

Press release

Bringing manufacturing data to life

Process monitoring in joining and assembly: quick data analysis with the maXYmos Analyzer software

Winterthur, December 2025

With the new maXYmos Analyzer (2850A) PC software, Kistler provides its customers with a powerful tool for making more productive use of data from the manufacturing process. The measurement curves from assembly lines recorded by the maXYmos series of process monitoring systems can be efficiently analyzed, documented, and evaluated in order to draw data-based conclusions about production optimization – either during the ongoing process or in post-processing.

Assembly and joining techniques such as precision joining, press fitting, riveting, clinching, and caulking are among the key assembly processes in industries such as automotive, aerospace, electronics, medical technology, and many others. With Kistler's electromechanical joining systems (servo presses), high-precision sensor technology, and intelligent process monitoring, these manufacturing processes can be efficiently automated and sustainably optimized. The process monitoring systems in the maXYmos product family ensure that joining and assembly processes are precise, quality-assured, and resource-efficient – for maximum productivity and the highest level of safety in production.

Force-displacement monitoring in manufacturing: What does the data reveal?

To get more out of the data collected – for example, for ongoing production optimization – Kistler provides the new maXYmos Analyzer PC software. As the final link in the measurement chain, it offers the ability to quickly and easily analyze measurement curves from process-monitored production, such as force-displacement measurement data when joining a bearing to a shaft. Irregularities can be detected from the measurement curves stored in the maXYmos process monitoring system for each manufactured component. In addition, SPC parameters such as Cp and CpK are automatically determined for the selected curve bundle.

Efficiently visualize and evaluate measurement curves

The new maXYmos Analyzer PC software is based on Kistler's jBEAM measurement data analysis platform and is tailor-made for maximum efficiency in production optimization. Users can zoom, compare, filter, and analyze measurement curves – both immediately after each production step

and later in the overall view. During development, the focus was on transparent, intuitive, and efficient use – deviations from the target are quickly identified and defective parts are reliably reduced. The software also enables the interactive use of KPIs as well as statistics and trend analyses. This allows decisions on production optimization to be made on a more data-driven basis.

Complete measurement chain from a single source: now with data analysis

maXYmos Analyzer is available as a standard license for use with maXYmos NC (for Kistler joining systems, from v1.7) and the process monitoring systems maXYmos TL (5877B, from v1.7) and maXYmos BL (from 5867C). A free trial version is also available for interested parties.

With the new maXYmos Analyzer (2850A) PC software, Kistler completes its range of dynamic measurement technology for production optimization and process monitoring – customers now have access to a complete measurement chain for joining and assembly processes from a single source: from sensors to software and with a matching electromechanical joining system (servo press).

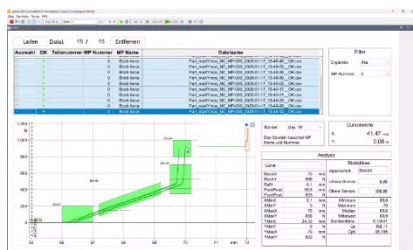
Image material (please name the Kistler Group as picture source)



The new maXYmos Analyzer (2850A) PC software from Kistler provides efficient data analysis of measurement curves from process-monitored joining and assembly processes.



Joining and assembly: Users can analyze all manufacturing data with maXYmos Analyzer to optimize processes – for example, to avoid defective parts and quality losses.



Data analysis: The streamlined interface of the maXYmos Analyzer PC software enables flexible visualization and comparison of measurement curves, allowing data-driven decision-making.

Media contact

Elisabeth Iancu
Marketing Campaign Manager
Tel.: +49 7172 184 147
Email: elisabeth.iancu@kistler.com

About the Kistler Group

Kistler is the global market leader for dynamic pressure, force, torque and acceleration measurement technology. Cutting-edge technologies provide the basis for Kistler's modular solutions. Customers in industry and scientific research benefit from Kistler's experience as a development partner, enabling them to optimize their products and processes so as to secure sustainable competitive edge. Unique sensor technology from this Swiss corporation helps to shape future innovations not only in automotive development and industrial automation but also in many newly emerging sectors. Drawing on our extensive application expertise, and always with an absolute commitment to quality, Kistler plays a key part in the ongoing development of the latest megatrends. The focus is on issues such as electrified drive technology, autonomous driving, emission reduction and Industry 4.0. Some 2,000 employees at more than 60 facilities across the globe are dedicated to the development of new solutions, and they offer application-specific services at the local level. Ever since it was founded in 1959, the Kistler Group has grown hand-in-hand with its customers and in 2024, it posted sales of mCHF 448. About 9 percent of this figure is reinvested in research and technology – with the aim of delivering innovative solutions for every customer.