

Injection Molding Machines

MicroAI's Machine Intelligence Reduces Waste and Improves OEE in Injection Molding Machines

Many manufacturing companies utilize injection molding to mass produce the plastic components used within their products. An Endpoint AI solution is needed that will fully optimize the performance of mission-critical injection molding machines.

Current Needs



Deeper Machine Observability

The ability to actively observe the critical performance parameters and health of an individual machine and/or groups of machines.



Predictive Maintenance

A transition from preventive/reactive maintenance to a predictive state that would eliminate production loss resulting from unnecessary machine downtimes.



Longer Asset Lifespans

The ability to extend the lifecycle of expensive capital assets via AI-enabled asset lifecycle management.



Improved OEE

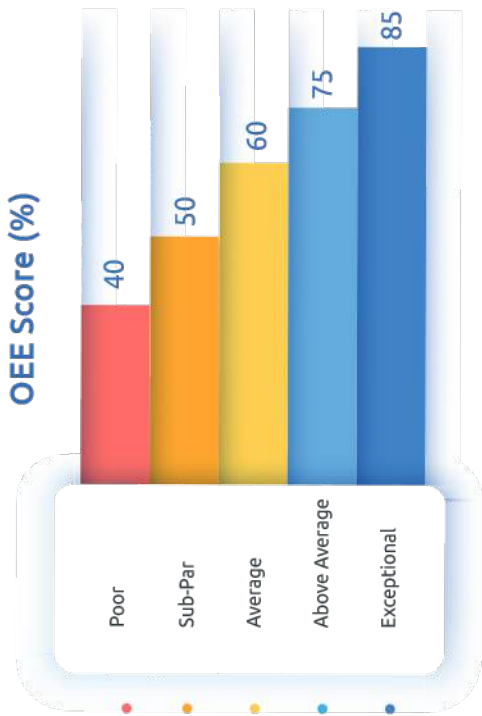
The means to break the 70% OEE (overall equipment effectiveness) barrier.

The Solution Machine Intelligence

Machine Intelligence is a self-contained Endpoint AI platform that provides quick implementation, low resource consumption, and fast ROI. Business and operational value includes:

-  Ability to digitally visualize the entire IMM process...in real time
-  Ability to quickly identify root causes of machine and process anomalies
-  Intelligent workflows that automatically generate fault alerts
-  Improved control of IMM material usage and ~ 70% reduction in waste
-  Predictive analytics that support predictive maintenance routines
-  Improved OEE scores that drive operational efficiency





Improving OEE for Injection Molding Machines

Poor Frequent, unplanned down-times. Low and inconsistent output. High scrapage rate. Long delivery lead-times. Short asset lifespans. High operational costs.

Sub-Par Minimal OEE control. Continued reliance on reactive maintenance. Product output still less than normal capacity. Inconsistent quality of products produced. Costs still too high to be competitive.

Average Operationally average. Machines and processes operate at average rates. Typically, still reliant on manual maintenance processes. Have reached a state where embedded intelligence is needed to further maximize performance.

Above Average Some advanced OEE control mechanisms in place. Assets and processes are performing above the norm. Some predictive analytics are in place. Assets are better managed, producing longer lifespans.

Exceptional Embedded and Edge intelligence are being used to provide best-in-class OEE scores. Transition to predictive maintenance has been completed. True operational excellence has been achieved, producing segment-leading costs and pricing.

Return on Investment

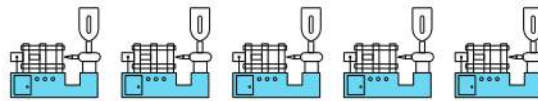
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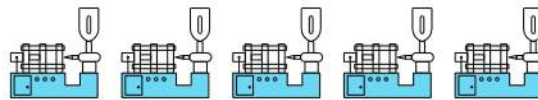
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\$1,000,000
Annual Throughput

55%
Variable Cost Ratio



Injection Molding Machines



Result with **MicroAI**

10%
OEE Growth

\$12k
First Year Cost of Solution

\$33,000
Profit from increased production

275%
ROI after year one

Businesses putting their trust in MicroAI



From automation to intelligence

To learn more about how Machine Intelligence will transform the output, efficiency, and predictability of your injection molding machines, visit <https://micro.ai/> to schedule a consultation and a demo.

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Visit www.micro.ai to access to our SDK. Send all technical inquiries to: support@micro.ai

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