

MILLIKEN PERFORMANCE SYSTEM

Surviving and Thriving in the Consumer Packaged Goods Industry



Performance
Solutions 
by Milliken

Leveraging Operational Improvements for Growth and Profitability

The consumer packaged goods (CPG) industry is vast and fiercely competitive, as global conglomerates, niche vendors, and entrepreneurs fight for shrinking shelf space. Major retailers may carry up to 100,000 SKUs (stock keeping units), but they also replace thousands of them each year with newer, trendier products. The need for constant innovation in a market shaped by commodity pricing pressures has left many CPG manufacturers with razor-thin margins today, and an even more uncertain tomorrow due to:

Omnichannel complexities

CPG manufacturers now sell across multiple channels — retailers, wholesalers, online stores, direct-to-consumers via the Internet — making production forecasting, scheduling, and delivery more challenging than ever.

Customers seeking “New”

Relentless innovation has dramatically shortened product lifecycles, narrowing the window for successful product launches — and for rapid, error-free production ramp-ups of new products.

Consolidation

CPG mergers and acquisitions can meet strategic needs — to acquire new products or enter new markets — but they can create operational nightmares, as disparate plant leadership and management systems create delays and confusion and make organization-wide improvements challenging.



Packaging and labeling complexity

Changing regulations around the world require CPG companies to manage packaging and labeling compliance across multiple jurisdictions. Even companies making a handful of products on few lines can find it difficult to change over packaging and labeling in order to stay compliant with the geographic markets they may serve.

Operations agility

As channels expand, competition increases, and organizations diversify, CPG manufacturers struggle to align legacy production facilities with 21st century market demands. They often fail to rapidly adapt existing plants, equipment, and processes to new-product specifications and business models and/or limit their R&D options to existing infrastructure and practices.

“THERE’S...A LOT OF DIFFERENTIATION AND COMPLEXITY WITH PACKAGING AND PRINTING, WHILE MAINTAINING QUALITY AND DELIVERY SCHEDULES.”

“The CPG market is becoming increasingly demanding,” says Chris Poole, a master practitioner with Performance Solutions by Milliken, the consulting division of Milliken & Company. “It requires a flexible production environment, small batches, and lots of innovation. There’s also a lot of differentiation and complexity with packaging and printing, while maintaining quality and delivery schedules.”

Poole says these pressures force CPG executives to manage in new ways, as they seek to minimize working capital and workforce turnover: “They need a system that delivers capability and stability, but also provides engaging work for employees, so that they stay with the company.”

Performance Solutions helps CPG manufacturers in implementing a holistic improvement system —the Milliken Performance System (MPS) — to achieve operational goals:

Enhanced workforce engagement, morale, and culture: Performance Solutions practitioners also help clients in developing a continuous-improvement mindset among the workforce: “When I’m working with a client, basic improvement results aren’t good enough,” says Brian Hall, advanced practitioner. “Fifty percent of our goal is to produce the performance results, and the other 50 percent is to develop a culture of 100-percent problem-solvers.” MPS establishes a standardized production environment that helps management consistently mentor and coach the workforce to become problem solvers, creating a culture in which all employees are attacking problems, improving productivity, and eliminating unnecessary costs.

Safe and environmentally compliant production facilities: Many CPG plants are hybrid plants with both discrete and process operations, combining automation with manual labor. Before any improvement methodology can be established, workers must trust that managers have employee interests at heart — and that environment, health, and safety (EHS) practices will keep them safe. World-class CPG

companies emphasize a safety-first approach and track lagging measures (incident rates, near misses, lost workdays) and, more importantly, leading indicators (e.g., safety audit scores, percentage of employees on safety teams) that drive improvements to prevent accidents. A safe working environment enhances workforce morale, improves productivity, and reduces costs (e.g., lower insurance and workers’ compensation premiums).

Increased plant reliability: For CPG plants running a mix of SKUs, machine breakdowns and stoppages lead to a wide range of losses — repair costs, production delays, overtime labor, damaged goods, etc. — that erode revenue and profit. A performance system engages frontline employees in routine equipment service, so that maintenance staff can focus on predictive maintenance, machine improvements to boost overall equipment effectiveness (OEE), and faster changeovers.

Improved quality throughout production: High-quality requirements are a given in CPG plants, but this often occurs along with large amounts of rework and scrap to ensure those standards. Executives are too often willing to accept such wastes as a cost of doing business, when in fact it’s really just a cost drain that does not need to occur. MPS practices (called “pillars”) deploy a zero-loss approach, emphasizing expectations that there will be zero problems for safety, environmental, equipment, or quality targets — including scrap, rework, and waste. Zero loss is a directional guide to pinpoint repeated production problems, and in high-performing CPG companies can become a reality.

Higher productivity and lower costs (i.e., increased profits): “The extent to which CPG manufacturers can control costs increases market competitiveness and drives up margins,” says Robert Allen, an Performance Solutions senior practitioner. “We help clients implement a system to drive cost to its lowest possible point, by making them more efficient, improving quality, and giving them the ability to be more flexible and agile.”

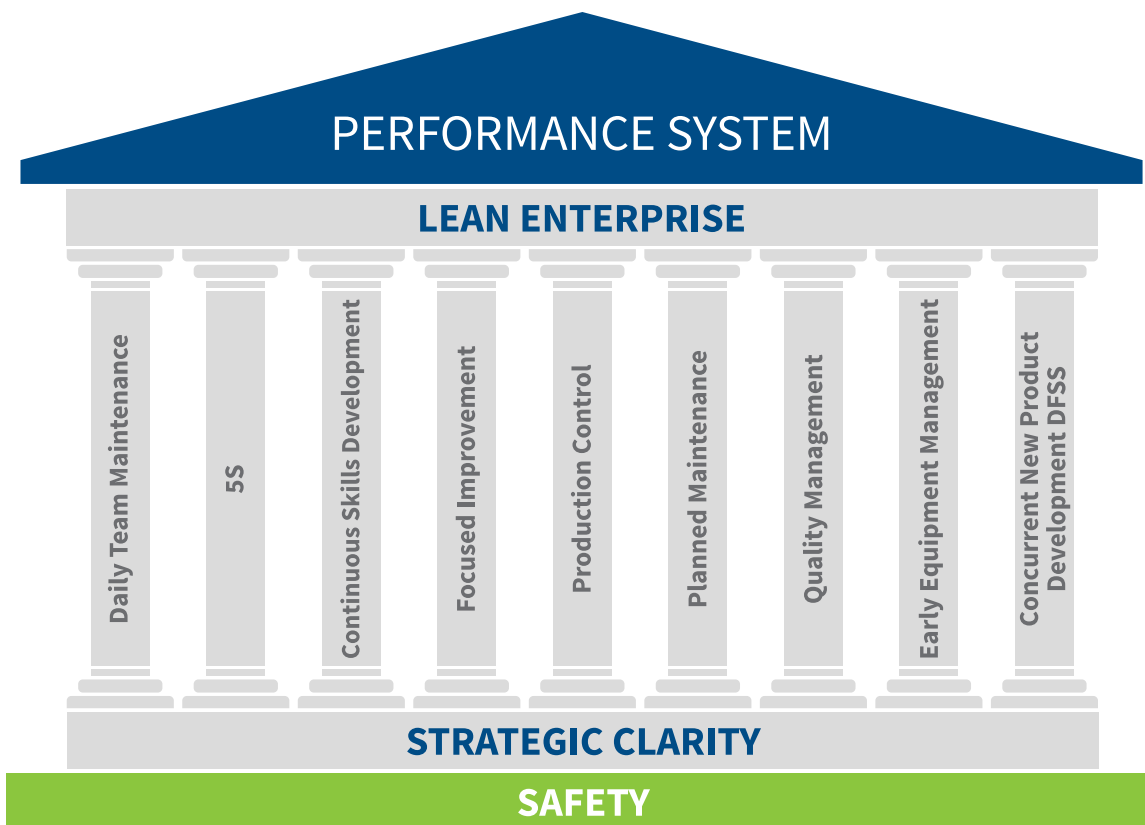
Embedding a Performance System

The MPS improvement platform delivers short-term CPG performance gains during implementation, and even greater long-term gains as the system is extended across the plant and enterprise.

“A systematic approach requires long-term thinking and discipline,” says Phil McIntyre, Managing Director, Business Development for Performance Solutions. “CPG executives want a model that helps them move away from a cycle of firefighting and short-term initiatives, and toward a culture of continuous improvement and agile operations.”

MPS is comprised of nine pillars built upon a foundation of safety and strategic clarity. MPS was originally deployed by Milliken & Company, and has been used to continuously improve the company’s operations, surface new opportunities, and achieve unprecedented industrial performance. Performance Solutions helps CPG executives use MPS for similar results in their own companies.

“MPS offers CPG leaders a complete approach to organizational improvement,” adds McIntyre. “Systematic planning and identification of priorities; application of common standards; and education and training that lead to sustainable performance and dramatic returns on their effort.”



Performance Solutions helps CPG companies advance along a six-step MPS roadmap to transform their organizations:

- 1. Accommodate, educate, and demonstrate:** CPG executives become acquainted with Performance Solutions via the “accommodate, educate, and demonstrate” program. They travel to Milliken headquarters in Spartanburg, S.C., and learn about MPS from Milliken leaders and tour high-performance Milliken facilities. Executives hear about the Milliken journey, gain a first-hand perspective of a successful performance system, and begin to explore how their companies can benefit from the MPS.
- 2. Assessment:** Performance Solution practitioners — who have typically spent an average of 20 years in leadership in manufacturing — evaluate a client company’s current system against MPS pillars and criteria. They also perform a SWOT (strengths, weaknesses, opportunities, and threats) analysis, interview management and frontline associates, and evaluate the organization’s culture. Practitioners distill their evaluation into a concise document that helps company leaders to establish a corporate vision and explain “why” a company needs to improve.
- 3. Corporate master plan:** A leadership team from the CPG client works with Performance Solutions to create a company-specific master plan, tailored to the firm’s portfolio of plants and operations. This long term plan addresses the pillars of MPS, and establishes critical objectives for each pillar to guide and align the organization. During this time, the initial plants that will implement MPS are identified, and managers are educated on roles, responsibilities, and expectations.
- 4. Plant implementation plan:** Performance Solutions practitioners conduct a zero-loss analysis at the target facilities, identifying potential savings if all problems (e.g., downtime, quality rejects, injuries, time and resource wastes) are eliminated. The wastes identified — and the potential savings

estimated — are typically significant, even for a single plant.

- 5. Model area within plant:** During Stage 1 of plant activities, a model line, process, or machine is selected for improvement. The model is highly visible, critical to overall plant performance, and usually in dire need of improvement. Improvements on the line or machine address all MPS pillars until the model is fully transformed toward zero-loss targets. This continuous, focused effort on loss reduction can take eight to 12 months, generating both cost savings and excitement as workers see what’s possible with a new mindset.

“We work with plant leadership to carefully select the model process,” says Poole. “In essence, we’re implementing MPS in miniature, so that they and the workforce can see and understand how much they can achieve. We teach and coach the model process team to build a system that they want, and to set objectives that they want to reach — in terms of both performance and employee engagement. At the end of the modeling stage, we evaluate performance and help them to refine their approach before moving into the next stage.” The resulting client performance system typically aligns with MPS, but with adaptations for the culture of the client’s organization. Similarly, Performance Solutions often helps clients in applying MPS pillars to a client’s existing operating system, to address missing or underperforming facets.
- 6. Replicate:** Processes and best practices demonstrated within the model area are expanded to 50 percent of a plant’s primary lines and equipment during Stage 2. Once these areas have been transformed, changes are applied to the remainder of a facility’s lines and equipment during Stage 3; a scorecard and audit system monitors progress. During this stage CPG companies further develop and begin to deploy their own practitioners, relying less on Performance Solutions practitioners as the system is expanded and applied in other facilities.

“CLIENTS APPRECIATE THEIR ONGOING RELATIONSHIP WITH A PERFORMANCE SOLUTIONS PRACTITIONER”

“Clients appreciate their ongoing relationship with a Performance Solutions practitioner,” says Hall. “But after 24 months or so, a company knows what we and MPS are all about. We will have helped them to develop model machines and processes. They will have had a chance to see all of the manufacturing basics that are so important to our operating system and to changing a plant’s culture.” As MPS expands across a company, the pillars and practices put in place by Performance Solutions practitioners — such as a daily management system, layered audit process, and accountability reviews — ensure that the changes already made can be sustained and improved further, with less Performance Solutions involvement.

Even the long-term improvements and organizational returns usually occur faster than most CPG executives imagine is possible. “First of all,” says Poole, “these companies are typically

stuck in a problem-fixing mode, and not a problem-solving mode of behavior. That means that five out of six problems aren’t really solved, because they don’t dedicate the right time and methodology to solve the problem permanently rather than just fix it. Second, they’re often working on the wrong things. They have lots of legacy activities, and work on these things for historical reasons that no longer apply. Even though these things are no longer a high priority, no one has ever reviewed them closely enough to say, ‘Why are we still doing this?’”

Poole says that Performance Solutions helps management “prioritize the ‘critical few’ things, and devote resources to them. By filtering out unnecessary activities and getting everyone involved, everything moves faster. We create a sense of freeing up time because everyone is focused on fewer but more important things.”

Performance Solutions and MPS Deliver Expanding CPG Results

The six-step MPS transformation roadmap provides early wins (and returns on investment) via the model area, and then helps a CPG company record increasing returns as the organization develops its own base of practitioners, who spread system pillars across the firm's portfolio of plants. The long-term returns are often far more significant than leaders expected.

"Many managers are unfamiliar with the zero-loss concept," explains Poole. "They've never measured losses in the way that Milliken measures them, and they've never made those losses visible before. But now they can dedicate resources to eliminating these losses, and they typically find huge amounts of hidden treasure — wasted dollars and profits — especially in the CPG industry."

Yet loss reduction is only one "hidden treasure" these companies find. Performance Solutions also helps CPG companies in growing revenues, too. "We're working with a client right now on revenue generation," adds Poole, "because they're capacity-constrained. They sell everything they can make, but they can't make enough. So we're working on increasing capacity on the production lines they have now." For many companies, increased capacity can eliminate plans to expand plants or build facilities.

Another hidden treasure is the engagement of every single employee. As managers and workers gain confidence with MPS and make it their new way to work, the rate of improvement accelerates. "This system builds everyone's problem-solving confidence," says Poole. "By unleashing the problem-solving potential of your people, you can dramatically reshape your organization."

The numbers speak for themselves: One client achieved approximately \$1 million in annualized savings during the model phase, and another \$1 million in annualized savings as replication proceeded. These cost savings come from the following types of operational improvements:

- 💰 Returns on investment (ROI) ranges from 7-to-1 to 37-to-1 ROI.
- 👍 Safety incidents in many plants at record lows
- 🔧 Equipment breakdowns reduced by as much as 75 percent
- ⬇️ Minor work stoppages reduced by 85 percent or more
- % Rework reduced by 50 percent or more
- 💧 Waste reduced by 70 percent
- 🔧 Equipment changeover times nearly halved.

The roles of managers and associates also change, as ownership of improvement initiatives is gradually assumed by frontline employees. Managers focus on future improvement opportunities, with breakdowns, lost-time incidents, and firefighting becoming things of the past. "We're helping CPG companies push knowledge and decision-making closer to the plant floor," says McIntyre. "Leaders can work on tomorrow's profits, instead of worrying about today's operations and problems."



Performance Solutions and MPS Deliver Expanding CPG Results

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 27 countries, and covering a wide variety of industries. Visit www.PerformanceSolutionsByMilliken.com to learn more about Performance Solutions' consulting and education services.