PRODUCT DATASHEET

CONDITION MANAGEMENT

Reduce Unscheduled Downtime and Shift From Reactive to Proactive Maintenance

Condition Management software is a unique, intelligent, real-time software solution that collects and analyses real-time diagnostics from all plant production assets. Condition Management software drives appropriate actions to improve overall asset performance and manage the corresponding operations, engineering and maintenance activities.

Summary

- Connects the control, safety and maintenance environments of a plant
- Integrates to AVEVA Enterprise Asset Management solution as well as solutions such as IBM Maximo® and SAP/PM
- Assists in managing the complexity and risks in today's manufacturing environments
- Leverages large amounts of condition information available from devices, systems and process readings and alarms that come from all sources in the plant

Condition Management software provides early failure detection to increase asset availability, reduce costs and avoid unnecessary maintenance and downtime.

Deal with Complexity in Your Operations

Condition Management software deals with the complexity of your operations by supporting many devices and assets from different suppliers. The solution also helps organisations move from a reactive to a proactive maintenance environment by predicting and correcting issues before they affect the plant. Condition Management software is an integral part of the Foxboro® EVO™ Control System, providing one of the critical links between operations and business systems — a fundamental element in delivering on the promise of Asset Performance Management.

In today's manufacturing environment, companies are constantly striving to meet growing production demands with current equipment and facilities while continuing to reduce costs in order to deliver the maximum return on assets (ROA). To accomplish this, organisations must find the optimum balance between availability and utilisation, while fully addressing all of the risks (regulatory, environmental, health and safety) inherent to operating in today's complex environments.

To effectively manage within this requirement, there are four major challenges:

- Moving to a proactive and predictive model for operations and maintenance
- Dealing with complexity
- Knowledge management and the complex issues of an aging workforce and staff turnover
- Improving communication and coordination between operations, engineering, maintenance and the other business functions to ensure that all decisions are aligned to deliver the maximum return

Delivering this balanced and integrated view is the focus of the Asset Performance Management (APM) solution, where Condition Management software is one of the key enabling products that deliver directly to these challenges.

Real-time Condition Management software

Condition Management software builds upon its award-winning technology to provide the collection of real-time condition data from an even broader range of plant data sources, and to interoperate with the full range of AVEVA and third-party applications supported through the application environment.

Condition Management software delivers a wide range of benefits:

- Avoids unnecessary maintenance by moving to both Condition Based Maintenance (CBM) and a Reliability Centered model for Operations and Maintenance (RCO/RCM). Over 25% of maintenance done today is unnecessary and can introduce additional failure risks.
- Provides early failure detection to increase asset availability, reduce costs and avoid unnecessary downtime. Unplanned outages represent an average of 5% in lost production, where the impact is often much more significant.
- Supports continuous improvement through an integrated workflow management capability, ensuring accurate and consistent response to developing conditions.
- Provides operations, engineering and maintenance personnel with easy access to current asset information for better decision making.
- Collects and analyses data on asset conditions to help optimise asset contribution over its full life cycle.
- Provides integration with the control, safety and maintenance environments.
- Leverages the latest Microsoft.NET technology to provide easy-to-use asset intelligence and business intelligence information.

Optimise Operations and Maintenance

Operations and maintenance personnel routinely make asset-related decisions which directly affect the company's production and business goals. Stockholder equity, quality control, lean manufacturing and customer satisfaction are all impacted by these decisions. That is why arming your operations and maintenance employees with current asset information is so important. Condition Management software provides the critical link to your real-time plant floor data, making relevant information available to the people who need it in order to keep your organisation profitable.

AVEVA APM Portfolio

AVEVA offers an end-to-end solution that manages the collection of data from any number of sources, incorporates advanced analytics technology that combines machine learning with analytic rules and provides a complete asset management platform to manage asset lifecycle and maintenance processes. It also includes a variety of interactive visualisation capabilities for presenting this information in intuitive ways on mobile devices and platforms.

No matter what level of maturity your organisation has achieved on the Maintenance Maturity Pyramid, AVEVA products can move you one step closer to asset performance excellence. The comprehensive offering is equipment and vendor agnostic for seamless integration with existing equipment and technologies, enabling you to maximise the value of previous investments through proactive asset health and performance monitoring.

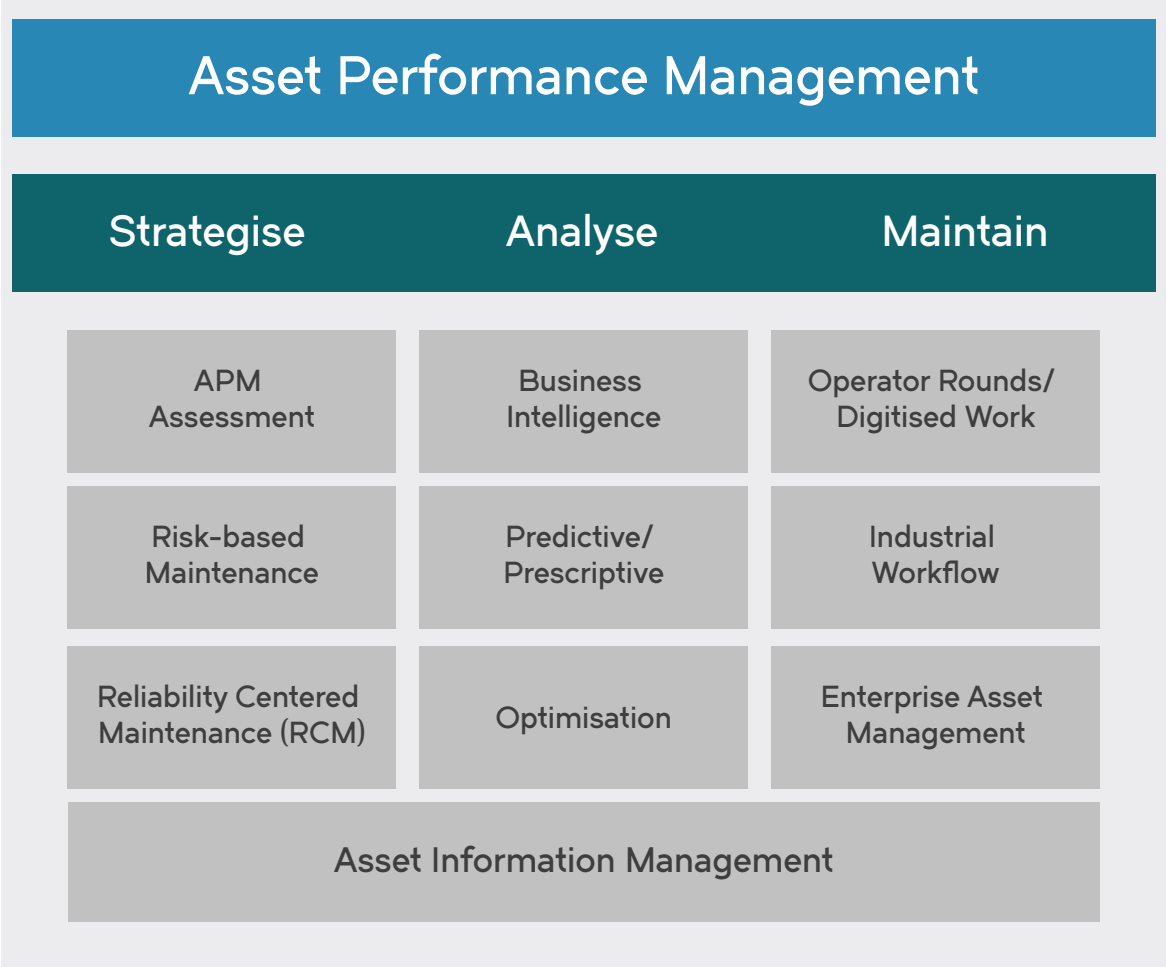

Figure 1: Condition Management software - Architecture

Asset Performance Strategy

Developing an APM strategy enables companies to balance asset utilisation, cost control, and regulatory compliance, and shows how people, processes, and technology can drive optimal performance. We offer comprehensive APM Assessments, Consulting Services and Risk-based Maintenance to help our customers optimise their APM strategies.

Asset Information Management

Bridge the IT/OT information gap, improve data access throughout the enterprise, and enable actionable insights with enterprise data management and reporting solutions available on premise or in the cloud.

Asset Analysis

Maximising return on capital investments, including ensuring assets are running as safely and reliably as possible, is key to improving profitability. Proactive and predictive maintenance empowers personnel to act before costly failures or downtime occurs. Our comprehensive analytics solutions enable customers to proactively plan maintenance and reduce costs.

Asset Maintenance

World class Asset Management is the foundation of an APM strategy. We offer advanced solutions leveraging cloud, mobility, and augmented reality to transform and empower the mobile workforce, increase collaboration, provide comprehensive asset and materials management, and efficient maintenance execution to optimise the availability of all assets.

ADDITIONAL PRODUCTS AVAILABLE

AVEVA offers a comprehensive portfolio of software solutions that integrate with Predictive Asset Analytics, including mobile applications, data historians, condition management systems, EAMs, and more.

SmartGlance Mobile Reports

Integration with Predictive Asset Analytics enables users to monitor the performance of critical assets on-the-go from any mobile smartphone or tablet. The SmartGlance App allows users to view and analyse data and alerts—anywhere, anytime and from any device.

Enterprise Historian

Enterprise Historian is a real-time enterprise data historian that bridges the IT/OT information gap. It collects, stores, displays, analyses and reports on operational and asset related health information for more timely and informed decisions.

Mobile Operator Rounds

Mobile Operator Rounds is the most comprehensive mobile workforce enablement and decision support system. It enables consistent execution of Operations, Maintenance, and Inspection activities to achieve higher levels of plant safety, regulatory compliance, availability, reliability and performance.

Condition Management

Condition Management is a unique, intelligent real-time condition management system solution that collects and analyses real-time diagnostics from all plant production assets using rule based logic. The results drive a condition-based maintenance strategy.

Enterprise Asset Management

Enterprise Asset Management (EAM) solution comprised of a set of integrated modules designed to enable improved asset reliability and real-time access to information to manage maintenance and supply chain operations.

Monitoring and Diagnostic Services

Reduce maintenance costs and capital expenditures by leveraging our Monitoring and Diagnostics Services Center for remote monitoring of your industrial assets as a service.

Risk-based Maintenance

The Risk-based Maintenance software module generates optimised maintenance and spare parts strategies by first looking at the company's business strategy and objectives, and then prioritising actions down to an individual asset level to maximise return on asset investment.

APM Assessment

The Asset Performance Management (APM) Assessment enables clear understanding of the current status of the business and where improvement opportunities will provide the quickest financial return which results in a comprehensive action plan to execute against.

Control of Work

Plan and perform safe, compliant working on complex engineering assets. AVEVA Control of Work enables asset operators to eliminate, minimise or mitigate operational risk while optimising asset performance.

For more information, visit:
sw.aveva.com/asset-performance/asset-analysis/predictive-asset-analytics

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