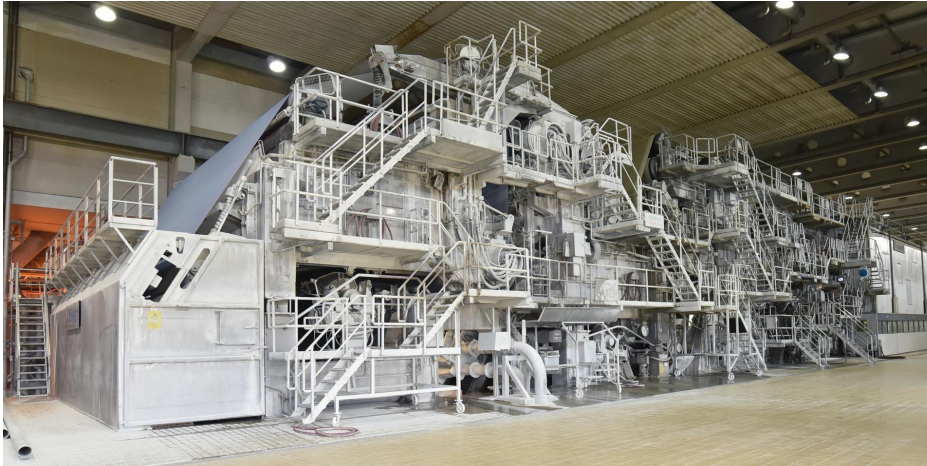


RENGO'S REVOLUTIONARY SHIFT TO PREDICTIVE MAINTENANCE WITH ADI OTOSENSE SMS

As part of ADI's strategic partnership with Macnica, Rengo pioneers a new era of efficiency in the paper and pulp industry.



BACKGROUND

In the competitive realm of paper & pulp manufacturing, where operational downtime can be catastrophic, optimizing efficiency is imperative. For industry giant Rengo, this pursuit of excellence began with a strategic partnership with ADI OtoSense and their Smart Motor Sensor (SMS) solution. The adoption of this advanced Predictive Maintenance (PdM) technology marked the inception of Rengo's journey towards proactive asset management and improved cost efficiency.

Faced with unpredictable equipment failures jeopardizing productivity, Rengo took proactive steps to transition from traditional to predictive maintenance practices. The implementation of ADI OtoSense SMS was a pivotal move, positioning Rengo as a leader in embracing AI-driven maintenance solutions.

ADI OtoSense SMS offers a robust solution by providing continuous health monitoring of critical induction motors. Designed to deliver instant, actionable insights into motor health, this system equips paper and pulp plants like Rengo with unparalleled predictive maintenance capabilities. With this technological edge, Rengo exemplifies the transformative impact and advantages of predictive maintenance in the industry.

CUSTOMER STORY:

END USER



USE CASE

Critical motors on paper machine

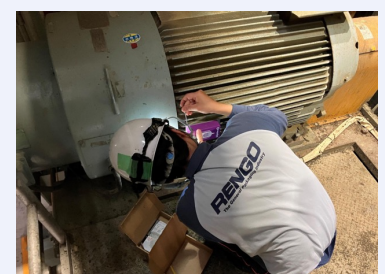


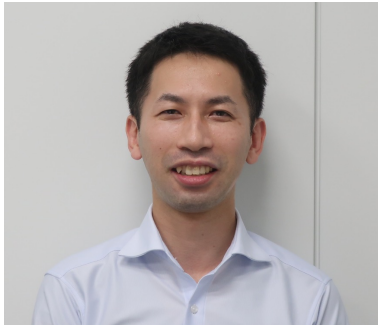
CHALLENGES

Rengo's paper manufacturing processes, heavily reliant on motor-driven rollers, were particularly vulnerable to sudden equipment stoppages. Traditional maintenance, based on human senses, posed limitations due to variability in experience and skill among personnel.

SOLUTION

The implementation of ADI OtoSense SMS represented a significant technological advancement. This AI-based solution facilitated a transition to predictive maintenance, offering real-time alerts and diagnostics to optimize maintenance resources and improve quality.



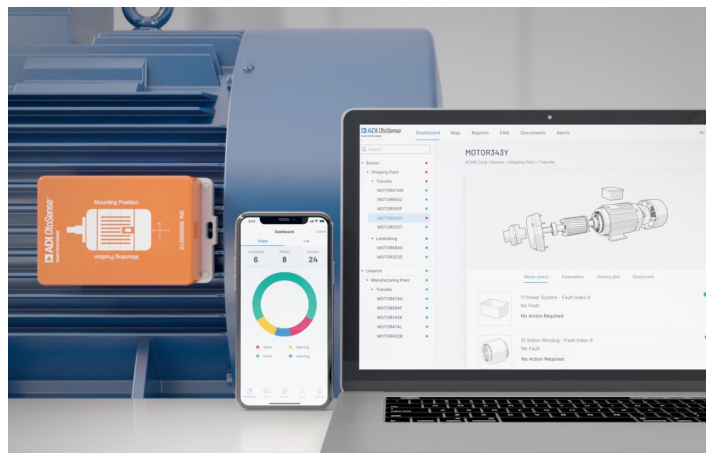


"We've transitioned from reactive to proactive maintenance, optimizing operations and predicting equipment failures. ADI OtoSense SMS has been pivotal in reinforcing our commitment to quality and efficiency,"

Naoya Dozono
Engineering Development Group
Paperboard Business Unit
Rengo Co., Ltd.

ADI OtoSense Smart Motor Sensor reduced overall costs:

- Reduces unforeseen downtimes and avoids catastrophic failures
- Extends period between overhauls
- Reduces route-based activities & optimizes maintenance resource allocation
- Manages spare parts and stock more efficiently
- Increases lifetime of your equipment
- Optimizes motor efficiency
- Improves OEE (Overall Equipment Efficiency)



Benefit of ADI OtoSense Smart Motor Sensor:

1. Advanced diagnostics for prioritized action items

- Electrical and mechanical faults are diagnosed
- Level of severity helps prioritize required maintenance
- Recommendation on required actions

2. Sensing technologies for high quality

- Multi-axis, wide bandwidth vibration sensors
- Magnetic field sensors monitor electrical health
- Temperature sensors monitor ambient and motor skin temperature

3. Machine learning creates motor models during operation

- Combines and interprets high quality, sensing data for higher reliability diagnostics
- Automated model creation agnostic to motor brand
- Customized model learns motor operation and interaction with

