

USE CASE

Comprehensive Battery QC



CUSTOMER

Leading Manufacturer of Primary, Consumer Batteries

NEED

- Develop a holistic understanding of all factors impacting battery quality
- Better control maintenance requirements
- Create a stronger connection between operations

OUTCOMES

- Improved maintenance cycles of equipment
- Less unplanned downtime
- Improved overall equipment efficiency

CHALLENGES

- Change Management: Cross departmental collaboration between operations and plant maintenance required, which traditionally work independently, but data generated in one area needed to inform the other
- Technical: Make pump failure prediction more reliable and develop a robust maintenance schedule that optimizes maintenance during planned downtime.

PROCESS

- Collection of IoT data from sensors, cleansing and aggregation of data
- Development of a 30-parameter pump health model with defect detection data from QC fed into the model. The model was trained to detect anomalies and deployed to the shopfloor.

SOLUTION

AI model that links data from quality control and maintenance to generate a holistic picture of pump health that allows catching emerging issues earlier.