

SIEMENS

Industry Services

Complete services for the drive train from a single source



Technology-based services for a greater competitive edge

Minimum downtime and the optimum use of staff and resources are key to sustainable success in industry. Siemens provides the basis for greater productivity, flexibility, and efficiency with technology-based services throughout the lifecycle of an industrial plant – reliably, globally, and around the clock. In-depth technology and product knowledge as well as industry expertise within Siemens' global network of experts ensure a considerable competitive edge.

The challenge:

The dependable operation of all electrical drives

Smooth production processes are possible only when all electric machines work reliably and all complex drive systems can be operated trouble-free over the long term. This goes for motors, gearboxes, converters, and switchgear, as well as the ancillary and supply systems that are so necessary today. Each device (module, component) of an overall drive train (system) can tolerate a certain amount of wear, aging, and corrosion before reaching the limits of its operability. In other words, it has a specific individual useful life.

This useful life is largest at the beginning of operation, and decreases with use until the fault threshold is reached.

Answers for industry.



System services overview:

- Services for all components (including diagnostics) from a single source
- Project management
- User-specific services
- Documentation of performance

The requirements for total drive train service are obvious:

The task of system service is to restore the target condition, i.e. 100% useful life, of the entire drive train, by deploying individually adapted measures for each device in the train before faults can occur. This service must cover all components, including motors, gearboxes, converters, switchgear, cooling and oil supply if applicable.

All individual activities are aimed at improving the availability of the overall drive train.

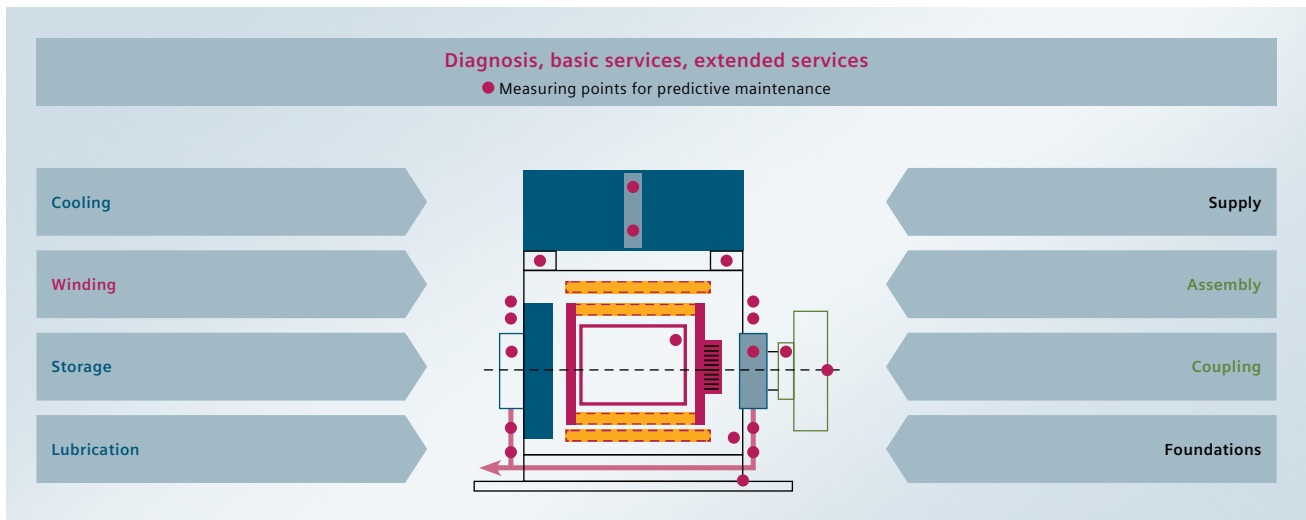
The solution:

Intelligent system services

For a system service concept this means that only the rigorous application of all available tools can extend the life of the plant, combined with the individual analysis of all relevant components (motor, converter, cooling, oil supply, gearboxes).

This minimizes unplanned costs resulting from component failures, such as a fault in the converter. It also prevents higher operating costs due to causes such as deposits in tubing.

Diagnosis and basic and extended service thus ensure the reliability of the plant.



System services in detail

With manufacturer-independent extended service, Siemens Industry Services offers further added value for systems in the main or ancillary drive trains, including repair and replacement of defective subsystem components.

The benefit:

All drives in top shape

- Comprehensive view of the drive train
- Optimization of system components and thereby service life
- Improved system reliability
- Prevention of unplanned downtime

System services in detail:

Analysis

In the analysis phase we determine the need for maintenance, repair, or replacement. We compare the system condition (operating parameters) with the design parameters, and use this to define the work packages needed for a system overhaul. This can include basic or extended service.

Basic services

Maintenance without disassembly

Basic services comprise cleaning and inspection activities. In some cases the system may need to be taken out of operation, for example to replace coolant. These services do not include disassembly.

Extended services

Maintenance with disassembly

In extended services, components are inspected for functioning and wear, and replaced if necessary. The drive system is taken out of operation for disassembly, and production downtime must be planned.

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