

The Siemens logo is displayed in a bold, teal, sans-serif font.

*Ingenuity for life*

Predictive Services for  
Electronics

# Predictive Services for Depaneling Machines

## Life may be full of surprises – but your depaneling machine doesn't have to be

### Predictive Services for Depaneling Machines let you see into the future

The milling process produces a fine dust that is accumulated in the milling spindles. This dust can hinder the constant rotation of spindles or, in the worst case, stop it altogether. Instead of scheduling fixed service intervals, Predictive Services for Depaneling Machines can, for example, analyze spindle current and speed and detect anomalies.

For this purpose, we enable connectivity between your depaneling machine and cloud or Edge applications, provide solid analyses of process data, status data, and sources of error to enable fast and precise analysis based on artificial intelligence. Because each machine is individually configured, our experts design tailored concepts to substantially increase transparency throughout the entire lifecycle. Predictive Services extend the service life of your milling spindle and optimize the Overall Equipment Effectiveness (OEE) of your depaneling machine.

Predictive Services for Depaneling Machines is our three-stage offering for depaneling machines in electronics 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



#### Inventory reduction

Based on data analysis, schedule the spare parts you need in advance



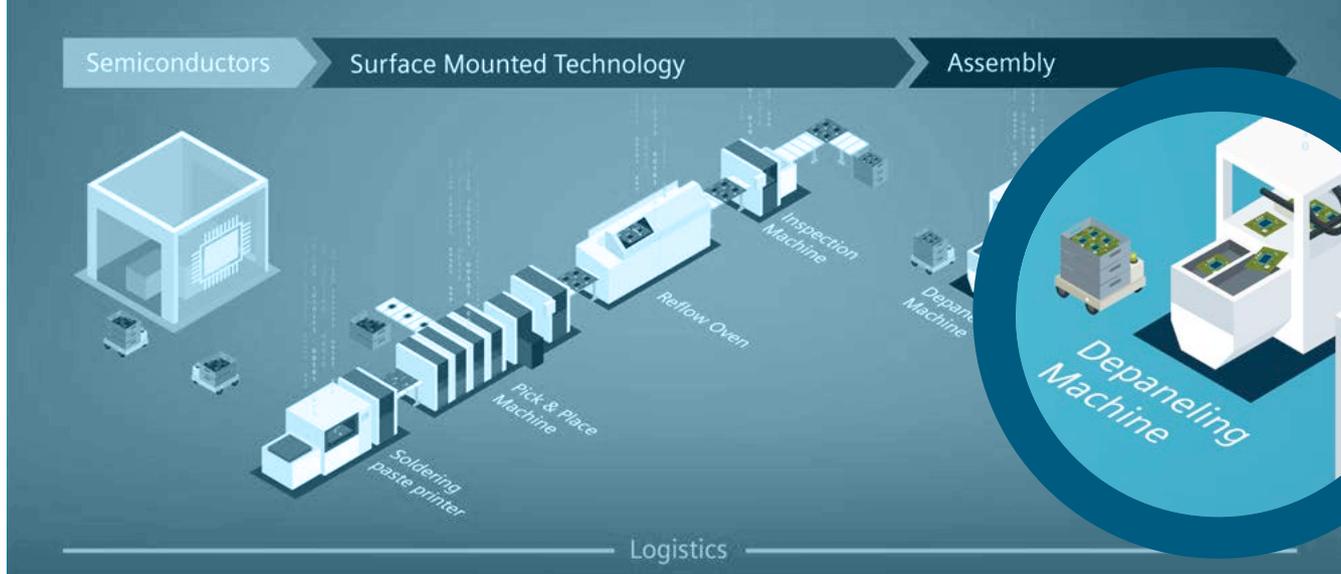
#### Improvement of OEE

Improve your overall equipment effectiveness by reducing downtimes



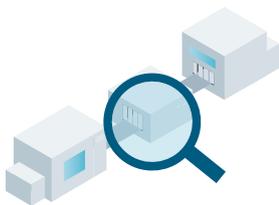
#### Optimized service life

Extend the service life of your milling spindle through ongoing data analysis



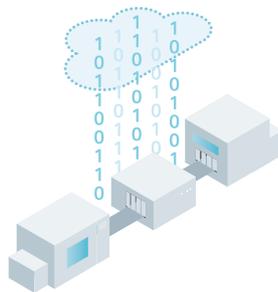
## Our offering for your future – modular solutions for predictive services in the electronics industry

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 get solid analyses of the process data, status data, and sources of error that are evaluated with the aid of artificial intelligence. You can easily view this data via an app, and you're also promptly and proactively notified of critical states.



### 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, such as the milling spindle of a depaneling machine. We then generate a detailed connectivity concept based on the results of this assessment.



### Module 2 Connectivity

The connectivity concept that was generated in the Assessment module serves as the framework for installing hardware and software in order to acquire the necessary data and transfer it to the platform suitable for your application. The usable data varies widely: For example, we record the speed and current of the milling spindle over a defined period of time. We can then make a clear prediction about its future status. 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 transfer and analysis.



### Module 3 Analytics

The acquired data is continuously analyzed, processed, and visualized by an AI-based app. Thanks to artificial intelligence, you can already predict future critical states of your machine today. AI is capable of constantly learning and improving the accuracy of the anomaly detection. This app lets you view your machine's data at any time and obtain information on critical states promptly and proactively.

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For the U.S. published by  
Siemens Industry Inc.  
100 Technology Drive  
Alpharetta, GA 30005  
United States

Article no.: DICS-B10034-00-7600  
Dispo 21640  
fb 8502 11191.0  
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