

## Press Release

### **AutoForm Assembly R12 – Enhanced BiW Assembly Process Engineering, Optimization and Evaluation**

**Pfäffikon SZ, Switzerland, September 3, 2024: AutoForm Engineering GmbH, the leading supplier of software solutions for stamping and BiW assembly processes, unveils its latest software version AutoForm Assembly R12. This version offers new capabilities and enhancements for the BiW assembly process chain, in particular for process engineering, process optimization and evaluation as well as hemming.**

AutoForm Assembly R12 offers advancements and new options for assembly process engineering. During this stage, users have to import assembly CAD data, which often includes a large amount of information which is not needed in its entirety for the assembly process definition. AutoForm Assembly R12 allows users to filter CAD data which is relevant for the assembly process definition. They can then easily select elements for the import which, once imported, maintain the same CAD structure and original element names. This software version allows for more control over the CAD data import and a better overview of the imported elements needed for the assembly process definition.

In addition, AutoForm Assembly R12 significantly improves the behavior of the thermal model, which was developed to enable the prediction of thermally induced distortions that occur during welding processes. Line welds now consider the time-dependent thermal behavior of the process, enabling more realistic welding simulations. The newly implemented time-dependent thermal model for line welding in AutoForm Assembly R12 allows users to optimize welding processes already in the process engineering stage.

This software release also offers new capabilities which are important for assembly process optimization and evaluation. In practice, assembly equipment is continually adjusted in order to resolve dimensional deviations and their effects on production. With AutoForm Assembly R12, process adjustments can be made virtually, enabling users to define which clamps should be considered for shimming and which joints should be considered for teaching. Selected clamp positions can be moved within the defined range, and nearby joints can be taught as needed based on sheet movement. By running multiple simulations, the software enables users to determine the optimal parameters that can be applied to resolve accuracy issues in the assembly. When a solution is found, the settings can be easily mirrored in the physical process, eliminating the costly traditional trial-and-error approach.

AutoForm Assembly R12 brings new options for the hemming operation. Parts which have several disconnected flanges can now be hemmed with a single hemming tool. The software enables a more realistic process definition, a reduction in the number of hemming tools and a shorter amount of time for the simulation setup.

Dr. Markus Thomma, CMO of the AutoForm Group, stated: “With AutoForm Assembly R12, we offer our users a range of new capabilities and enhancements which are important for the BiW assembly process chain. The software allows for an even more reliable digital process representation, which serves as a blueprint for the physical process in BiW assembly production. The digital process model enables users to determine which adjustments need to be made to the physical process. With AutoForm Assembly R12, users can significantly reduce the number of physical tryout and quality loops, which results in lead time and cost savings.”

**About AutoForm Engineering GmbH**

*AutoForm offers software solutions for sheet metal forming and BiW assembly process. With over 400 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](http://www.autoform.com)*

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AutoForm Assembly R12 offers new capabilities and enhancements for the BiW assembly process chain.

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