Press Release

AutoForm TubeXpert R8 – Unique Software Solution for Experts in Tube Bending, Forming and Hydroforming

Wilen b. Wollerau, Switzerland, September 24, 2019: AutoForm Engineering GmbH, the leading supplier of software solutions for the sheet and tube metal forming industry, has unveiled AutoForm TubeXpert R8. Building on the success of AutoForm Hydro 2016, this new software solution provides extensive conceptual and functional enhancements to further streamline the digital process chain for tube bending, forming and hydroforming companies.

AutoForm TubeXpert R8 provides a completely revised and state-of-the-art user interface, which allows for increased ease-of-use and workflow efficiency through an innovative navigation concept. With this software, experts in tube bending, forming and hydroforming can define the complete process based on imported part geometry and then use this information for rapid tool design and simulation set up. New design functionalities, such as for radius changes, surface extensions and morphing, allow users more flexibility to modify the part and tool designs and to analyze the effect of these modifications on formability. Since AutoForm TubeXpert R8 is based on CAD surfaces technology, designs created can be easily exchanged with other CAx systems.

AutoForm TubeXpert R8 offers improved springback evaluation and compensation capabilities. With it, users can perform accurate springback simulation after any of the forming process operations. The software then automatically makes the necessary adjustments to the tool geometry and process parameters in order to compensate the effects of springback. The compensation functionalities can be applied to tool geometries created by AutoForm TubeXpert R8 as well as to imported tool geometries throughout all of the process operations. Thus, users are now well-equipped to reliably manage and compensate springback effects even for complex processes and advanced materials.

When setting up simulation and during results evaluation, the ability to define and apply standards improves consistency in the engineering process, reduces the number of mistakes and ensures compliance with in-house standards or those provided by clients. Based on the defined standards, the newly developed issue detection automatically highlights forming issues and prevents quality deficiencies from being overlooked.

The full integration of AutoForm-Sigma technology in AutoForm TubeXpert ensures an optimal forming process through its highly efficient and systematic engineering methodology, which is unique on the market. Instead of setting up multiple single simulations, users can define value ranges of multiple design parameters and evaluate their impact on part formability and quality all at once. In this way, ideal process conditions cannot only be rapidly identified but important information on how far a feasible process is from failure can also be ascertained. To ensure robust part production, the effect of uncontrollable variations of process parameters, such as material properties, pressure, friction conditions, can be analyzed.

In addition, the combination of TriboForm software with AutoForm TubeXpert R8 allows for an even more realistic consideration of tribological effects. This leads to a new level of result accuracy for friction-sensitive materials and forming processes.

Dr. Markus Thomma, Corporate Marketing Director at AutoForm stated: "AutoForm TubeXpert R8, with all its unique features, was developed with the objective of streamlining the digital process chain in tube forming. The goal was to provide even better support to tube experts confronted with increasing market demands regarding part and process complexity, advanced materials and new forming technologies as well as shorter time-to-market at lower cost requirements. The software has been designed to bring tube forming companies to a new level of process efficiency and product quality. We are glad that initial customer feedback has confirmed that, with AutoForm TubeXpert R8, understanding and optimizing the tube forming process has never been easier and more intuitive."
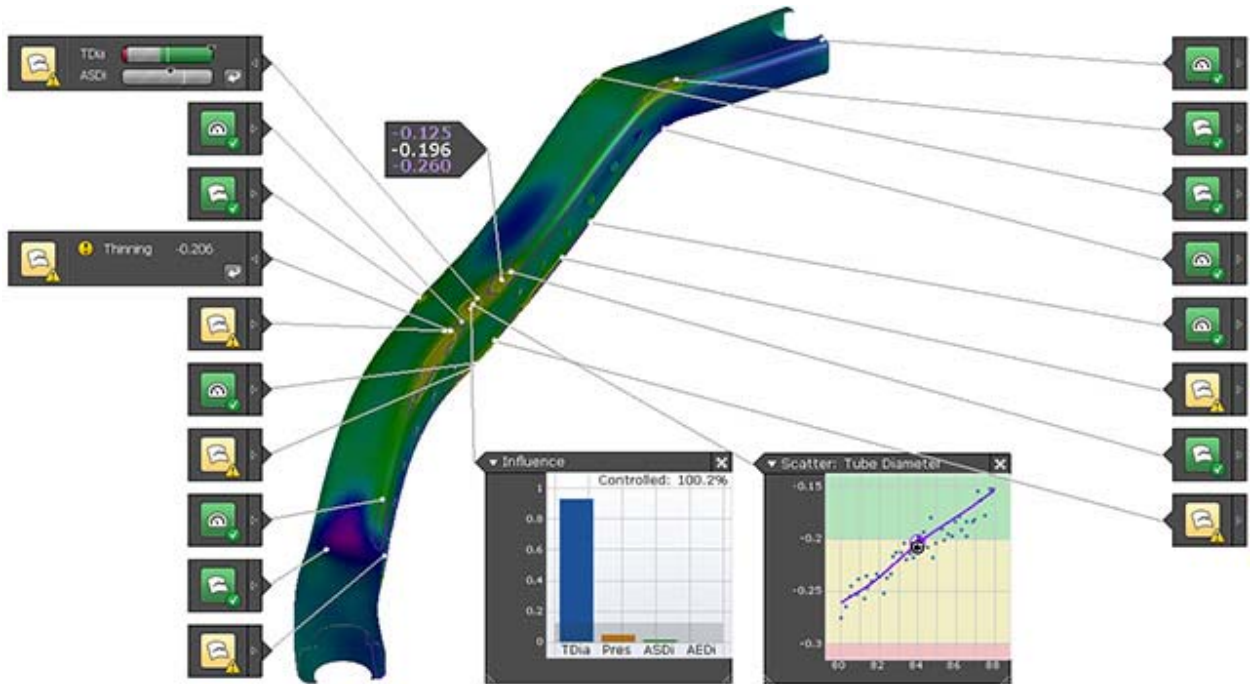
About AutoForm Engineering GmbH

AutoForm offers software solutions for the die-making and sheet metal forming industries along the entire process chain. 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 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 15 other countries. For detailed information please visit: www.autoform.com
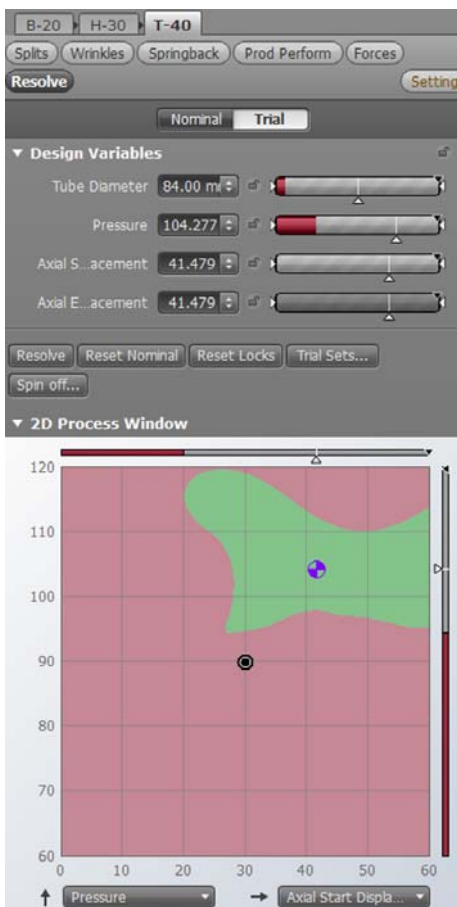
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Automatically detected forming issues based on evaluation standards with scatter and influence plots

2D process window showing process formability depending on pressure level and movement of axial tools

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