Business Value of Al in Plastic Molding Processes



Modernizing operations by leveraging solutions like AI is a competitive advantage that plastics manufacturers cannot overlook, especially with emerging competitors like bioplastics, paper, cardboard packaging, and natural fibers.

Current State of Plastics Manufacturing

Factors such as supply chain disruptions, rising material costs, skilled labor shortage, and sustainable pressure are converging and pushing the need for the adoption of advanced technologies to support the advancement of the production process.



11% Turnover Loss

Annual losses amounting to \$1.5 trillion due to unplanned downtime highlight the need for more efficient processes1



20-40% Production Costs

Attributed to material overuse and waste, these costs emphasize the importance of process optimization3



82% Equipment Failures

Traditional monitoring systems lead to costly equipment failures, highlighting a \$20 billion annual loss⁵



91% Resource Scarcity

Companies experience significant material shortages, underscoring supply chain vulnerabilities²



85% Resin Cost Increase

The dramatic rise in resin costs in 2023 requires more efficient material utilization strategies4

Plastics processors aren't exploiting around 98% of the data available to them about their operations. By using sensors, AI, physics, and embedded domain expertise, they can understand every aspect of their operations and processes. That's the holistic picture they need to

understand exactly how to

peak performance.⁵

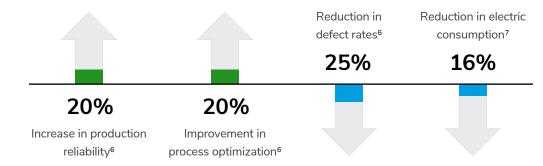
make their companies run at

Plastic Molding Processes Ripe for Innovation

In an industry driven by efficiency, leveraging AI in the plastic molding process provides plastics processors with significant bottom line benefits.



in savings by reducing molding defects across multiple failure types simultaneously









Operators that have applied AI in industrial processing plants have reported a 10-15% increase in production and a 4-5% increase in EBITA.8

CLIENT SUCCESS STORY

How a Plastic Injection Molding Factory Reduced Scrap Rate by 25%

A leading plastics manufacturer was experiencing unusually high defect rates in one of its specialty product lines. Using ProcessMiner, an AI process optimization platform, the company reduced scrap rates more than 25%, achieving a six-figure annual savings per line.

READ MORE



Leverage the Power of Al

ProcessMiner delivers quantifiable improvements in efficiency and productivity for continuous and semicontinuous manufacturers. ProcessMiner's turnkey solution offers seamless integration with existing systems and infrastructure and does not require staffing data scientists to run and provide real-time insights and data-driven decisions.



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About ProcessMiner

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This results in improved quality and productivity while reducing consumption and waste of both raw materials and energy, ultimately contributing to organizational sustainability goals.







