As a multi-award-winning plant, GWE manufactures and develops industrial control systems for machine tools and production machines, drives and frequency inverters. In a highly diverse market with up to 1,000 product variants, Electronics Factory Erlangen has been successfully implementing end-to-end digitalisation and flexible automation for years. Digital twins are used at every step of the digital value chain. GWE is an outstanding example of a sustainable, lean, digital factory.

The dilemma
Siemens GWE was hindered by a lack of detailed data, which affected their ability to foresee significant breakdowns leaving them unprepared to deal with such incidents. This compounded the complexity of their goal to minimize plant shutdowns and bolster machinery dependability.

Whilst they were undertaking their digitalization and lean factory project, they came across the concept of predictive maintenance. Subsequently, they decided to implement Senseye Predictive Maintenance and kick off a creation pilot program across three of their plants.

The solution
Siemens GWE was seeking suitable solutions for predictive maintenance, but many were either specific to manufacturers or technologies.

The vendor-agnostic and technology-agnostic approach of Senseye Predictive Maintenance stood out as key features to them. In addition, through the co-creation pilot, they were able to contribute their own ideas for product development. Their goal was to enhance plant availability and minimise unnecessary plant downtime. They also aimed to optimize storage by minimizing spare parts inventory through precise forecasting, thus enabling just-in-time ordering to meet demand.

The outcome
The integration of the platform was successful and allowed Siemens GWE to unify their asset management all in one platform. Furthermore, the utilization of reporting dashboards was highly beneficial as it allowed GWE to gain a comprehensive perspective of their machines. They also trained algorithms to identify any error cases and reduce the number of false cases. GWE was supported by the Senseye Predictive Maintenance team throughout the pilot, where their concerns were met swiftly, and were consistently kept informed of the deployment status.

GWE were provided with excellent support that was flexible and focused on cooperation and developing recommendations that were constructive and goal orientated. An example of this is, that they were given suggestions as to which data collection makes sense and how it should be related to other data.

“I recommend having a conversation with our colleagues from Siemens when deploying Senseye Predictive Maintenance because they have a high level of experience and expertise and can quickly understand your plants’ needs.”

Dominik Klemm - Maintenance Planner at Siemens GWE