MNS iS Condition Monitoring
Enhanced availability through innovative design
MNS iS 减少运行成本，提高设备使用率

连续的设备监测
Continuous Asset Monitor

MNS iS 状况监控系统具有双重优点：有助于减少计划外停机时间，且提供重要信息以帮助实现预测性维护；这样运行成本可大大减少，并同时提高设备使用率。

The benefits of the MNS iS Condition Monitoring System are two-fold:
It can help to reduce unscheduled downtime whilst vital information for a predictive maintenance program is also provided. Thus operational costs are reduced and asset availability is increased.

专业的运行与维护帮助
Professional operation and maintenance assistance

在设备发生故障的情况下，MNS iS 状况监控系统能在第一时间提供故障根本原因的分析，并建议整改维护措施，从而最大限度地缩短维修时间。

In a reactive situation MNS iS Condition Monitoring minimises the time to repair by providing a root cause analysis of the condition and a suggested maintenance action to rectify it.

MNS iS 可实现预测性的维护，维护与运行部门可通过 MNS iS 状况监控系统，持续监测开关柜的状况、报警、事件、既有实时数据又有历史数据。状况监控系统将分析这些数据，并提供针对每个单独设备的信息，这样，就能实现仅在需要维修时才进行设备维护，从而减少了制定预防性维护时间表的必要性。（如每半年的定期停车维护等）

To assist with a predictive program the Condition Monitoring System enables the maintenance and operation teams to have continuous supervision of the switchgears' conditions, alarms and events, both real time and historic. The Condition Monitoring System analyses this data and provides focussed information on each individual asset. This allows maintenance to be scheduled only when it is required, therefore reducing the need for a preventive maintenance schedule.
MNS iS reduces operational costs and increases asset availability

MNS iS 设备监测器的特性
MNS iS Asset Monitor characteristics

MNS iS 状况监控系统以设备监测器为基础，设备监测器为软件功能模块，内置维护与诊断规则。
The MNS iS Condition Monitoring System utilises as its foundation Asset Monitors, these are software function blocks with maintenance and diagnostic rules inbuilt.

MNS iS 支持以下设备监测器：
- MStart (马达启动回路单元)
- MFeed (馈电回路单元)
- MNS iS (电气盘/柜)

MNS iS supports the following Asset Monitors:
- MStart (Motor starter)
- MFeed (Energy distribution)
- MNS iS Cubicle

MNS iS 状况监控系统为每台设备提供数据记录功能，以3秒的时间间隔保存过去7天的实时数据。超过一周后，将保存每天的最大、最小与平均值数据长达一年*。

MNS iS Condition Monitoring provides a data logging function for each Asset where the real-time data is stored at a 3 second interval for the last 7 days. Exceeding one week, the data is stored as maximum, minimum and average values per day up to 1 year*.

*系统为完全可调型，通过设计以可满足其他各种要求。

*M the system is fully scalable and can be engineered to suit additional requirements.

设备监测器运行时采用实时产生与控制数据，状况监控系统会连续处理这些数据，并在出现“超出正常值范围”的情况下生成“根本原因分析”，具体包括以下信息：
- 报警的严重程度
- 发生问题的位置
- 设备状态
- 问题描述
- 可能的原因
- 建议采取的措施

The Asset Monitors operate using real-time production and control data. The Condition Monitoring system continuously processes this data, and in the event of an ‘out of tolerance’ condition the ‘root cause analysis’ is generated, which provides the following:
- The Severity level of the alarm
- The Condition – Where the problem is located
- The Sub-Condition – The status of the asset
- The Problem description
- The Possible cause
- The Suggested action
MNS iS 状况监测用于工厂
领域运行流程

问题分析：设备监控器的特性
给出“可能的原因”与“建议采取的行动”。“可能需要通过 MNavigate 修
改 MNS iS 的参数。

Analysis of a problem:
Asset Monitor characteristics give
Possible cause and Suggested action.
Changes of MNS iS parameters via
MNavigate may be required.
Integration of MNS iS Condition Monitoring into the plant-wide operation process

Switchgear condition details in Asset Monitor

Through Windows™ environment, the system provides a comprehensive overview for maintenance and operations, with navigation through a Windows™ environment and graphic representation of the connected assets.

For example, shown left is a cubicle Asset Monitor that has detected that the admissible power loss for that individual cubicle has been exceeded. A ‘Condition’ has now been generated along with a timestamp. From this event the operator can assess the ‘Possible cause’ and ‘Suggested action’. A corresponding work order may also be issued.

Maintenance faceplate

The faceplate gives an active overview for each MStart or MFeed (Asset) detailing the status of the Conditions used within the associated Asset Monitor.

Through toolbar icons, the following information is available:

- Alarm list
- Event list
- Trend displays for operational data and diagnostic data
- Data logging configuration
- Reset of maintenance alarms
MNS iS 为前瞻性维护设定了标准

维护类型
Types of maintenance

被动地维护
通常为“故障排除”步骤
Reactive
Typically a 'fix on failure' procedure

预防地维护
基于时间表的维护，通常纳入设备停机
Preventive
Schedule based maintenance, usually incorporating plant shutdown

预测地维护
基于发生的情况，需要时进行维护
Predictive
Condition based, maintenance when required

前瞻性维护
维护部门与生产部门的交叉功能，可减少或者消除可能出现故障
Proactive
Cross functionality of maintenance and production to lessen or eliminate the route cause of possible failure
MNS iS sets the standard for proactive maintenance

Reduce downtime and increase production

The MNS iS Condition Monitoring System performs tasks evaluating all events and alarms and provides the following root cause analysis:

- What is the problem?
- Where is the problem?
- What is the severity of the problem?
- What caused the problem?
- Who should initiate the rectification?
- What actions are required for the rectification of the problem?
联系方式
Contact

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