

CASE STUDY

PACKAGING-PRODUCT PLANTS IMPLEMENT THE MILLIKEN PERFORMANCE SYSTEM

Plants in the paperboard and packaging industry face challenging customer requirements — from companies that use these products directly and those that convert paper stocks into other goods — as well as regulatory and financial pressures. The commodity nature of the business makes continuous improvement a must.

PERFORMANCE-IMPROVEMENT OPPORTUNITY

This client faces a changing customer environment common in many industries: smaller orders, smaller run sizes, and increased complexity due to customization. For many of this company's customers, packaging must change by season, product type, and marketing strategy.

The client was operationally excellent before Performance Solutions arrived, but executives there sought to raise the bar with continuous improvement to sustain profitable growth. "We're building

WORKING WITH PERFORMANCE SOLUTIONS PRACTITIONERS

Client leaders became acquainted with Performance Solutions via our "Accommodate, Educate, and Demonstrate" program. These executives traveled to Milliken headquarters, where they learned about the Milliken Performance System and toured Milliken's high-performance facilities. "We present our Milliken journey and explain what they can expect out of the same process,"

off what they already have in place," says Doug Skaggs, a Performance Solutions practitioner who works with a dozen of the client's plants, "taking them to a world-class level."

Of particular concern were issues with common production problems, including poor machine uptime, product rework, slow equipment changeovers, high

says Skaggs. "We take them to our own plants, where they see what a successful performance system looks like, and how it could change their plants' futures." After the visit, the client contracted for an organizational assessment, which led to a corporate master planning session and then plant implementations.

The focus of our work with this client is

CLIENT

This \$3 billion packaging-products manufacturer manages more than 200 plants and 10,000 employees worldwide, with a mix of both union and non-union workforces. In business for 75 years, the company makes roll stock for converting operations and flexible printing and plastics, primarily for the food industry. The manufacturer contracted with Performance Solutions by Milliken in 2009, and our practitioners now assist in 27 different locations, primarily in North America and Europe.

employee turnover, and legacy safety processes driven by managers rather than associates. "There were a lot of gaps in the way they viewed downtime situations," says Skaggs. "They were just managing downtime instead of working to eliminate it. They lacked standardization around both the work itself and how they trained associates."

consistent with most of our engagements. We started with a zero-loss analysis: i.e., if it were possible to remove all waste from operations — including time, money, and resources — what cost savings would that return to the organization? In other words, what is possible if the client eliminates all downtime, rework, etc.

"At almost every company, there's money

wasted that nobody even measures,” says Skaggs, “because most executives are willing to accept some level of imperfection. But we ask: How much could you gain if a plant ran with zero breakdowns, zero minor stops, zero changeovers? We often see clients realize that millions of dollars are at stake — which then inspires an intense desire to change.”

This engagement was structured around educating the company’s steering team on its roles, responsibilities, and expectations, and developing a one-year plan that addresses the pillars of the Milliken Performance System (MPS): e.g., continuous skills development, focused improvement, planned maintenance, daily team maintenance, 5S, quality management, safety, early equipment management, and new product development. For each pillar there are defined objectives that must be met, starting with a model line or machine in each plant.

The model line or machine is typically highly visible and plant performance-critical, with high potential to exhibit the loss-analysis process to the entire plant. Key pillars are addressed within the model area over eight months to a year, with a continuous focus on loss reduction. “They’re building a system and driving out losses through DMAIC (define/measure/analyze/improve/control) practices or PDCA (plan/do/check/act) practices and kaizen projects,” says Skaggs. “We start by stressing better daily management practices — equipment inspections, monitoring, and housekeeping — and then move on to auditing these processes to make further improvements.”

Once the model area was established in each client plant, the system was expanded to the rest of the facility. These launches were celebrated with official kickoff events, where associates leading the implementation shared success stories, highlighted achievements, and invited employees in other areas of the

plant to join them. Modeling is the first of three phases; Phase 2 is complete when 50 percent of a plant’s A-ranked (priority) equipment and systems are improved; and Phase 3 culminates when the remaining 50 percent of A-ranked processes and equipment have been addressed.

“Modeling is about learning and making small mistakes, proving the concept,” explains Skaggs. “It’s our time to build skill-sets and pillar leaders. We can’t stay and manage the plant for them. We want them to become practitioners, so that when we leave, they have a process that is sustainable.” As the engagement has progressed and expanded, the client has successfully developed its own group of practitioners, taken over the education role previously led by Performance Solutions. These home-grown practitioners standardize and document best practices, before teaching colleagues how to deploy them in ways that reduce losses across the enterprise.

CHANGEOVER TIMES HAVE BEEN REDUCED SO MUCH, THEY DIDN'T HAVE TO ADD ANOTHER DAY TO THEIR PLANT SCHEDULE

POWERFUL IMPROVEMENTS

The client has earned an overall 15 to 1 return on investment (ROI) with Performance Solutions. A manufacturer’s current condition prior to an engagement is reflected in the ROI. Some client engagements with Performance Solutions have earned returns as large as 37 to 1; no engagement has returned less than 7 to 1.

Examples of performance improvements at the packaging-products manufacturer, based on a summary of plants that have reached Phase 3, include:

- Breakdown performance improvements of 60 to 70 percent
- Minor stops reduced by 50 to 60 percent

- Rework reduced by 50 percent
- Waste reduced by 80 percent
- Equipment changeover times reduced by 50 to 60 percent.

“Changeover times have been reduced so much, they didn’t have to add another day to their plant schedule. They’re down to a five-day week,” adds Skaggs.

FUTURE SUCCESS

The client plants are continuing their implementations, and eventually all the facilities engaged with Performance Solutions will demonstrate that MPS is now their operating system and the way

they manage. Progress is tracked through a detailed scorecard that measures MPS sustainability along with metrics specific to the organization. The aggregated tally of a scorecard triggers movement

for a plant from Phase 2 to Phase 3, and decreases the frequency of Performance Solution practitioner visits — a process well under way at this client.

KEY CONTACTS

Phil McIntyre / *Managing Director, Business Development & Marketing* / Performance Solutions by Milliken
(864) 503-1359 / Phil.McIntyre@Milliken.com

Doug Skaggs / *Practitioner* / Performance Solutions by Milliken
(864) 680-4010 / Doug.Skaggs@milliken.com

PUT PERFORMANCE SOLUTIONS TO WORK FOR YOU

Performance Solutions by Milliken® works side by side with companies interested in strengthening and improving their operations. The strategic approach that made Milliken one of the safest, most efficient manufacturers in the world is the backbone of the consulting and educational services that Performance Solutions offers worldwide. Performance Solutions by Milliken practitioners are serving over 350 operations, in 23 countries, and covering a wide variety of industries.

Visit www.PerformanceSolutionsByMilliken.com to learn more about Performance Solutions' consulting and education services.