course of action to resolve them."

Lorival Verillo, IT Manager, Klabin SA

www.sap.com/contactsap

Klabin SA is Brazil's largest paper producer, exporter, and recycler. It is also the country's market leader in packaging paper and board, corrugated boxes, and industrial sacks. Founded in 1899, Klabin has 17 industrial plants in Brazil and 1 in Argentina.

Competitiveness Requires Intelligent Manufacturing Planning

Pulp and paper is an asset-intensive, commodity-pricing industry. Klabin runs its plants 24x7, but that alone is not enough to stay competitive. The company must maximize its use of manufacturing assets while minimizing scrap. Machinery setups must be as infrequent as possible, and maintenance must be preventative. This calls for careful planning, but until recently the software Klabin used was not delivering the needed results. The plants' manufacturing control applications were not integrated with one another or with Klabin's core SAP® business software. The firm had limited analytics capabilities and relied instead on spreadsheets and local databases. Interfacing Klabin's plant-floor applications with machinery controllers was labor intensive.

SAP MII Delivers Integrated Analytics

To maximize quality and cost-effectiveness in its plants and enable growth, Klabin determined to replace much of its analytics software with a single, strong manufacturing monitoring and control application. Klabin examined several candidates before deciding on the SAP Manufacturing Integration and Intelligence (SAP MII) application. SAP MII was best at satisfying the firm's criteria, especially tight integration with core SAP software and the manufacturing execution systems layer.

Klabin began with the most complex of its plants, Telemaco Borba in the state of Paraná. Systematically a team from Klabin and its partner Neoris integrated SAP MII with the manufacturing controllers in the plant and rewrote existing processes. The team finished in five months, on schedule and within budget, before moving on to other Klabin plants.

Klabin Wins Coveted TPM Award

Klabin's IT costs have dropped now that there are far fewer one-off systems to support and interfaces to develop and maintain. With a static process control application, plant managers can monitor bottlenecks, setups, and quality indicators more quickly. As a result, machine setups are much less frequent, and equipment availability has improved as much as 70%. The plant reduced scrap by 700 tons last year for a savings of US$500,000 and an overall manufacturing throughput improvement of 1%. Reporting is automated, increasing productivity. Quality management and maintenance costs are down, and overall productivity and adherence to quality standards are up.

Senior management also sees the benefits of improved information availability, because the causes of problems are immediately apparent and resolving them is much easier. "The benefits of having intelligent control over our manufacturing with SAP MII exceeded our expectations and put us at a new level to compete in the global market," says IT manager Lorival Verillo.

Altogether Klabin's savings reach into the millions of dollars annually at just the first plant, with much more to come. Because of its success, the Telemaco Borba plant was honored with a distinction in 2008 – the Total Productive Maintenance (TPM) Award from the Japan Institute of Plant Maintenance. Klabin is the first Brazilian pulp and paper company to win the first degree of this award, which recognizes ongoing improvements and standards of industrial excellence.

Implementation Partner

Neoris specializes in near-shore outsourcing, IT consulting, emerging technologies, systems integration, application development and deployment, and support solutions. Neoris is the second-largest consulting and integration company in Latin America.

NEORIS
Practical Visionaries

50 094 816 (09/04)

©2009 by SAP AG.
All rights reserved. SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP Business ByDesign, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and other countries.

Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects S.A. in the United States and in other countries. Business Objects is an SAP company.

All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.

THE BEST-RUN BUSINESSES RUN SAP™

SAP®