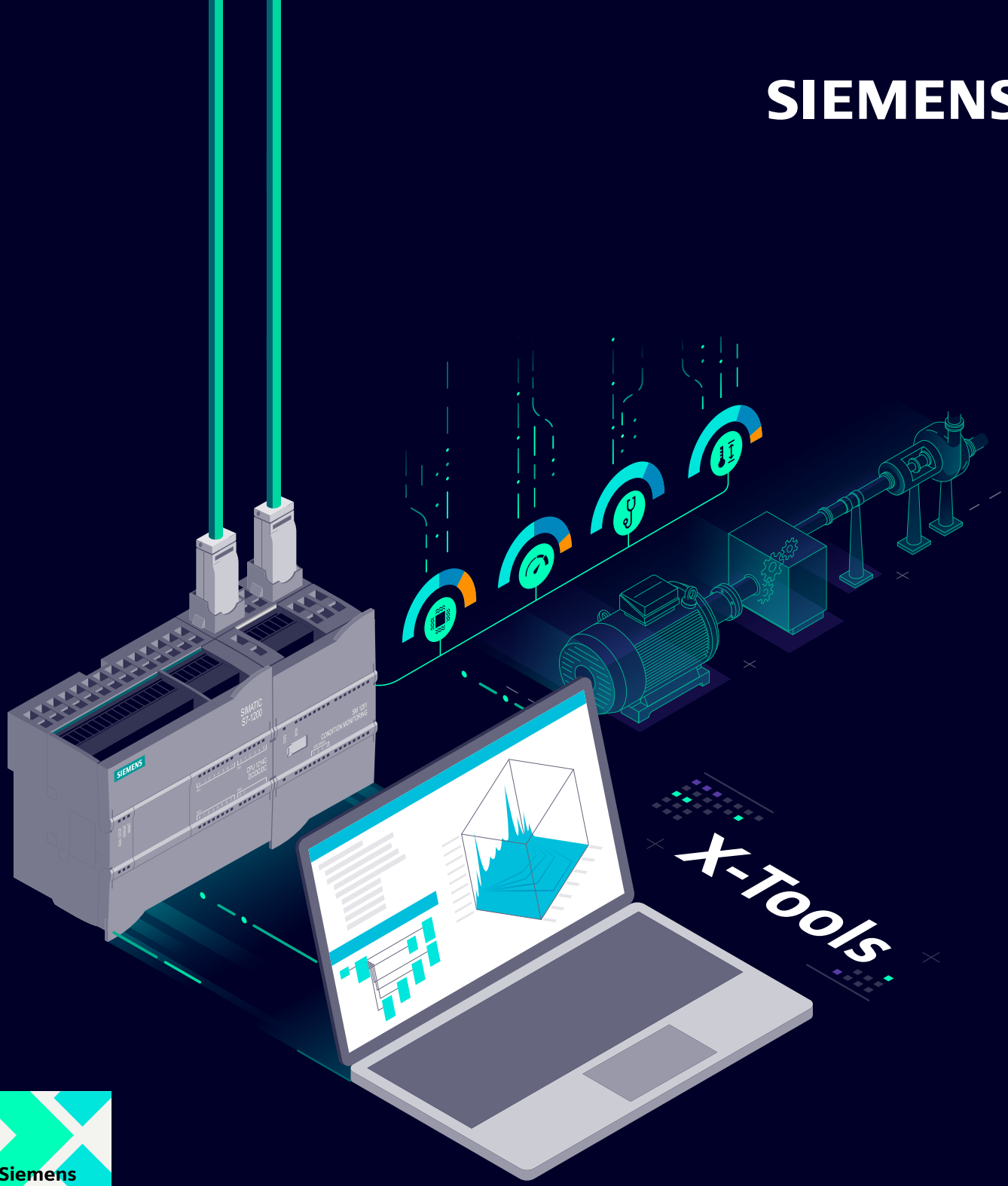
SIEMENS



Siemens Xcelerator

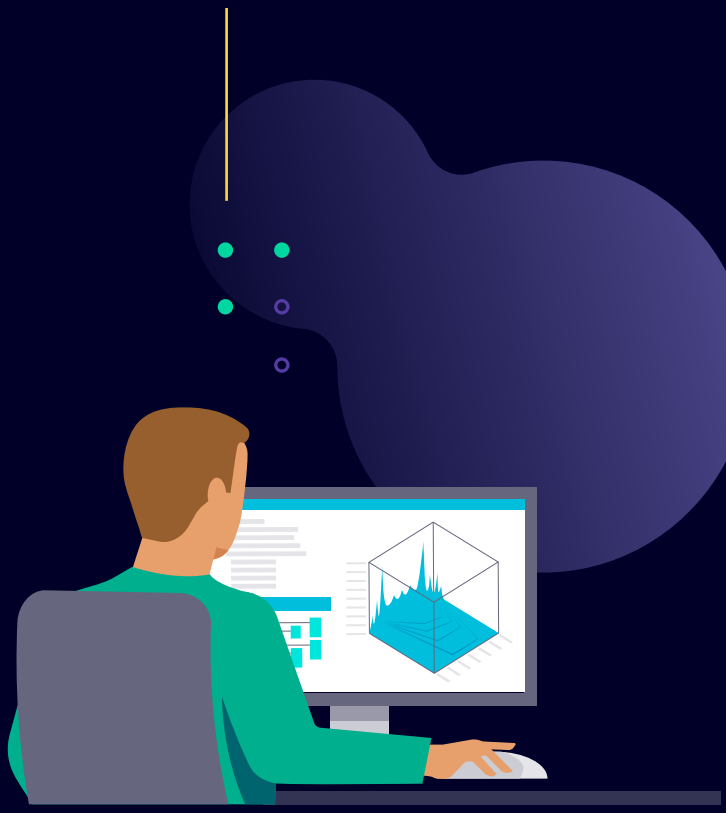
DRIVETRAIN ANALYZER X-TOOLS

The real time condition monitoring software to cover all your needs

siemens.com/dta-xtools

Drivetrain Analyzer X-Tools – acquiring data from diverse sources

Drivetrain Analyzer X-Tools, the advanced PC software from Siemens, focuses on analyzing data from multiple sources. It combines three main functionalities: high speed data acquisition, an expert analysis tool, and a comprehensive analytics workbench. For real-time monitoring, it provides a graphical interconnection of its analysis functions. To support this graphical visualization, Drivetrain Analyzer X-Tools comes with an extensive functions library. Through its server/client architecture, the tool can be run on an industrial PC as well as on server architectures, which makes the software scalable based on your needs.



Fast data acquisition and data logging

Thanks to open software interfaces like OPC UA, you can use Drivetrain Analyzer X-Tools not only with Siemens devices but import data from almost any source. In other words, you can centralize the entire data acquisition and analysis of your machine data in one place. Unlike other software solutions, Drivetrain Analyzer X-Tools can acquire, log, and process high-frequency data up to 192 kHz. Besides connecting any OPC UA device, typical data sources are SIPLUS Condition Monitoring Systems, SIMATIC S7 PLCs, SIMATIC PCS7 control systems, SINAMICS converters, SIMOTION drive control systems, or third-party sensors. Your advantage: You have all your data from different sources in one place and can comfortably analyze it.

Analytics and visualization

Mimic Board

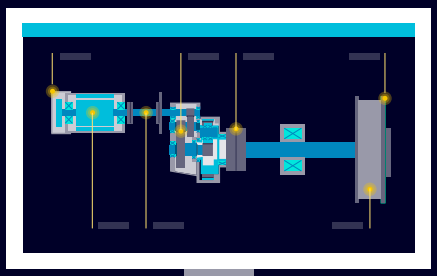
Using the Mimic Board, you can create and customize the view of your machine to comfortably analyze the data and make it more intuitive.

Drivetrain Analyzer X-Tools as analytics workbench

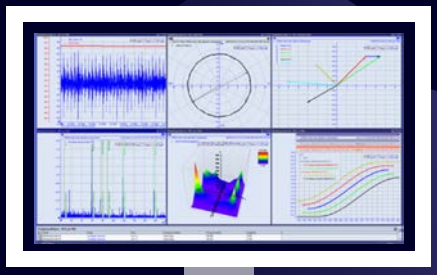
Use our extensive graphics library to visually customize and interconnect your analysis. By combining self-developed models with the extensive Siemens library, you can use Drivetrain Analyzer X-Tools as an analytics workbench to customize and optimize your analysis. The library offers a wide range of predefined analysis modules such as FFT, enveloping or entry filters.

Expert analysis to detect concrete problems

Identify roller bearing damages, imbalances, misalignment, or other failure patterns to avoid unplanned downtime of your machines and plants.



Mimic Board



Extensive library of graphically interconnectable analysis components

Data quality

Use your data, no matter where it is coming from

Drivetrain Analyzer X-Tools is not limited to Siemens equipment: You can bring together all the data from your system for visualization and analysis, regardless of the manufacturer. Connections to third-party devices can be developed using an SDK application. And via the open software interface, various SCADA systems can be integrated, as well as other programs via OPC UA.

Process high quantity of data

Reliable vibration analysis and a precise condition monitoring system require high-frequency data of up to 192 kHz. This data not only allows you to detect future problems in your machine, but also to determine which issue currently needs to be rectified.

Typical use cases

Measurement of low speed applications

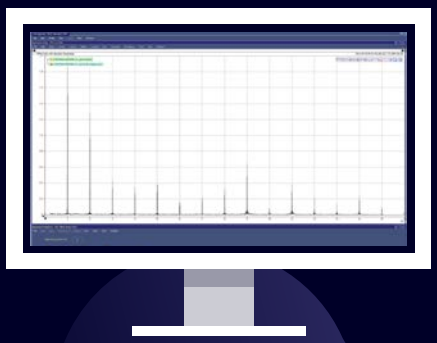
In combination with Siplus CMS products, Drivetrain Analyzer X-Tools is able to measure vibrations even from applications with low speeds. In conjunction with highly sensitive acceleration sensors, wind turbines with speeds of around 0.2 Hz (12 rpm) can be measured, for example. The option of individual filter settings and freely terminable raw data recording allow for application-specific monitoring.

Measuring speed variable applications

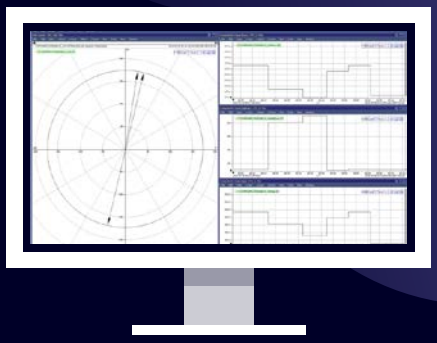
The fact that most drivetrains do not run under constant conditions is no problem for Drivetrain Analyzer X-Tools. Thanks to its IPC base, Drivetrain Analyzer X-Tools can quickly measure characteristic vibration values, with individually set warning and alarm thresholds in place. In addition, the order spectrum calculation enables speed-independent FFT analysis.

Monitoring of sleeve bearings

Heavy machinery is often equipped with sleeve bearings instead of rolling bearings. These bearings can be monitored with Drivetrain Analyzer X-Tools Orbit Analysis. Additional monitoring of bearing temperature, housing vibration and oil lubrication (pressure and flow monitoring) can also be realized with Drivetrain Analyzer X-Tools.



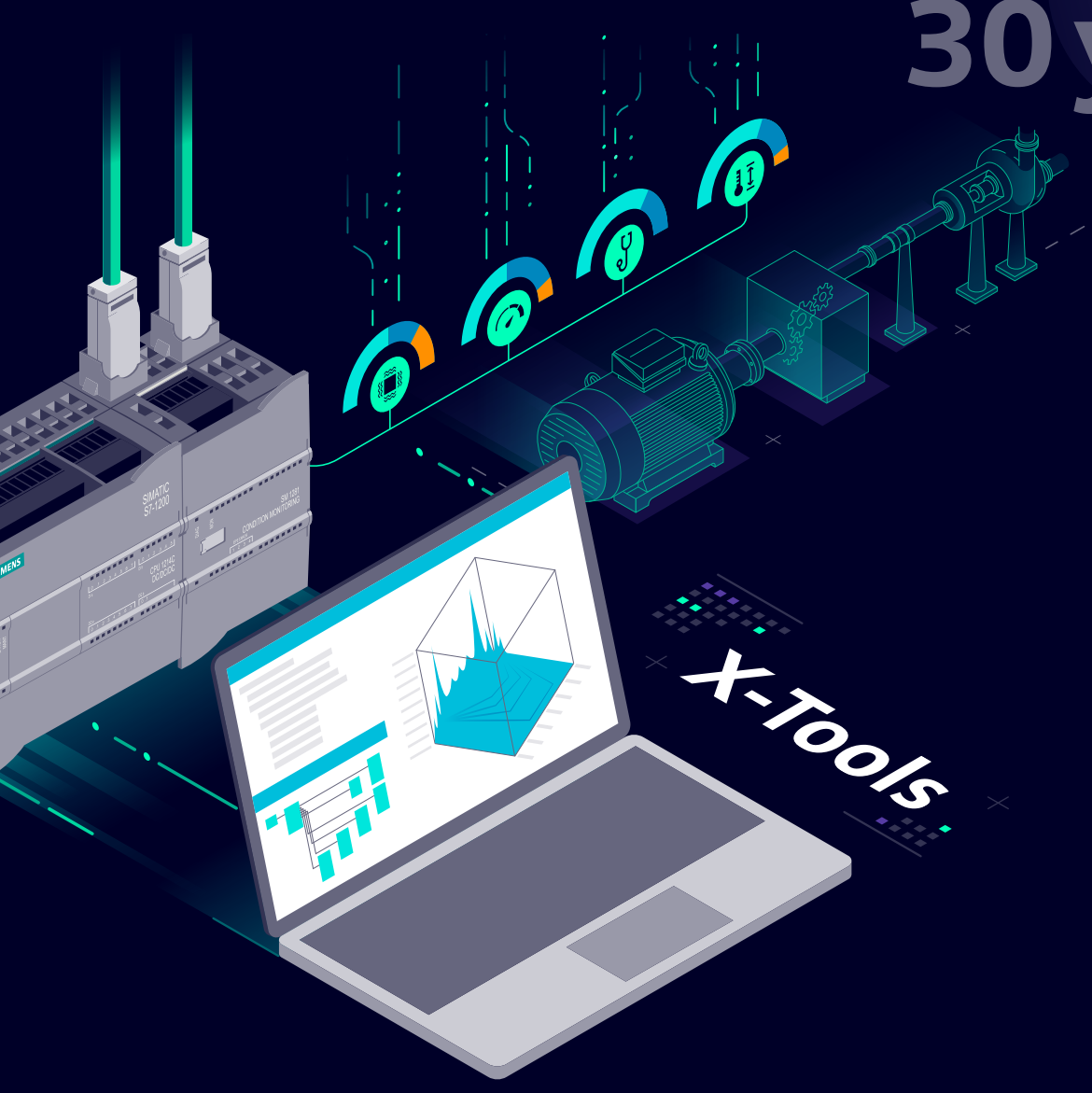
Measurement chart from the spectral order measurement task.



The Orbit measurement task computes a filtered displacement orbit for two signals shifted 90° to each other, visualizing shaft motion in a sleeve bearing.

30 years of continuous development

Drivetrain Analyzer X-Tools incorporates all our experience from more than three decades of development. Our aim is to provide you with everything you need for digital signal analysis in one software. We will continue to improve Drivetrain Analyzer X-Tools and add new features to provide users with best-in-class, high-speed data acquisition and powerful analysis capabilities.



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