

Case Study

Improving Productivity – Sharing Knowledge with mroAdvisor™

- Sector:** General Manufacturing
- Company Size:** Maintenance operations with 5 to 25 employees
- End Results:**
1. Return-on-Investment was less than one (1) month.
 2. The facility increased production throughput by 19.3% on two key products.
 3. Unnecessary weekend overtime was eliminated.



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Perspect Analytics Inc. is a software and solution company with a sole focus on developing innovative analytical solutions to improve all areas of the Maintenance, Repair and Operational (MRO) operations. The goal is to eliminate non-value-added MRO activities while creating a responsive, data-driven continuous improvement culture by leveraging state-of-the-art AI/ML technologies.

Actionable | Measurable | Sustainable | Adaptable

The Opportunity

The reliability of a newly installed critical automated machine cell used by two key products was poor, causing unnecessary overtime resources to make up the production throughput required to meet contractual agreements. The newly automated machine cell was implemented twenty-one (21) months earlier. The plant manager tasked the maintenance and engineering manager to improve equipment reliability on the key automated machining cell.

The Approach

To meet the mandates, the maintenance and engineering manager had the production operators documented all unexpected equipment outages. The maintenance team was asked to provide detailed information on the work order for all work and equipment set-ups completed, including spare part usage and comments by all maintenance crew member.

When reviewing the data provided by maintenance and operations, it became evident that the tradespeople and operators did not have adequate knowledge, skills, or tasks (KSTs) to troubleshoot and maintain the equipment. A deeper look at who were trained with the initial implementation to operate and maintain the automated machine cell highlighted that all employees who were trained were no longer with the company or had moved to another department. The underlying cause of the poor equipment reliability was the gap between the team’s KSTs and what the equipment systems required.

A real-time process was implemented to share knowledge to operate and maintain the equipment according to OEM standards. This included troubleshooting, setting up, and maintaining the equipment systems. An escalation process with the OEM to assist the maintenance team was implemented.

The Results

The duration of the equipment reliability project was three (3) months. The after results show the first two weeks after project completion.

Benchmark Month			
Measure		Before	After
Unexpected Outages (two weeks data)		48	11
Average Duration of Unexpected Outage (minutes)		63	26