Client: Automotive Parts Manufacture   **Location:**   Tennessee   **Report:**   CI-216

How using KPI for condition based PM can achieve big cost savings

Problem:

In an effort to minimize coolant related process performance and HS&E risk, this client was using an aggressive PM program to maintain the condition of their systems.

Objectives:

Move to a data driven condition based program that identifies the specific KPI's and KPI limits that impact process performance on a machine by machine basis in order to let fluid analysis drive the total process cost.

Current State:

- This facility has over 130 stand-alone coolant applications. Using a contract labor force, the facility was using operator requested fluid clean-outs to keep from having fluid related quality or HS&E related issues.
- Management knew that this practice was wasteful resulting in excessive coolant use, significant generation of waste water and seriously impacted their OEE by all the downtime caused by the frequent cleanouts. They also knew that some machines weren't being cleaned out often enough as all decisions were subjective and driven by the wrong reasons. They knew that in the absence of data there was no opportunity to actually improve their current state.

Current State Metrics:

- Over 200 Clean-outs per month
- 11 totes of coolant consumed per month
- $1.92 total cost per housing per month
- 10,000 Gallons of coolant related waste per month
- Unknown but significant impact on OEE

Implemented Changes:

- By implementing a data driven, KPI-based program, we were able to assist in significantly reducing direct fluid cost, waste volumes, while improving machine up-time and production.
- Moving from a tribal based to a condition based mind set was a tough challenge, however repeated reinforcement, daily measured compliance, and strict adherence to control plan execution eventually let the operators put their faith in the data vs relying on their perception to drive this impactful aspect of the business.

Data Driven Execution

Robust Systems

Specialised Expertize

Z-TPM
Zimmark Technical Process Management

Tightly controlling the KPI's that impact Performance and Cost in an effort to Maximize OEE and Minimize the Total Process Cost (TPC)

Results:

- Average of 57 Condition Based Clean-outs per month (>70% reduction)
- 3 totes of coolant consumed per month (73% Reduction)
- < $1.00 total cost per housing per month
- 3,550 Gallons of coolant related waste per month (65% Reduction)