In a global economy with tightening regulations, achieving long-term success requires companies to develop an intimate knowledge of their business and assets. Adopting Industry 4.0 and Industrial Internet of Things concepts enables connectivity between people, processes, and equipment for a comprehensive view of where improvements and efficiencies can be made.

AVEVA Asset Strategy Optimization enables a comprehensive view into current asset performance to identify improvement opportunities, perform analyses and simulation to determine the best maintenance strategies, and visualize deployment effects. A key component of our comprehensive Asset Performance Management platform, AVEVA Asset Strategy Optimization is used by companies all over the world bridging OT and IT disciplines to enable digital transformation that drives business objectives and delivers tangible results with clear long-term benefits.
Defining the best way to manage your production assets is a key success factor in achieving your business objectives. AVEVA Asset Strategy Optimization uses smart APM technology to improve insight into operational performance and to reduce time to value, with less effort. The software enables you to create and analyze the effects of different asset management strategies, providing clear insight into the consequences, results and benefits related to asset availability, HSE compliance, productivity, and profitability. Asset Performance optimization has never been easier or more efficient.

Features and Benefits

AVEVA Asset Strategy Optimization incorporates FMECA/Reliability Centered Maintenance (RCM), Spare Part Optimization and Root Cause Analysis (RCA) functionalities with intelligent dashboard and reporting functions. The solution includes Asset Strategy Libraries for rapid build-up and deployment of asset hierarchies through simple drag and drop menus, as well as efficient spare part optimization. The software facilitates data management and allows asset data to be easily reviewed and managed.

With asset safety and reliability as the starting point, AVEVA Asset Strategy Optimization delivers significant cost savings and efficiency gains at remarkable speed.

Actual Cost Benefits Achieved:

- 30% Decrease in CAPEX
- 50% Maintenance & Inspection Cost Reduction
- 25% Reduction in Spare Parts Cost
- 15% Increase in Asset Availability
- 30 - 60% Less Equipment Opened During Turnarounds
- 80 - 95% Failure Risk Reduction
Improve asset performance by integrating Risk Based Maintenance to your EAM system. AVEVA Asset Strategy Optimization generates optimized maintenance and spare parts strategies by looking at the big picture first and then prioritizing before getting to the relevant details for each asset.

The software provides real-time data and analyses asset behavior down to component level if necessary to arrive at the optimum APM strategy based on facts and acceptable risks. Statistics can also be modified and updated to reflect experience and insights. With open integration to existing systems. The software connects seamlessly with EAM solutions for direct integration with daily work procedures, maintenance planning and spare parts management. The solution also enables quick and complete RCM studies based on asset criticality.

AVEVA Asset Strategy Optimization interfaces seamlessly with existing EAM systems, to enable users to get the most out of existing investments and speed up installation, implementation and deployment.

- Simulate maintenance strategies to calculate effects and ROI over the entire asset life cycle and export strategies directly to the EAM system for planning and execution
- Comprehensive Root Cause Analysis (RCA) for incident logging, solution definitions, and secure prevention – including an average 1:30 ROI within a year
- Asset Strategy Libraries built with 20 years’ worth of equipment reliability data, in order to speed up deployment time (up to 90% improvement)

Integrating risk management to EAM system brings a systematic approach to continuous improvement.
The Journey Starts with Quality Data

AVEVA Asset Strategy Optimization data insights represent the strategy component of executing the journey to reach your business objectives. Productivity, safety, quality, compliance, and cost efficiency start with knowing the facts about current performance and where improvements can have the biggest impact on bottom line. Understanding the criticality of your assets, what deserves priority and what can wait to be serviced, can be crucial in today’s increasingly competitive markets.

The Reliability Centered Maintenance (RCM) module offers direct insight into the effects of specific failures on reaching business objectives. Such acute awareness of consequences results in informed and timely decisions about cost savings, based on acceptable risk. RCM enables rapid criticality analysis, a first assessment to find the right way forward immediately and prevent wasting resources on what initially seemed important.

Hit the sweet spot with optimized maintenance based on acceptable risk.
If high-quality data is the key to successful asset management, companies need the means to collect and manage that data. AVEVA Asset Strategy Optimization allows you to structure, manage and use asset-related data in the most effective manner imaginable. In a highly structured process, data is laying the foundations for your ideal maintenance strategies. Decision-making is greatly simplified by quickly comparing existing strategies to industry libraries, best practices and the state of your assets.

AVEVA’s Asset Strategy Library ensures rapid deployment by adding 20 years of failure mode data to complete the asset data. The asset library contains RCM-based equipment failure data and preventive maintenance (PM) templates for the top 100 most commonly found asset types in asset-intensive industries:

- 1,000 components
- 1,500 failure causes with failure conditions
- 2,000 preventative tasks
- 5,000 prescriptive tasks
- 20 years and 22,000 man-years of experience

Laying the Foundation
Once running, the solution allows users to explore all investment, production and maintenance scenarios to determine the best way forward.
Maintenance Strategy Defined and Deployed

Systematic Reliability Centered Maintenance analysis leads to development, sharing, and deepening of the knowledge of your assets. The solution helps to define acceptable risks, your maintenance strategy, and the best route to your business objectives. Decisions on capital-intensive replacements can have a high impact on profitability and continuity. RCM also shows when ageing assets become too expensive to maintain, and calculates the impact of different renewal scenarios on CAPEX and OPEX.

Predict Outcomes
With the ability to predict the effects of different maintenance and investment scenarios, users can choose the optimum strategy to cover the entire asset lifecycle. Asset design and condition, market demand, regulatory compliance and risk analysis are the basis for maintenance strategies. As all these elements can and will change over time, AVEVA Asset Strategy Optimization enables you to explore multiple scenarios and predict the impact of changes to arrive at the most cost-effective strategy.

Simulate Effects
The simulation functionality helps users calculate the ROI and effects of maintenance strategies for this month, next year or anywhere in the asset lifecycle. The chosen strategy is automatically translated to maintenance tasks and preparations can be easily operationalized in your EAM system. You can easily tailor to specific needs, for example by fast mass mutations when a change in business objectives warrants an entirely new maintenance strategy.

Learn from the Past to Prevent in the Future
Frequent failures and safety incidents have a big impact on operations. Jumping to conclusions and resorting to stopgaps usually means treating symptoms instead of causes. When the root causes have been established, and all measures and solutions have been systematically registered and analyzed, it will be possible to prevent future incidents.

The immediate harmful effects of failing assets may go far beyond production losses, and endanger the safety of people and the environment. Prevention is the better option in all cases. Asset Performance Management helps to predict and prevent failures and get the most out of your assets. AVEVA Asset Strategy Optimization also supports business objectives such as production optimization, safety, quality and cost control, while dealing effectively with compliance issues and environmental care.
Spare Part Optimization

Spare parts and components can be crucial for safety, compliance, asset availability, even business continuity. A small part can cause big problems when it fails and can’t be replaced rapidly. At the same time, keeping large numbers in stock is obviously not the most efficient way to mitigate risks in terms of costs and logistics.

AVEVA Asset Strategy Optimization delivers additional functionality to your EAM inventory management module. It takes inventory management to the next level by identifying which spare parts are critical to overall asset performance and business objectives. By combining all available data with risk profiles, it allows you to strike exactly the right balance in inventory management. It allows you to determine minimum stock levels and uses the Economic Order Quantity (EOQ) model to calculate the most cost-efficient procurement options.

The Software has proven to reduce repair time by 10% and inventory costs by 25%.

Flexible Hosting and Services Model

AVEVA ensures that you get the full range of benefits from AVEVA Asset Strategy Optimization including installation and integration services, in addition to consulting services. The solution is available on premises and as a service (SaaS). User training and e-learning courses help our customers discover best practices and get the most out of their systems.

For more information on Asset Performance Management with AVEVA Asset Strategy Optimization, please visit: sw.aveva.com/asset-performance/asset-strategy/aveva-asset-strategy-optimization