

EMPOLIS SERVICE DIAGNOSTICS

Analyzing Machine and Sensor Data Empowering Service Processes

CHALLENGES IN DAY-TO-DAY OPERATIONS

The **Industrial Internet** and **digitalization** in all areas of production create enormous challenges for service organizations. The degree to which installations are connected is increasing, as is the complexity of processes and interactions; product life cycles are getting even shorter, and malfunctions lead to continually growing costs.

EMPOLIS SERVICE DIAGNOSTICS

The application Empolis Service Diagnostics facilitates the intelligent analysis of large volumes of machine and sensor data. With its support, fault causes are identified systematically, typical problem situations are identified, and impending breakdowns are avoided. Thanks to the seamless integration with the other components of the Empolis Smart Service® solution, service processes can be optimized comprehensively with optimum support from intelligent analysis and the fusion of all relevant contents, uncovering hidden potentials.

AREAS OF APPLICATION

REMOTE MONITORING:

Intelligent data analysis and visualization technologies facilitate processing of very large data volumes for dashboarding. Irrelevant contents are hidden, the relevant indicators and fault causes are highlighted. Appropriate interaction concepts support users on various devices, be it PC, tablet, smartphone or special devices, e.g. diagnostic tester.

EFFICIENT REPAIRS:

Intelligent analysis using innovative evaluation of sensor and machine data facilitates root cause analysis: the identification of the ultimate causes of the observed failures. The service engineer is guided purposefully to the cause of the problem and can then remedy the malfunction directly, thus avoiding extensive testing.

FAILURE PREVENTION:

Through continuous monitoring of the sensor and data streams in virtual real time, trends can be established early and indicators pointing to possible problems can be detected. Thanks to Predictive Analytics, these impending failures and breakdowns can be anticipated and avoided. Innovative Big Data solutions ensure that data volumes of practically any size can be processed and analyzed cost-efficiently.

OPTIMIZING YOUR SERVICE PROCESSES:

Monitoring a number of different installations and larger fleets of devices facilitates the analysis of typical fault patterns, as well as the detection of weak points through benchmarking. Trends and dependencies between components, configurations, and fault frequencies or geographic idiosyncrasies are determined and conveyed to the Service Manager in interactive dashboards.

YOUR BENEFITS

	Increase in FIRST CALL FIX RATE through targeted problem analysis		Increase in SERVICE QUALITY through standardized processes
	COST REDUCTION through optimization of service visits		Faster REPAIRS and shorter downtimes through identification of root causes
	REMOTE SERVICE involving plant monitoring without requiring the presence of a service engineer on site		Higher LEVEL OF AVAILABILITY through predictive maintenance
	Detection of WEAK POINTS for continuous improvement		Greater REVENUE through higher level of availability and reduction in downtimes

OPERATION AND INTEGRATION

Our software is available to you as a classic on-premise solution as well as a Software-as-a-Service solution with the following benefits:

- no costs involved with installation, operation and maintenance,
- fast startup,
- high scalability,
- the highest possible level of security and reliability for your data through operation in German data centers,
- seamless integration with other components of the award-winning Empolis Smart Service® for accessing relevant service knowledge,
- Empolis Smart Service® for Salesforce available on [AppExchange](#).