



Pfreundt uses SimulationX to develop and improve weighing algorithms of mobile scales for heavy machinery

Founded in 1979, Pfreundt has soared to become one of the leading manufacturers of mobile weighing systems. With now 80 employees developing and selling scales for wheel loaders, cranes, dumpers and other heavy machinery, Pfreundt is a pioneer in the industry.

As a consequence of an ever-increasing convergence of weighing and data processing systems, the growing complexity of mobile scales nowadays can only be mastered by the help of simulation tools during product development in order to keep resources and time-to-market in balance.

»SimulationX saves expenses, speeds up research and enables tests not possible in reality.«

Marco Becker, Software Development
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Challenge

Developing reliable algorithms

Pfreundt was looking for ways to speed up the development for improved weighing algorithms in a more efficient and faster research process. Instead of conducting expensive and time-consuming fieldwork to obtain measurements from real machinery, a virtual, less error-prone solution was very much favored.

Solution

SimulationX for fast variation calculations

By breaking down the lifting mechanism of a construction machine into individual components, it was easy to validate simulation results against measured data. By running SimulationX remotely through a Visual Basic script and Excel, various parameter settings could be tested in a matter of minutes.

Benefits

Quick and reliable results

Using a virtual solution for simulating physical behavior, it was no longer necessary to perform test series with real hardware. The impact on a test machine's availability could thus be eliminated saving costs and time in an accelerated development process.