

Press release

Kistler presents optimized assembly press workstation for automated joining

The Smart Single Station 2nd Generation keeps up with the fast-paced world of manufacturing

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With the new assembly workstation for pressing and joining Smart Single Station (SST) 2nd Generation, Kistler presents a fully optimized version of the proven servo press workstation for automated assembly and testing processes. The system can either be used as a manual workstation or fully integrated into the production line. The new version is significantly easier to operate, allowing inexperienced employees to perform various assembly and testing processes correctly. Further improvements including easier data export and the newly designed front door ensure smooth workflows on today's busy shopfloors.

Whether it's vehicle components, cables and electronics, white goods, packaging or medical equipment – in modern manufacturing, the latest requirements must be addressed as quickly as possible without compromising cycle time or quality. For maximum flexibility and guaranteed product quality, Kistler offers the Smart Single Station (SST), a customizable assembly workstation for diverse and application-specific pressing and joining tasks as well as test processes. The system can be used as a stand-alone workstation or integrated into a fully or partially automated production line to control, evaluate and document manufacturing processes. The integrated maXYmos NC process monitoring system for force-displacement monitoring enables quality inspection of joining and pressing processes, ensuring their traceability. In addition to flexibility and seamless product quality, even the smallest time savings in operational workflow are crucial. That's why Kistler has now further optimized the Smart Single Station to better adapt to the various conditions in the often tightly scheduled manufacturing routine.

Assembly workstation for pressing and joining ensures stream-lined workflows

The new SST 2nd Generation can be set up by parameterization; programming knowledge is not necessary. Its operation is now controlled centrally via an integrated screen. Illustrated instructions guide users through the testing or assembly processes, allowing even inexperienced operators to quickly and accurately start using the machine. They can select programs either by scanner or manually. The collected measurements are displayed in real time. A new and particularly powerful

feature of the maXYmos NC process monitoring system enables the operator to filter measurement data and then export the selection. This facilitates the subsequent evaluation of the production and analysis data.

To make the Smart Single Station even more user-friendly during everyday tasks, Kistler has revised the mechanics of the second generation. This includes a completely redesigned front door and service door. The front door can now be stopped in any position to improve workflows – making it no longer necessary to fully open it during each cycle. This makes work more ergonomic and saves valuable time. The service door now opens up to 180 degrees, providing easier access to the tool holder. Additionally, the upper frame can be completely removed for maintenance on the NC joining module or sensor calibration.

Efficient and flexible manufacturing with the SST and electromechanical joining systems

Kistler designs its SST assembly workstations to meet individual customer needs and the requirements of the respective joining, assembly and testing tasks. The manual servo press workstations are equipped with Kistler's electromechanical NC joining modules and are designed for various joining processes, including pressing, clinching, caulking, riveting and punching, as well as for thermo-bonding and testing springs. Thanks to their energy efficiency, electromechanical joining systems improve the CO₂ balance and make a valuable contribution to climate protection. In addition to joining and pressing processes, other industry-specific manufacturing processes can be implemented with the Smart Single Station. The SST can for instance be equipped with high-resolution cameras for special optical inspections to realize 100 percent quality assurance.

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

To download the images in a high resolution, please follow the link: [\[LINK\]](#)



Ready-to-use and easy to operate, even when things get hectic – the servo press workstation Smart Single Station (SST) 2nd Generation ensures smooth workflows in the production line.



This assembly press workstation was built by Kistler as a manual workstation for pressing rotor stacks with a high joining force onto the shaft of an electric motor.



The turnkey assembly workstation Smart Single Station (SST) is equipped with the maXYmos NC process monitoring system. The integrated force-displacement monitoring function enables a 100 percent quality inspection of joining and pressing processes.

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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 owner-managed 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 2,200 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 2023, it posted sales of CHF 465 million. About 9% of this figure is reinvested in research and technology – with the aim of delivering better results for every customer.