

USING REAL-TIME DATA ON WEIGHT CHECKS

# **MSI EXPRESS MAXIMIZES THROUGHPUT AND YIELD BY DIGITIZING PLANT MANAGEMENT**

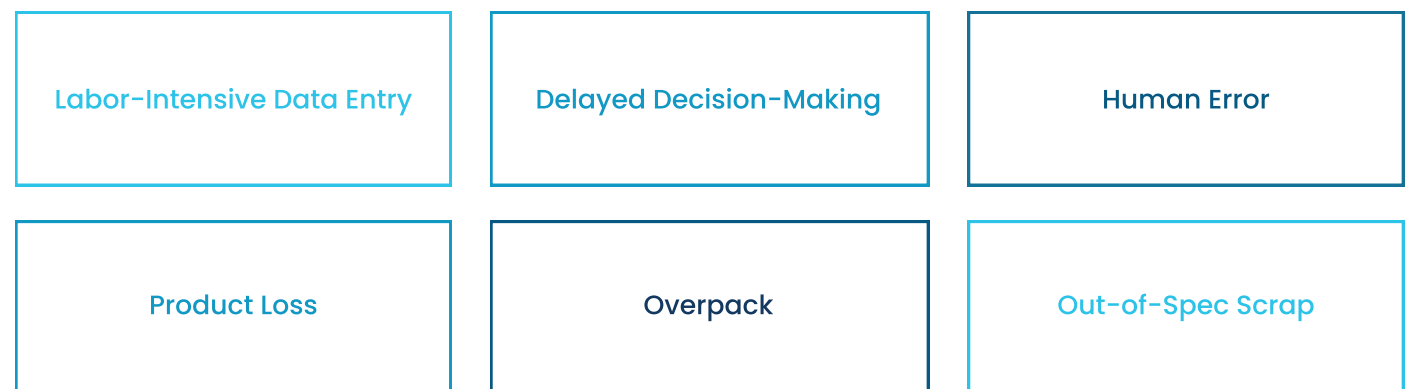




Statistical process control (SPC) charts have been around for decades. These tools use statistical methods and sampling programs to help plant and operational leaders understand and control variability in their manufacturing process. But, according to TheManufacturer.com, nearly 61% of manufacturers are using pen and paper within their facilities – leading to manual record entry in SPC charts and graphs, making it nearly impossible to view trends over time.

The main objective of SPC is to manage operations better and reduce waste and rework. Plant and operations managers benefit from SPC because it gives them the concrete information and clear markers needed to stop a line and fix problems before things spin out of control.

But, if an organization is collecting critical SPC-related data such as weight checks using pen, paper, and/or manual data entry, they're more likely to encounter issues like:







All of these mistakes are costly, impacting your bottom line, cutting into profits, and putting you in a position of noncompliance or at the risk of a costly recall.

Digitizing paper-based data collection processes and capturing automated data streams from machines and sensors (such as scales) insert real-time visibility into plant-wide operations. By unifying data from multiple sources, manufacturers can empower frontline workers to take decisive corrective action and provide data-driven insights to management. The resulting improvements will drive top-line growth, and maximize throughput and yield within the facility.

When SPC data charted in real-time is combined with alerts triggered if processes begin to trend out of spec, Operations can be proactive while the line is running — versus catching a potentially costly mistake when the run is already done.

In this download, we'll explore how MSI Express used SafetyChain to collect and trend weight data in real time, empower frontline workers to take decisive action, and provide data-driven business insights to aid management in driving top-line growth.





## Digitizing SPC Charting Helps MSI Express Save \$256,000 in Product Savings

MSI Express is a single-source contract manufacturing and packaging company. The company has a breadth of capabilities in all consumer packaged goods (CPG) categories, including dry foods blending, liquid packaging and bottle filling, vitamin and supplements, dry pet food packaging, and secondary packaging. In addition, they help a growing list of Fortune 500 companies and entrepreneurs streamline their supply chain and keep costs down.

### Manual SPC Charting Limits Visibility into Weight Trends

In their Burhman, Indiana plant, MSI Express packages overcaps filled with confectionary products for a well-known retail brand. They used to record all their weight checks on paper and during a product run, a weight-checker ensured that no light or heavyweights made it to the customer. Without access to real-time data and SPC charting, their goal was simply to comply with spec guidelines -- not maximize yield. As a result, they were unaware of any potential overpacking because they couldn't chart data recorded by operators during routine line checks.





### **30,000 Pounds of Product Overfill Discovered**

Product weight spec is between 10.5 g and 14g with a target of 11.5g per product piece. Once SPC was digitized and the team could physically see the weight trendlines on a dashboard, it was discovered that while the line started on target, by mid-shift the weight was averaging 13.5g. This meant 27,000 pieces of product were being overfilled by 2g of product per shift, which equals more than 30,000 lbs of product giveaway each year.

### **Business Impact: \$256,000 in Product Savings**

With SafetyChain, SPC charting for weight control records has been implemented across MSI Express' business network. The MSI Express team now has leadership review during the production run to ensure product weights are optimized, that rejected product percentages are tracked and managed appropriately, and that record sign-off occurs to demonstrate compliance to the targets in place on record submissions.

While the total savings across the MSI Express network is expansive, this one example of using digital trending and analysis has saved the organization \$256,000 on a single line in a single facility.



## About SafetyChain

SafetyChain is a digital plant management platform for process manufacturers trusted by more than 2,000 facilities to improve plant-wide performance. It unifies production and quality teams with data and insights, tools, and delivers real-time operational visibility and control by eliminating paper and point solutions. Used on the shop floor, SafetyChain connects operators, FSQA, maintenance, EH&S, and leadership with equipment and supplier performance.



Digital Plant Management Platform

[\[What is it\]](#) [\[Demo\]](#)

Statistical Process Control (SPC) Software

[\[What is it\]](#) [\[Demo\]](#)