



3D Blank Development Tool for Die Designers



3DQuickForm is a powerful SolidWorks[®] add-in application for inverse forming simulation. High speed, accuracy, and full associativity with SolidWorks[®] data are taken into consideration to make 3DQuickForm a production design tool for die designers. Users can either import different types of CAD data or build the die geometries in SolidWorks[®] environment for the forming studies. It helps OEM manufacturers, material suppliers, and die manufacturers to deliver precision tooling in the shortest time and with minimum physical try-outs.

The built-in mesher is automatic and allows user adjustment to meet needs in different situations. Tool designers may fully concentrate on the die design processes and virtual try-outs. Simulations are run in project driven manner and support multiple projects; thus streamlining design feasibility study, process simulation, and optimization. Simulation results are displayed to show initial blank shape, different material thickness, and stress/strain distribution. Customizable material database allows designers to test their design with different materials. Fully integrated with SolidWorks[®], 3DQuickForm is easy to use and rich in functions.



Best-in-class



Features

3DQuickForm

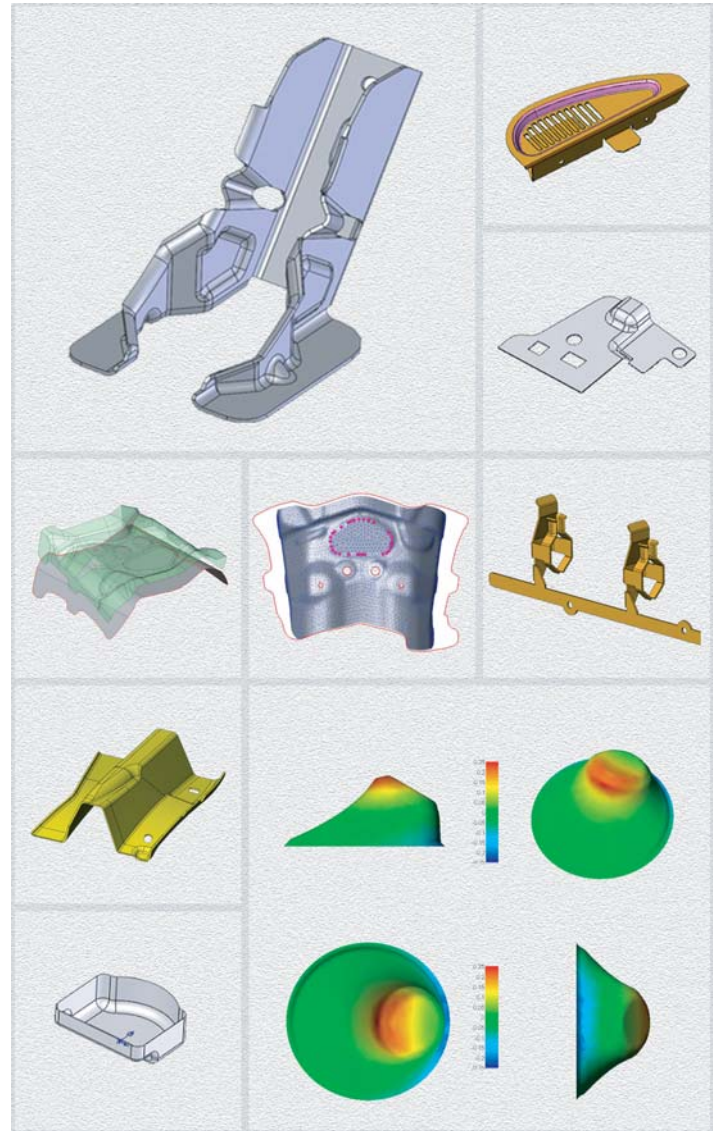
- ▶ Full range of CAD interfaces to read both imported 3D data or native data
- ▶ Special modeling tools for cleaning data
- ▶ Powerful modeling functions
- ▶ Fast & accurate blank shape generation
- ▶ Short learning curve
- ▶ Get blank contours of parts which cannot be folded/unstamped in traditional ways
- ▶ Fully integrated with SolidWorks to allow strip design in fully associative process
- ▶ Better communication results in less engineering changes
- ▶ Quickly compare multiple solutions for a stamped component
- ▶ Handle complex blank shapes and forming features
- ▶ Based on ESI technologies in metal forming
- ▶ Facilitate the material usage calculation in quotation phase
- ▶ Support fixed edges/faces
- ▶ Graphical plots of thinning and thickening of materials, stress/strain, etc.
- ▶ Report generation
- ▶ Customizable material database
- ▶ Complete integration with 3DQuickPress providing the blank shapes for die design process

3DQuickForm Professional

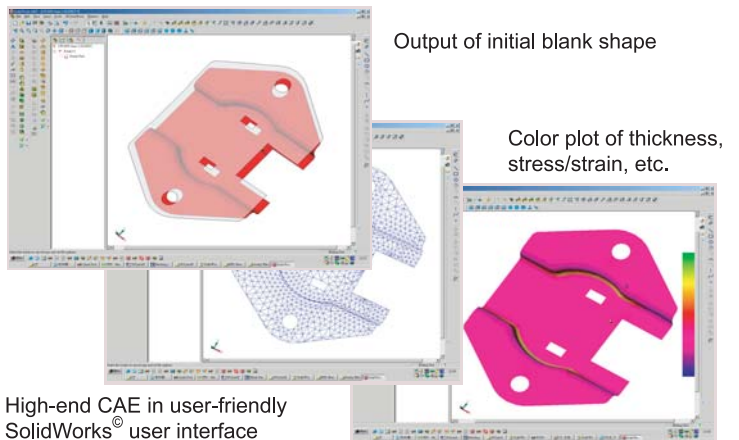
- ▶ All features in 3DQuickForm
- ▶ Part unfolded to non-planar initial blank
- ▶ Symmetrical Boundary Conditions
- ▶ Support Flanging

3DQuickForm Advanced

- ▶ All features in 3DQuickForm Professional
- ▶ Boundary conditions like drawbeads
- ▶ Support multiple-steps, blank holder, trim line
- ▶ Forming Limit Diagram (FLD)
- ▶ Springback calculation
- ▶ Stress report



Empowered by
ESI technologies



3D QuickTools Limited

Unit 115, No.5 Science Park West Avenue,
Hong Kong Science Park, Shatin, N.T., Hong Kong
Tel: +852 2788 2832 Fax: +852 2777 6676
www.3dquicktools.com