

Digital Enterprise SPS Dialog

Mindsphere app Predictive Service Assistance uses artificial intelligence to optimize maintenance efficiency of drive systems

- **Early detection of anomalies in the drivetrain with the support of artificial intelligence**
- **Trend Prediction for optimized maintenance efficiency**
- **Higher productivity and reduced machine and system downtime**

Siemens has supplemented the Mindsphere application Predictive Service Assistance with an AI-based module. The new Artificial Intelligence module identifies concrete fault patterns in motors at an early stage, such as misalignment or a defective bearing. The application thus helps users to reduce downtimes and further improve spare parts and maintenance processes. The new Artificial Intelligence module for motors uses a neural network to solve what was previously implemented using a defined KPI limit value. This enables the module to detect anomalies even before the defined limit value and provides clear indications of the type and severity of faults and their development. As soon as the application detects signs of an error, it warns the user and generates a due date that indicates when the error should ideally be corrected and what corrective action is recommended to prevent an unplanned downtime. Predictive Service Assistance with the new AI-based Artificial Intelligence module is offered as part of a Predictive Service Assessment. The package includes a customized configuration service that ensures that the Mindsphere application with the new AI-based module runs optimally according to the customer's requirements.

The Mindsphere application Predictive Service Assistance is a central element of Predictive Services for Drive Systems, a standardized extension to the local service contract. It is used for more efficient maintenance of Sinamics and Simotics drive systems used on pumps, fans, and compressors, among other things. With Predictive

Services for Drive Systems, customers benefit from higher productivity and reduced unplanned downtime of their machines and systems. With the support of the respective Mindsphere application, users also enjoy full transparency on spare parts and maintenance activities to minimize risks through simple weak-point analysis. The application also contributes to more efficient maintenance and reduced planned downtimes.

With Predictive Services, Siemens offers a comprehensive range of services for industry. Each industry requires specific predictive services, which the company has developed based on its extensive industry know-how. The modular services for the collection, analysis and evaluation of machine data are adapted to the requirements of different industries.



This press release and a press picture are available at <https://sie.ag/360GfSb>

For further information regarding the Digital Enterprise SPS Dialog 2020, please see www.siemens.com/sps-dialog

For further information regarding Predictive Services for Drive Systems, please see www.siemens.com/drivesystems-services

Contact for journalists

Katharina Lamsa

Phone: +49 172 8413539

E-mail: katharina.lamsa@siemens.comFollow us on **Social Media****Twitter:** www.twitter.com/siemens_press and www.twitter.com/SiemensIndustry**Blog:** <https://ingenuity.siemens.com/>

Siemens Digital Industries (DI) is an innovation leader in automation and digitalization. Closely collaborating with partners and customers, DI drives the digital transformation in the process and discrete industries. With its Digital Enterprise portfolio, DI provides companies of all sizes with an end-to-end set of products, solutions and services to integrate and digitalize the entire value chain. Optimized for the specific needs of each industry, DI's unique portfolio supports customers to achieve greater productivity and flexibility. DI is constantly adding innovations to its portfolio to integrate cutting-edge future technologies. Siemens Digital Industries has its global headquarters in Nuremberg, Germany, and has around 76,000 employees internationally.

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. Active around the world, the company focuses on intelligent infrastructure for buildings and distributed energy systems and on automation and digitalization in the process and manufacturing industries. Siemens brings together the digital and physical worlds to benefit customers and society. Through Mobility, a leading supplier of intelligent mobility solutions for rail and road transport, Siemens is helping to shape the world market for passenger and freight services. Via its majority stake in the publicly listed company Siemens Healthineers, Siemens is also a world-leading supplier of medical technology and digital health services. In addition, Siemens holds a minority stake in Siemens Energy, a global leader in the transmission and generation of electrical power that has been listed on the stock exchange since September 28, 2020. In fiscal 2020, which ended on September 30, 2020, the Siemens Group generated revenue of €57.1 billion and net income of €4.2 billion. As of September 30, 2020, the company had around 293,000 employees worldwide. Further information is available on the Internet at www.siemens.com.