

Faster. Better. Safer.

Food manufacturers' investments in automation and continuous improvement are on the rise — and they're working.

The next time you buy crackers, you may find fewer broken pieces at the bottom of the box. And it won't be just dumb luck.

Fewer crumbs is one tangible result of the investments many food processors are making in automation, continuous improvement programs and other efforts to improve product quality and reduce production costs.

In all, capital spending by food processors was up a reported 6.2 percent in 2012 — the biggest jump in five years, according to an annual survey by *Food Engineering* magazine. These investments are paying dividends, with survey respondents reporting an increase in the production of salable products, along with less downtime and scrap materials, compared to just a year earlier.

First Step: Go Lean

With process automation, vision inspection systems and other game-changing technologies gaining wider use, some traditional food processors now find themselves scrambling to keep up, says Bill Sokolowsky, business development manager for the Burns & McDonnell Food & Consumer Products Group. He advises such manufacturers to approach their facilities' futures with an open mind.

"When their operations are outdated, manufacturers often presume they have just two alternatives: build a new plant or automate the old one," Sokolowsky says. "But these are not the only or even necessarily the best answers."

Before investing in wholesale changes, Sokolowsky suggests manufacturers find out how much additional productivity they might be able to squeeze from their current operations. Lean manufacturing initiatives or Six Sigma assessments can shine a new light

on what they already have, which can be the first step toward optimizing operations and eliminating waste.

For example, it's not uncommon for older plants to struggle with excessive downtime during process changeovers. Manufacturers often blame equipment, claiming it's not flexible enough. In fact, changeover time might be slashed by implementing more efficient cleaning methods or through better staging of the equipment needed for the new process.

According to the *Food Engineering* survey, continuous improvement efforts like these are increasingly common. Lean manufacturing initiatives are now in place at three out of every five plants that participated in the survey. Two out of five organizations are using total quality management, Six Sigma and total productive maintenance.

"While it's necessary to stay abreast of trends, it's more important for manufacturers to understand which ones will have the greatest impact on their operations, and continuous improvement initiatives help clarify that," Sokolowsky says.

Equipment that can be adjusted to produce different-sized packages with the press of a button, for example, may be indispensable to corrugated cardboard manufacturers. But at twice the cost of standard converting equipment, the productivity gains it delivers may not be worth the cost to a food processor with limited packaging needs.

Workforce Ramifications

There's another reason it makes sense for many manufacturers to optimize their current operations before making wholesale changes. Automation changes workforce requirements.

"It takes a smaller, but much more highly skilled workforce to troubleshoot electronic controls than to watch for defects in a production line and fix an occasional broken pump," Sokolowsky says. "That means companies have to invest in retraining their workforces."

The bottom line: Many manufacturing processes can be automated, but manufacturers must learn to balance the cost of the automation with the return on investment it delivers. Fewer broken crackers, it turns out, is only the beginning.

For more information, contact Bill Sokolowsky, 816-823-7108.



Burns & McDonnell can help food processors implement Lean manufacturing initiatives or Six Sigma assessments that can optimize existing operations and eliminate waste.