Life may be full of surprises – but your presses don’t have to be

Predictive Services for Presses let you see into the future
In automotive manufacturing, outages in individual stations can quickly put your entire production system out of action. Errors are often caused by little things like bearing wear, deposits, excessive moisture, or leaks in the lubricating oil distribution system. Regular service intervals aren’t enough to prevent unplanned downtimes. The important thing is to monitor the status of production plants and detect imminent faults predictively.

With our Predictive Services for Presses, we enable connectivity between your press stages and cloud or Edge applications, provide well-grounded analyses of both status data and sources of error through our experts, and enable even faster and more precise automated analysis based on artificial intelligence. Because each press is individually configured, our experts design tailored concepts and data analysis models and in this way substantially increase transparency throughout the entire lifecycle. They make it easier for you to schedule maintenance work and improve the availability and productivity of your plants on a lasting basis.

Predictive Services for Presses is our three-stage offering for presses in automotive manufacturing. They’re part of our services for the Digital Enterprise, in which our digitalization experts assist you with the digital transformation of your company.

Your benefits

Transparency
Enjoy full transparency regarding the status of your presses using round-the-clock automatic plant monitoring.

Availability
Improve plant availability using status-based, predictive maintenance.

Easier planning
Proactively avoid unscheduled production outages by aligning maintenance and servicing activities with actual needs.

siemens.com/predictive-services
Our offering for your future – modular solutions for predictive services in automotive manufacturing

The modular services for acquiring, analyzing, and evaluating machine data connect your plant and applications to Edge or cloud applications in accordance with your needs and requirements. You obtain well-grounded analyses of the status data and sources of error, as well as specific recommendations from our experts, who evaluate and analyze the existing data with the aid of artificial intelligence.

Module 1
Assessment

We work with you on site to assess the current situation based on machine data, automation hardware, network situation, and similar factors. The focus is on the area you want to optimize – for example, the drive train or the energy storage motors of servo presses. Among other things, we clarify whether all the necessary data is available or additional sensors are required. The results of the assessment are used to generate a detailed connectivity concept.

Module 2
Connectivity

The connectivity concept that was generated in the Assessment module serves as the framework for installing sensors and condition monitoring systems in order to acquire all the necessary data. The usable data varies widely. We can determine bearing wear and shaft misalignment in the main drive, deposits and water content in the hydraulic oil, misalignment of press tools, the remaining semiconductor service life for converters, and much more. We also set up a tailored Edge or cloud solution, depending on which version you need or prefer in your company. In this way, we establish connectivity for data analysis.

Module 3
Analytics

Our experts evaluate the data collected and provide you with informative reports on the status of your plant and potential causes of error – for example, bearing damage. Using artificial intelligence, we’re able to evaluate the steadily growing volume of data faster and more reliably. Our experts optimize adaptive algorithms in order to reliably detect anomalies that indicate potential errors. This can also be performed across locations and makes it possible to monitor the availability of different production lines.