ABB – Process Industries Service

AssetVista™
Utilize untapped potential to gain maintenance excellence
Mining market
Get the most out of every rock you mine

Due global market conditions plants are being forced to reduce maintenance costs while improve equipment reliability and reduce unplanned shut-downs.

More effective maintenance has a very real cost saving potential but still there are challenges:

- Lack of resources, due to remote locations or difficult working circumstance
- Difficult to collaborate between daily operations and maintenance activities
- Increased amount and complexity of equipment currently installed in plants
Maintenance practices
Different philosophies for different assets

- **Reactive** – Fix on failure
- **Preventive** – Maintain on schedule
- **Predictive** – Maintain when condition detected

Cost of maintenance

- Predictive
- Preventive
- Corrective

Corrective maintenance can cost ten times as much as a predictive maintenance strategy.

Asset categorization

- Critical (5%)
- Essential (25%)
- Important (30%)
- Basic (40%)

- Predictive (continuous)
- Condition based (periodic)
- Time based (preventive)
- Reactive

Reliability centered maintenance – strategy based on the role of the asset, its safety & criticality

Source: ARC Advisory Group
Condition Monitoring
It is not all about the tool

Investments in condition monitoring tools only are insufficient to improve predictive maintenance. Here are some reasons:

- **Diversity** of monitoring techniques, with different cost-benefit ratio
- **Lack of integration** between the monitoring tools
- Hard to **demonstrate ROI** and justify additional investment
AssetVista™ service concept
Our solution is not just another tool, it is much more

- **Maintenance-oriented service** solution customized to your asset maintenance strategy
- **Scalable packages** to leverage existing equipment data and access the condition of your assets
- **We keep your application up-to-date** and support your reliability and maintenance engineering **staff**
Continuous improvement of maintenance process

AssetVista
Support the decision-making process

1. Transform data into information
2. Transform info into knowledge
3. Planning and execution
4. Evaluation and optimization
5. Engineering Maintenance

Data Source
Process Data “on/offline”
History Data
Expert Monitoring System

Maintenance Strategy

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Combining “things” with services and people
The “Internet of Things” begins here, with your “things”

The goal of AssetVista is to *increase maintenance performance* by analyzing pieces of data from thousands of components and production assets installed in your plant.

This rich data is the access to asset-related information and to an efficient, proactive maintenance and service driven strategy!
Speed up decision making process
Real-time asset information gets to maintenance

- **Maintenance** data in user-friendly **dashboards** for a faster and accurate decision-making process.

- **Identifying potential failures** either periodically or in real-time before they affect the productivity.

- **Periodic reports** support your maintenance team with **direct** and detailed **asset information**.

- Easy-to-use **root cause analysis** allows a **quick fail detection** and reduces production losses.
AssetVista™ service offering
Wide range of service packages

- Maintenance environment evaluation
- Force Signals
- Run Time
- Maintenance Dashboards
- Controller, Link Device, Remote, Gateway
- Server, Workstation, Switch, UPS
- Sensor, Transmitter, Positioner, Valve
- MCC, Drives, Relays, AC motors, breakers, transformers
- Heat Exchanger
- Pump, Compressor, Blower, Gearbox
- Conveyor, Crusher, Reclaimer, Flotation Cell
- ABB Ellipse, SAP PM, IBM Maximo

Regardless of your current focus – we can support you!
Scalable service packages
Small footprint

1. Essentials Package
   Implement dashboards for a **holistic view** of conveyor health and its sub-components.

2. Automation and Electrical Package
   Make use of the technology already installed, improve the **return of investment - ROI**

3. Rotating Machine Package
   Integrate existing condition monitoring systems, **break up information silos**

4. Production Equipment Package
   Add new monitoring solutions, **continuous improvement**
AssetVista™ Library Suite
Monitoring capabilities as needed by your business

Thanks to our scalable approach you can start with a small scope including AssetVista Essentials and AssetVista Elements. And once you need more than that you just extend your solution with AssetVista Elements Plus and AssetVista Selection.

- **AssetVista Selection** – high-value added production equipment with specific monitoring knowledge
- **AssetVista Elements+** – high-value added components with complex analytics technics
- **AssetVista Elements** – most common components with easy access to self diagnostic data
- **AssetVista Essentials** – condition monitoring environment with maintenance oriented dashboards, faceplates and trends
AssetVista™ service delivery
Development and commissioning tailored to your needs

A well-balanced plan to develop, implement, and operate your scalable and long-term asset management solution

- **Evaluate** – In an on-site assessment we listen to and understand your needs
- **Design** – We define suitable tactics and appropriated mix of technologies
- **Implement** – We deploy your designed solution for on-line condition monitoring
- **Measure & Optimize** – We support you to achieve your expected results and ROI through local/remote evaluation and periodic reports
References
Iron ore process plant – Brazil

6,000 pieces of equipment under monitoring, including:
- Mining process equipment
- Instruments, controllers and IT assets
- Electrical equipment
- Electrical & process automation devices
- Control loops
- Interface with external condition monitoring system
- Interface with EAM
- Development of dedicated Asset Monitoring Library for crusher, stacker, reclaimer, vibrating screens, ...
AssetVista™
Solution features

- **Scalable** packaged solution
- Proven **maintenance** methodologies
- Long-term **service** agreement
- Leverage **existing** equipment data
- Maintenance-oriented **dashboards**
- **Single** point of **contact**
- Built on **800xA Asset Optimization**
AssetVista™
Your benefits

- **Optimize and sustain** your maintenance performance
- Avoid useless maintenance and **improve time to repair**
- Access to ABB mining and **maintenance expertise**
- Prevents **unnecessary exposure** to hazardous areas
- **Quick and qualified** decision-making process
- Solution that best fits your **maintenance strategy**
- Operation and maintenance **share** the same platform
AssetVista™
Contact details

If you want to learn more about AssetVista, we would be happy to help you. Please write us an email or give us a call:

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Power and productivity for a better world™