

Press Release

AutoForm Assembly 13 – A New Level of Dimensional Accuracy in BiW Assembly Processes

Pfäffikon SZ, Switzerland, September 25, 2025: AutoForm Engineering GmbH, the leading supplier of software solutions for stamping and BiW assembly processes, unveils its latest software version AutoForm Assembly R13. This version introduces new features and enhancements for the BiW assembly process chain, focusing on greater simulation accuracy, advanced modeling of joining processes and hemming, and improved dimensional accuracy. In addition, AutoForm Assembly R13 features reduced file sizes, enabling significantly smaller simulation files without compromising results or influencing engineering decisions.

AutoForm Assembly R13 offers new features and options for assembly process engineering. With this release, users can significantly reduce the time and effort required to pre-assemble groups of parts in the early stages of the process engineering, without having to simulate the full assembly process. This is particularly beneficial for preliminary qualitative analyses or in those cases when users are considering subassemblies from suppliers or other departments without a detailed process description.

This latest release offers enhancements for modeling of joining processes and hemming. It has an improved thermal model for line joins, which was specifically designed to accurately account for the thermally induced deformations that occur during welding processes. In addition, the software features an improved mesh refinement for roller hemming, particularly beneficial for advanced processes such as rope hemming. This new option improves numerical precision and stability in the critical areas of the hemming process by performing mesh refinements earlier in the simulation sequence. This capability is essential for increased accuracy of rope hemming simulation results.

AutoForm Assembly R13 enhances dimensional accuracy with a newly developed algorithm that ensures the best dimensional fit to the reference geometry. This is especially beneficial in cases involving large deviations, such as those caused by shimming or thermal effects during line welding.

The software also provides benefits for users working with scanned data in assembly simulations. Parts are often scanned under conditions that differ from those during the assembly process. The new measurement compensation feature enables users to account for differences between scanned and assembly conditions, ensuring that scanned data can always be accurately integrated into subsequent assembly simulations. This capability delivers a new level of dimensional accuracy in car body assemblies and plays a significant role in advancing digital clamping.

Dr. Markus Thomma, CMO of the AutoForm Group, stated: "We are pleased that with AutoForm Assembly R13, we can provide our users with a range of new features and enhancements which are important for the BiW assembly process chain. With this latest release, users can confidently explore and expand the boundaries of their assembly process designs. They can rapidly optimize for manufacturability and performance while minimizing costly, time-consuming physical tryouts."

About AutoForm Engineering GmbH

AutoForm offers software solutions for sheet metal forming and BiW assembly process. With over 500 employees dedicated to this field, AutoForm is recognized as the leading provider of software for product manufacturability, tool and material cost calculation, die face design and virtual stamping as well as BiW assembly process optimization. All of the Top 20 automotive OEMs and most of their suppliers have selected AutoForm as their software of choice. Besides its headquarters in Switzerland, AutoForm has offices in Germany, The Netherlands, France, Spain, Italy, Czech Republic, Sweden, USA, Mexico, Brazil, India, China, Japan and Korea. AutoForm is also present through its agents in more than 10 other countries. For detailed information please visit: www.autoform.com

Contact:

Dr. Jasmine Joyce
Head of Corporate PR & Communications
AutoForm Development GmbH
Zurich, Switzerland

Phone: +41 43 444 61 61

Email: jasmine.joyce@autoform.ch

www.autoform.com



AutoForm Assembly R13 offers a range of new features and enhancements which are important for the BiW process chain.

If you need a high resolution image, please contact us.