MService – Proactive maintenance for peak performance

MService helps control ongoing operational expenses and reduce yearly maintenance:



MService is based on a simple premise: When an asset's condition is monitored continuously, in real time, maintenance intervals can be accurately planned. In this regard, the probability of asset failure between maintenance intervals is significantly reduced, improving the availability and health of the asset - and overall operations.

How customers can benefit from MService?

- Increased maintenance effectiveness through fast failure location and identification that leads to quick resolution. Easy operator interfaces such as Module Details, Trend Display, Edit Note speed communications, achieving higher performance and lower maintenance costs.
- Higher asset availability through continuous online supervision. MService reports history, measurement values and real-time conditions, enabling predictive maintenance that reduces unnecessary downtime. MService statistical reporting helps expose the root cause of failures and promotes proactive maintenance practices.
- Lower maintenance costs through alarms messaging for required maintenance, helping avoid catastrophic shutdowns.

With the introduction of MService, ABB once again draws on its expertise in improving maintainability of low voltage switchgear.

MService delivers a wide range of features that optimize operational performance, ensure extended system life and reduce life-cycle costs through increased reliability.

As part of ABB's service offering, MService is available to all MNS *i*S customers. Contact us to learn more about MService features and benefits.

ABB Low Voltage Systems

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MService On-site condition monitoring solution and service offering for optimized plant performance







The secret to a company's success lies in the health of its plant equipment. Based on industrial data, 65% of maintenance is corrective, while only 35% is preventive. One impacts equipment, environment and personnel; the other impacts production.

With this impact in mind, ABB introduces MService, a switchgear condition monitoring package for ABB intelligent low voltage switchgear systems. MService helps customers improve operational efficiency by enabling proactive, needsbased maintenance practices.

MService unit



What is MService?

MService is a condition monitoring hard- and software package specifically designed for MNS iS low voltage switchgear.

MService comes in an embedded industrial PC that offers an electrician-friendly operator interface based on commonly-used web browser technology. Point-and-click navigation provides near-instant ease of use.

MService implements the whole condition monitoring concept from collecting field level real-time data to performing assessment algorithms and keeping users up-to-date on developing maintenance situations. Collection and storage of data as well as system alarms and events allow detailed analysis of operational performance for both process equipment and MNS iS switchgear.

MService is packed with features that can help analyze failures and reduce mean time to repair.

When it comes to plant operation, no operator likes surprises. But in the fast-paced, round-the-clock world of manufacturing, how can you avoid the unexpected?

Motor starter maintenance faceplate

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- To support the electrical operator, a motor starter maintenance faceplate depicting a single line diagram of the motor starter is provided
- The faceplate also contains all measured values, status and maintenance information
- It also offers navigation to all developing situations and problem analysis

Maintenance reports for focused information



Trend logging for powerful analysis



- Online operation trend display for continuous evaluation of MNS iS performance
- Diagnostics trend displays for analysis of elimination of root cause
- History data logs for performance improvement analysis
- Identification of underutilized assets or analysis of lower performance of assets
- User definable trend displays

Predefined Condition reports collect operational and maintenance data for selected time period e.g., daily or monthly reporting.

Condition reports are created on three levels:

- Switchgear: Shows a summary of failures and maintenance triggers generated for selected starters and cubicles
- Cubicle: Shows calculated online power losses
- Device: Shows summary of occurred events/alarms for selected starters.

Energy reports are provided to enable fast overview of energy consumption by electrical motors throughout the plant.

Various reports present focused, salient content to site maintenance staff.

These reports offer focused, salient content to site maintenance staff, offering a quick way to transfer information among departments.

Troubleshooting with Knowledge Base

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- The 'Knowledge Base' aids maintenance personnel on possible causes and provides suggestions for required actions
- Manages alarms and events with specific severity, helping operators take appropriate action

ABB's intelligent Low Voltage Switchgear provides comprehensive information and maintenance data. MService then collates this data into context for the maintenance operator.

For example, condition-based monitoring is performed by continuously measuring contact temperature for any deterioration of cable connections. It also performs operation supervision and identifies motors or equipment that have not been in use for an extended period of time and raises specific maintenance issues. Additionally, it performs a continuous check on all internal components, their consumption and lifetime calculation.

With MService, all aspects of MNS iS system's operational performance are optimized, ensuring the system's extended lifetime, cost reduction in the life cycle and higher reliability to users.

In any situation, MService answers day-to-day operation questions in a clear, specific and direct manner, allowing maintenance personnel and technicians to initiate the right action at the right time, such as: MService helps to understand: What is the problem? Where is the problem? What is the type and severity of the problem? What is the possible cause? Who should initiate the actions (e.g. electrical or mechanical maintenance personnel)?