Case Study

Driving Operational Excellence for a U.S.-Based Plastics Manufacturer

Client Background

A mid-sized U.S. plastics manufacturer specializing in precision components engaged Plasteck Consulting to perform a comprehensive operational assessment. The company faced increasing scrap rates, inconsistent processes, and safety compliance concerns, all of which threatened efficiency, profitability, and customer satisfaction.

The Challenge

- Outdated infrastructure (ventilation, lighting, utilities)
- Underutilized and poorly maintained injection molding equipment
- No structured preventive maintenance or process validation
- Tribal knowledge driving operations instead of standardized training
- Safety gaps including incomplete OSHA compliance and missing PPE protocols
- Scrap and defect rates undermining profitability and customer trust

Plasteck Consulting's Approach

Plasteck Consulting conducted a 2-day on-site diagnostic audit covering the physical plant, equipment and tooling, staff skills, operational systems, quality & safety, and customer impact. The deliverable was a detailed assessment with prioritized recommendations, capital improvement requirements, and a roadmap for training and compliance.

Key Findings

Strengths	Weaknesses
Solar integration reduced energy costs	Scrap rate and lack of process validation
Facility layout allowed expansion	Outdated cooling tower & no material
Basic recycling in place	drying systems
	No preventative maintenance program
	OSHA safety non-compliance
	Staff lacked formal training

Results & Impact (Projected)

- 30–40% Scrap Reduction $\rightarrow \sim$ \$400K annual savings
- Improved Equipment Uptime → 15–20% more availability
- Regulatory Compliance → reduced OSHA risk exposure
- Operational Efficiency → streamlined scheduling & reduced downtime
- Customer Retention → stronger delivery performance and quality consistency

Why This Matters

This case illustrates how structured, data-driven evaluations uncover hidden costs and risks that erode profitability. By providing a roadmap tied to ROI, Plasteck Consulting transforms operational challenges into actionable steps that drive measurable improvements.