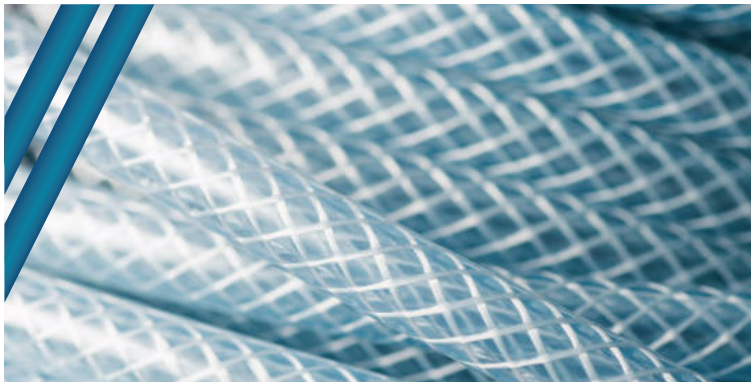
Case Study | Improving Production Quality by Reducing Scrap

The Challenge

Our client—a leading manufacturer of various extrusion products experienced a high rate of scrap on a continuously operated tubing line. This was resulting in production and fulfillment delays along with added costs. With multiple production lines, they requested direct support – time was of the essence!



Our Approach

With a vision towards long-term improvement, we immediately mobilized on-site to focus on current state of all lines and across all shifts. This was a critical step to understand the full impact before formulating improvements. Leading the team through a traditional kaizen work-out and multiple experiments developed strong ownership and camaraderie within all Production Shifts, Engineering, Maintenance, Planning and Sales.

Here's how we executed the engagement

On-site Observations and Assessment:
We first focused on current state and detailed problem solving – specifically, the deviation from known standards. Where standards were not developed, that became our focus. We also compared our observations with data that was collected as well as observations from Supervisors, Team Leader, Line Operators, Maintenance Technicians and Process Engineers and Sales Leaders. We were seeking the voice of everyone impacted.

Targeted Experiments:
Developing an Impact – Effort Matrix, we began conducting experiments to learn what was having the biggest impact on scrap. We focused on all aspects of the process from raw material, maintenance of tooling, production process steps and acceptance standards. As we led the entire team through these experiments, we closely monitored how we were collecting data and reviewing results – this was critical to ensure long-term positive results would be sustainable.

Fast Action – Immediate Results:
Using an approach to make incremental improvements all supporting the long-term goal of scrap elimination kept the team energized and engaged. Each one of our suggested improvements resulted in an improvement. This was critical to gaining buy-in and recognizing positive results.

Setting of the Standards:
Every improvement made, and process change was properly documented and the Team was trained. These focused on:

- New tooling and maintenance procedures
- Operator Planned Maintenance (OPM) to eliminate unplanned line interruptions
- Standardized line operation from raw material receipt through final packaging
- Product acceptance and Quality Standards

Long-term continuous improvement:
After initial positive results were realized, the process didn't stop. The team continued with a specific Plan – Do – Check – Act (PDCA) process focused on "the next experiment" to run and learn from.

OpX SOLUTIONS

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Results & Impact

Quality improved immediately! This team was able to see positive results in:

Reduced Scrap:
Scrap rate was immediately cut in half and over the course of this engagement, was reduced by 75%.

Improved On-Time Delivery (OTD) and Customer Satisfaction:
With the reduction of scrap, each line's performance immediately improved – orders began shipping on-time, back logs were reduced and Customers were receiving their shipments without delay.

Stronger Teams:
Not only did we work with the Teams on immediate results, but we also spent a lot of time training them on Lean principles and the importance of a methodical approach. This resulted in buy-in to the process along with a strong sense of ownership.

Conclusion

OpX Solutions – recognized as a leader in improvement – understood the need to focus on this project. But we also knew that this needed to be sustained to support the final Customer. With improved quality comes a multitude of other improvements. Our collaborative approach solidified our role as a trusted partner in their continued success.

