

A New Disciplined Approach Brings Environmentally-Friendly Carvajal to the Next Level of Performance

Company: Carvajal Pulp & Paper | **Sector:** Paper Manufacturing |

Location: Colombia |

Services Provided: Work Management |



SITE:

Carvajal Pulp and Paper is not your typical paper manufacturer. The Colombia-based company is, in fact, tree-friendly. This environmental consciousness has been a source of Carvajal's competitive advantage for more than 50 years. Its broad portfolio of coated and uncoated high performance paper is manufactured using a unique process, where the waste byproduct of sugarcane processing is used instead of wood pulp. This byproduct is renewable, is harvested in short amounts of time and doesn't compete for the use of soil for food production. The company is also committed to technological innovations that further its environmental responsibility, including projects to reduce emissions from its manufacturing plants.

CHALLENGE:

In 2010, Carvajal's management team began assessing the performance gaps of the company's operations to identify areas where improvement was needed. The assessment revealed needs in the areas of maintenance efficiency, and machine availability and reliability. Moreover, they hoped to reduce operational costs by 20 percent. To make the necessary changes and bring its performance to the next level, Carvajal sought help from an experienced company with a solid track record of delivering results. The Carvajal management team selected SAMI, a leading operational improvement firm, after a thorough evaluation.

A team of process experts from SAMI joined representatives from Carvajal to launch the operational improvement initiative with a four-week analysis at one of the company's manufacturing plants in Yumbo, Colombia. This analysis uncovered a number of inefficiencies and opportunities for significant performance improvement as well as cost reductions. Using these findings, the team outlined a roadmap that would equip the paper manufacturer with the capabilities needed to pursue its long-term business objectives. The roadmap entailed disciplined work management processes consistent with industry best practices that would transform the plant's operations and provide a foundation with which the Carvajal team could use to tackle improvements at another nearby plant.

HOW WE HELPED:

The joint SAMI and Carvajal team developed a new work management process that included several procedures and tools designed to improve the company's day-to-

day operations. New work identification and execution support processes extended to each system and piece of equipment; a revamped planning and scheduling process widened the planning horizon to improve resource allocation; a new coding system helped prioritize work orders; and a new meeting rhythm encompassed all work planning, scheduling, selecting and reviewing activities.

Along with the overhauled work management process, key performance indicators were established to raise visibility of Carvajal's operations at any given moment in time. The indicators included overtime utilization, backlog status and schedule compliance, among others. With this level of visibility, the management team could now quickly identify areas for continuous improvement.

To support these efforts and ingrain the new approach into the heart of the manufacturing plant, employees at all levels participated in extensive training and coaching activities. Each person—from planners to technicians and supervisors to support coordinators—received a set of job responsibilities to drive a greater sense of accountability for the plant's continued success. This would help ensure the sustainability of the improvement initiative.

RESULTS:

The redesigned work management process made a remarkable impact within the Yumbo plant. A more proactive culture focused on continuous process improvement emerged. Through change management efforts, interactions across departments improved, teams were re-energized and employees brought new levels of discipline to their roles. Employees began receiving assignments better suited to their strengths and skill sets. From an operational standpoint, the newly established process decreased schedule disruptions and emergency work orders dropped from a high of 21 percent to a low of 5 percent. The new management system improved maintenance operations, leading to cost reductions. Job scoping and resource allocation improved, bringing greater structure and efficiency to the manufacturing plant. The project hit the bottom line as well, delivering financial benefits that computed to more than US\$1.8 million within just two years—and expected savings of \$4.6 million through 2015.

Within Carvajal, there is an openness, a willingness to share, and communicate between disciplines and across organizational functions that simply did not exist before. Armed with a new, more effective work management process, the company will continue to reap benefits at

both an operational and financial level. Carvajal can now devote even greater energy to its environmental causes for another 50 years.

SAMI was founded in 1996 to help national and international industrial organizations modify both functional processes and workforce behaviors in pursuit of sustainable performance improvements. SAMI's top-level consultants, all of whom are highly-accomplished veterans from such fields as energy, transportation, construction and engineering, offer client firms unique new approaches that positively transform all levels of an organization so that they can reach and maintain new heights of success. The company is headquartered in the U.S. in Farmington, CT and can be reached at 860.675.0439. SAMI also has offices in Europe, South America, India, Australia and the Middle East. On the web they can be found at www.samicorp.com.