

PULP AND PAPER

ABB Ability™ Asset Condition Monitoring

Increase operational and cost efficiency with accurate prediction of mill maintenance needs



Mills have thousands of production assets – from sensors and motors to complex equipment like drives and web monitoring systems. Asset data can be analyzed to help identify the right maintenance activities, enabling better planning and decision-making. ABB Ability™ Asset Condition Monitoring provides a maintenance-oriented solution to help monitor and analyze asset conditions 24/7.

Overview

Built on over 100 years of pulp and paper process know-how, ABB Ability™ Asset Condition Monitoring provides complete and continuous visibility of your assets' health, using data to predict maintenance needs, as well as detect, predict and/or quickly solve failures.

The digital application gathers previously disparate data from a variety of production equipment and curates analyzed information onto dashboards. Operations, automation and maintenance personnel gain an overview of equipment status and prioritized alerts based on criticality, helping to avoid unplanned downtime and guide maintenance actions based on business impact.

A solution tailored to your needs

To achieve your production goals, our team has established a balanced plan to develop, implement and operate your long-term asset management solution. ABB Ability™ Asset Condition Monitoring is scalable and can be implemented in a phased approach by enabling

mills to select condition monitors that align to focus areas from the ABB AbilityTM Asset Library Suite (automation, instrumentation, etc).

Features

- · Proven maintenance methodologies
- · Asset monitor library with demonstrated results
- User-friendly and maintenance-oriented dashboards
- · Detailed reports printed on demand
- ABB Ability[™] Asset Library Suite, which enables scalable implementation by area (automation, electrical, etc.)
- Built on 800xA Asset Optimization

Benefits

- Increased operational and cost efficiency
- · Breaks up information silos
- Ensures smooth integration between operation, automation and maintenance
- Helps avoid excess maintenance and unnecessary exposure to hazardous areas
- · Improves mean time to repair
- · Reduces unplanned shutdowns

Figure 1



- 1. Severity level distribution
- 2. Condition classification for quick decision support
- 3. Identifying assets requiring attention
- 4. Sub-condition tracking
- 5. Critical asset tracking
- 6. Maintenance action navigation bar (ECI/Mechanical)
- 7. Asset grouping (plant area/criticality/structure/custom)



- 1. Number of events by severity level for decision support
- 2. Asset condition statistics by severity level in %
- 3. Top 10 critical assets
- 4. Top 10 critical conditions
- $5. \ \ Charts for easy visualization of asset condition statistics$

Maintenance and process improvement at your fingertips

ABB Ability™ Asset Condition Monitoring provides all relevant data in a user-friendly, real-time dashboard, as well as detailed reports printed on demand.

The user-friendly, real-time dashboards present the condition of important production assets based on their hierarchical diagrams and a criticality analysis of equipment components (figure 1).

Equipment condition monitors are designed to consider failure modes, available control system data, pre-installed expert condition monitoring systems and data sheets. Based on this evaluation, ABB Ability™ Asset Condition Monitoring helps prevent unnecessary maintenance that both helps to reduce costs and minimize exposure of personnel to work situations in hazardous process areas. If an equipment failure occurs, easy-to-use root cause analysis and reports provide quick detection to reduce production losses.

How it works

Evaluation: In an on-site assessment, we listen to and understand your needs.

Design: We define suitable tactics and an appropriate mix of technologies.

Implementation: We deploy your designed solution for online condition monitoring.

Measurements and optimization: We deliver expected results through remote evaluation and periodic reports. After implementation, we keep your application updated and support your maintenance team so they can focus on daily business.

Increase proactive and predictive maintenance and maximize your return on investment with ABB Ability™ Asset Condition Monitoring. Contact your ABB sales representative today to get started.