

Press Release

AutoForm-Sigma Reduces Correction Loops in Tryout

Zurich, Switzerland, June 29, 2010: AutoForm Engineering GmbH, the leading supplier of software solutions for the sheet metal forming industry, enables to replace today's trial and error principle in tryout with a systematic approach provided by AutoForm-Sigma software. Both time and money are saved since the number of correction loops can apparently be reduced.

The fine tuning of a forming tool during tryout is a cost- and time-intensive process. Correction work and modifications are inevitable on the path to a functioning tool. An improvement in the effectiveness in tryout automatically increases competitiveness. Therefore, the critical areas in the part have to be known. This is also valid for measures taken in order to resolve problems and the influence they have on other areas in the part. The effectiveness of these correction measures, however, is often only evident afterwards.

This is where engineering applies simulation-based tryout support using AutoForm-Sigma. All the theoretically possible correction measures, which can be taken in real tryout, are copied in a simulation model. The calculation – a sensitivity analysis – takes place parallel to tool manufacturing. For this purpose, the original simulation set-up is extended. Correction measures, such as for example the modification of die radius, the positioning of the blank and the blank shape, as well as the restraining force and the binder force, are defined in the form of scatter ranges. The results of the sensitivity analysis are available before the fine tuning of a tool begins.

Should a problem arise in tryout, engineering refers to previously calculated simulation results in AutoForm-Sigma. Engineering and tryout quickly and easily define which measures will have a positive effect on the forming results. The software provides support for users in determining suitable correction measures and leads them in logical steps through the analysis. For example, colored circles show that a certain problem area can generally be influenced. The circle color indicates in which direction a modification should develop while the circle size represents the effectiveness of the measure. By means of a tryout map, a concrete recommended action for the next correction loop is worked out and an action plan is developed. In practice, this plan is usually made up of a combination of correction measures. Finally, planned measures are assessed on the computer to assure that all original errors will be eliminated and no new errors will appear. By means of sliders, AutoForm-Sigma is able to progressively adjust the strength of each of the individual correction measures and to simultaneously follow the effect on the entire part on a computer screen. The correction measures are implemented in sequential steps, or according to the most efficient way to realize them. The action plan is carried out on the tool only if the appropriate adjustments have been determined.

Dr. Markus Thomma, Corporate Marketing Director of AutoForm stated: "Due to complex part geometries, high-strength steel materials, tight deadline requirements for process engineering or tool manufacturing as well as high quality demands, the trial and error method has hardly a chance. One thing is for sure; systematic tryout using AutoForm-Sigma saves time and money."

About AutoForm-Sigma

AutoForm-Sigma is a software product for the sensitivity analysis and optimization of stamping processes. It provides support in tryout, which thereby optimizes tool adjustment and can reduce many correction loops. The effect and sensitivity of design parameters is graphically presented so that the process can be easily followed and development time can be reduced. AutoForm-Sigma is completely integrated in the AutoForm environment. The analysis and description of the results on the part reduces and simplifies time-consuming trials of abstract numbers and diagrams. Expert knowledge is not longer absolutely necessary and can be applied more profitably in other areas of the development process.

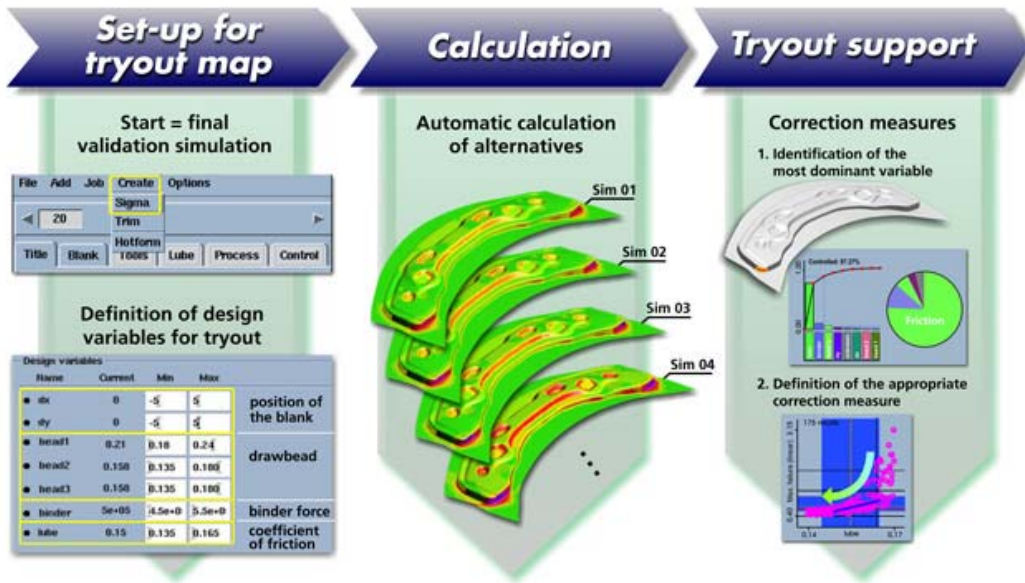
About AutoForm Engineering GmbH

AutoForm offers software solutions for the die-making and sheet metal forming industries along the entire process chain. With over 200 employees, 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, USA, Mexico, 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

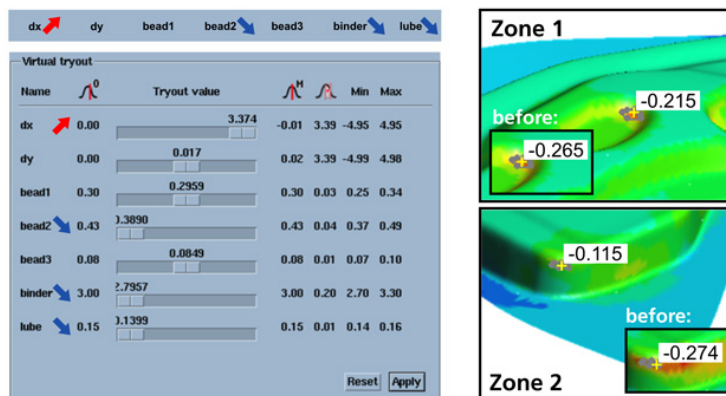
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Systematic approach in tryout using AutoForm-Sigma saves time and money since the number of correction loops can be significantly reduced.



By means of sliders, AutoForm-Sigma is able to progressively adjust the strength of each of the individual correction measures and to simultaneously follow the effect on the entire part before an action plan made up of correction measures is applied.

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