CASE STUDY - POLYURETHANE

A Higher-Efficiency Product. A World of Difference.

50%
MOLD CLEANING REDUCTION

50%
REDUCTION IN RELEASE AGENT CONSUMPTION

35%
COST REDUCTION

WHAT WE ACHIEVED.

When a large manufacturer of foam two-wheeler seats was facing the issue of high mold buildup — which required frequent cleanings that slowed production and caused accelerated wear to the molds — we were confident we could help. We replaced the less technically advanced release agent they were using with a higher-efficiency product that exhibited a consistent level of quality, reducing the consumption of the release agent by 50%. Mold cleanings were also cut by half, enhancing mold life and increasing their production efficiency. VOC levels on the shop floor and overall costs (a crucial factor for the manufacturer) were also lowered. Even more critically, we offered a solution that provided a safer work environment.

HOW WE GOT THERE.

Employing the highly analytical methods that Chem-Trend is known for, we conducted multiple trials with a product we had used to successfully decrease mold buildup for other customers. Our first trials were limited. We worked toward gathering accurate data, as the operator who was unaccustomed to using a higher-efficiency release agent that required a lower application rate gained more experience with the new product. We helped build confidence by providing shop-floor training to the operator. A longer bulk trial followed. Upon analyzing their daily production reports, we quickly saw a dramatic reduction in product consumption and mold cleaning frequency.

OUR SOLUTION.

The results were so impressive that after utilizing Chem-Trend's products and methods for just over half a year, they made the switch at their other plants as well. Reducing mold buildup with our release agent caused a domino effect: cleanings were slashed by half, which decreased downtime and extended time between mold replacements. All of these changes led to significant monetary savings. Overall, we were able to reduce the production costs of their foam components by 35%. Additionally, the health, safety, and environmental aspects of the customer's facility were improved through our product's lower VOC levels.

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HANDPRINT IMPACT

At Chem-Trend, we pride ourselves on our long history of sustainability efforts. However, it is our effect on our customers' processes that provides the greatest impact. It goes beyond our global Footprint; it is our even wider Handprint.

Here, we achieved the following:

- Reduced energy consumption due to lower levels of transportation required by decreased release agent usage
- Reduced waste of cleaning supplies due to fewer required cleanings
- Reduced energy waste due to decrease in downtime
- Equipment life span improvements, allowing for a long-term reduction in materials
- Lower VOC levels

Materials Emissions Waste Energy

For more information about our polyurethane capabilities, our innovations, or other stories, visit CHEMTREND.COM