



: visi flange

3D development of complex flanges

VISI Flange is an integrated solution for quickly and accurately unfolding complex flange geometry and flattening individual features to produce intermediate geometry stages to speed up strip layout development for progressive die design.

VISI Flange accurately develops the blank shape calculations for multi-stage forming processes and allows the trim die to be developed simultaneously with the draw die to save time.

Intuitive interface for ease of use

The simple user interface ensures that it is quick and easy to create flange developments from complex geometry, present the results with a graphical preview and help establish the optimum manufacturing process. A comprehensive material database ensures that the analysis can be performed on virtually any material.

Graphical representation

VISI Flange provides a dynamic contour plot indicating the thickening and thinning resulting from the forming process. Important information such as the flanging and bending stress are available for each step.

Animation of the flanging process is available and interactive analysis is possible by querying the results over each node of the mesh.

Multi-stage forming

Any 3D flange can be either partially unfolded or completely developed allowing the user to analyze and simulate the multi steps required to obtain the final shape. Generally the form can be produced within

a few minutes and has a proven accuracy within 1% of the finished component. The manual or traditional CAD approach would typically involve many hours of calculation and be less accurate.

Flanging on binder

The ability to blank a flange onto an automatic or manually created custom binder gives the user a powerful tool able to solve the most complex flanges quickly, with very high quality and accurate results.

The ability to use a binder for a flange unfolding calculation also allows the user to determinate the shape of the part (trim lines) in a deep drawing multi-operation stamping process

Formability analysis

Flange can also be used to calculate complex flanging formability analysis. The results obtained for each step allow the user to make an easy verification about the safe and accurate formability of the part - saving money and time by avoiding physical mechanical trials.

easy to learn
intuitive interface

highly graphical
analysis

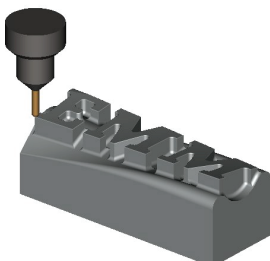
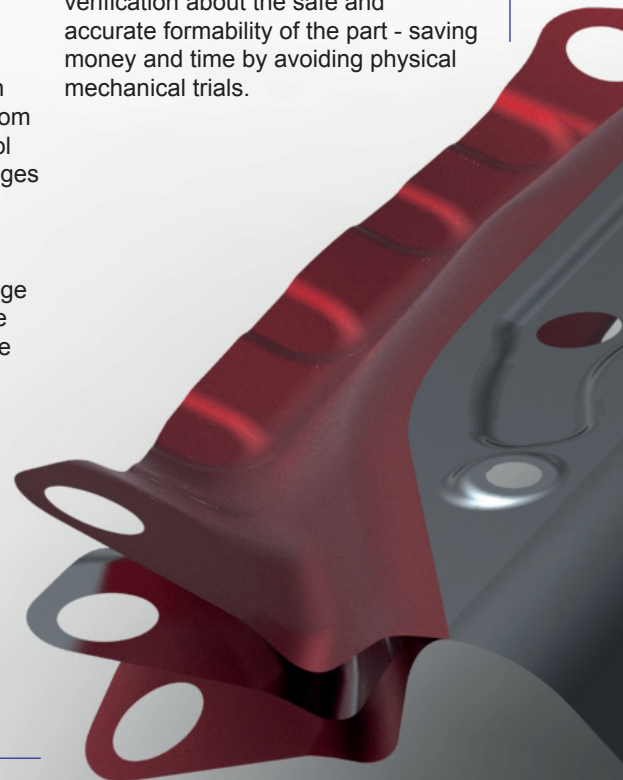
comprehensive
material database

thinning / wrinkling
representation

HTML output
report

High level of
accuracy

Flange & bending
stress calculation



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