AutoForm

Explorer

Software for
Simulation Setup and Results Evaluation

► Efficient simulation setup
► Quick and accurate process setup
► Rapid assessment of process feasibility
► Semi-automatic results evaluation
► Easy and fast issue identification and interpretation
► Systematic improvement and robustness check of entire process
► Effective use of individual company standards
► Easy visualization of surface imperfections – digital stoning
AutoForm-Explorer

The software allows for rapid and easy simulation setup and evaluation of the most important result variables relevant to the forming process calculated by AutoForm-FormingSolver and AutoForm-Sigma.

AutoForm-Explorer enables process engineers to quickly and easily set up the manufacturing process by defining the tool geometries (created in CAD or by AutoForm-DieDesigner) for each station. With AutoForm-Explorer, results can be evaluated using colored map generated according to defined company standards. In addition, process parameters that affect the resolution of issues that were either manually or automatically defined can also be evaluated (Systematic Improvement).

An efficient process simulation setup is achieved with AutoForm-Explorer and its intuitive workflow-based user interface concept. This new interface allows for the definition of all relevant process parameters and the related tool geometries so that the engineering workflow can be fully and consistently mapped into the simulation data.

With AutoForm-Explorer, interpreting results can be carried out quickly and easily. Semi-automatic issue identification facilitates and speeds up the identification of stamping issues as well as the types of issues and their locations. The user is led frame-by-frame to critical areas that require attention and thereby prevents any possible misinterpretations or oversights. Users can then track the progression of identified issues and quickly compare them by using synchronized multi design views.

Contrary to the typical trial-and-error approach, calculations performed by AutoForm-Sigma solver allow the user to fix all issues by systematically modifying process parameters. A dedicated interface helps designers to identify the process window, which is defined by the interactions of multiple parameters and then systematically adapt the most appropriate countermeasures.

The stamping process affects the surface appearance and thus influences surface quality. AutoForm-Explorer enables easy visualization of surface imperfections by digital stoning method. This method emulates the back and forth scratching of a stone block on a stamped outer panel.

AutoForm-Explorer fully supports the usage and management of company standards. The software also notifies the user of any deviations from the standard and thus ensures that work undertaken is consistent and in compliance with the defined norms and standards.