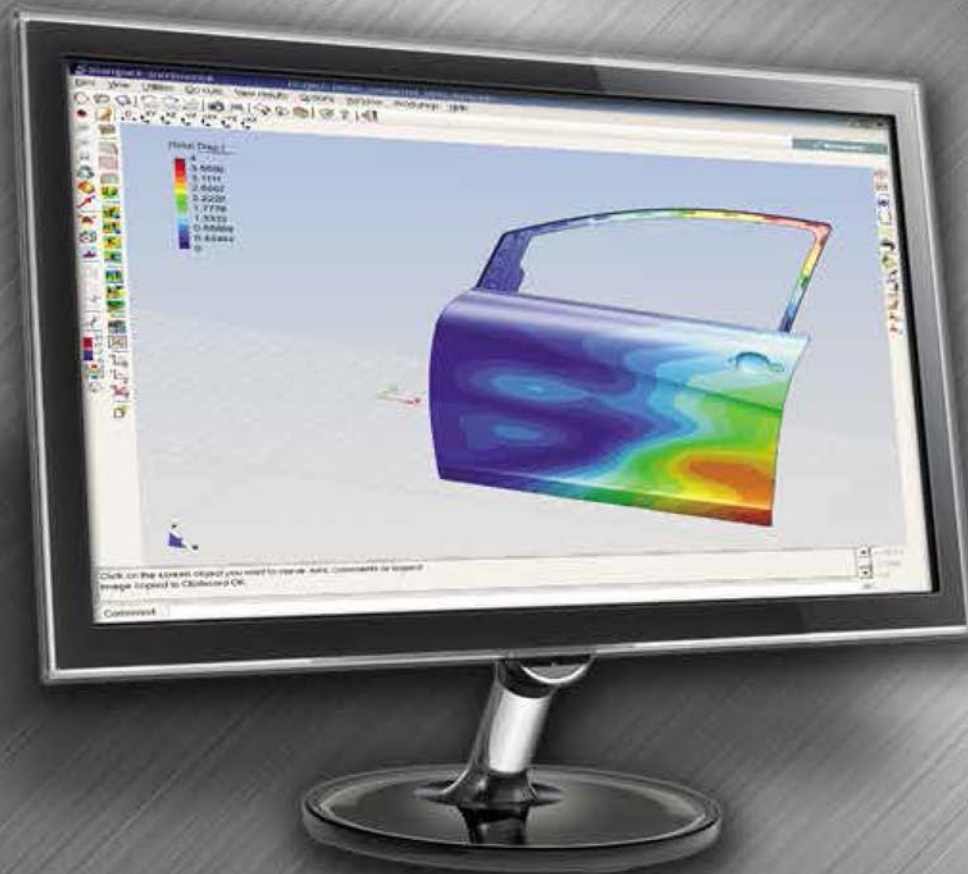


# STAMPAK

Metal forming simulation software



Technology for cost reduction,  
productivity gains, quality  
improvement.....

a product by:

**STAMPAK**  
www.stampack.com

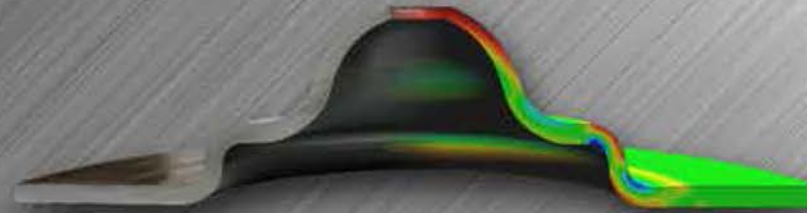
# Applications



The competitive and productive Stampack Tryout Solution is advanced, multipurpose and multistage simulation software for different metal forming industries into single software suite. Stampack's fields of applications meet the needs of demanding markets, such as those of the automotive, aerospace, transport, metal packaging, home appliance, electronic instruments and other sectors.

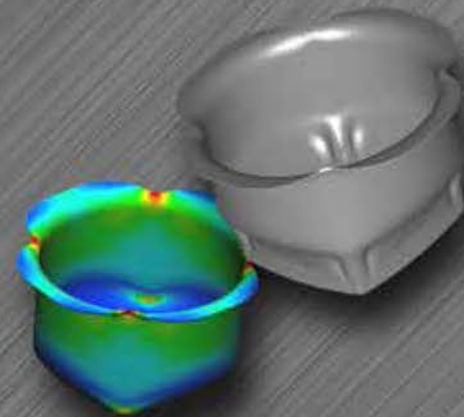
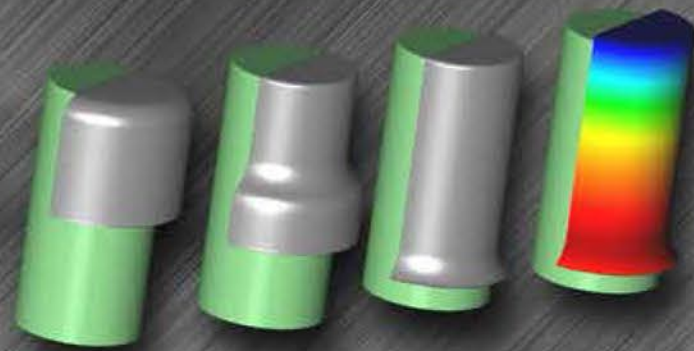
## Ironing:

Ironing is a widely used metal forming process when employed in combination with deep drawing to produce a uniform wall thickness part with greater height-to-diameter ratio. Stampack provides unique element technology and material models for an accurate ironing process definition.



## Forming of very thick sheets:

Stampack provides an efficient, accurate and fast solution to some sheet metal parts that can not currently be simulated with shell elements with enough accuracy when a high bending or high normal pressure occurs. Stampack is the only software able to completely simulate multistage 3D metal forming processes including cutting operations.



## Stamping, pressing and drawing:

Stampack allows the full manufacturing process validation, starting with the blank format, including gravity effects, binder wrap, drawing, trimming, re-striking, re-positioning and flanging.

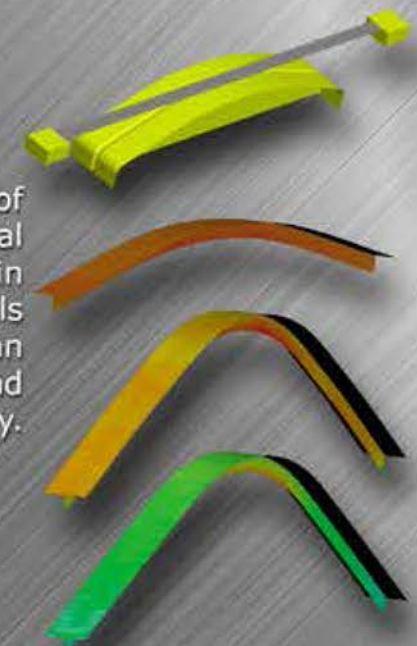
## Fast spring-back and spring-forward prediction:

Stampack allows the accurate prediction of the final part geometry via the fast spring-back computation. A Spring-forward algorithm has been developed to systematically generate a complete geometry description of the tooling surface with spring-back compensation. The algorithm has been proven successful with complicated 3D real metal forming parts.



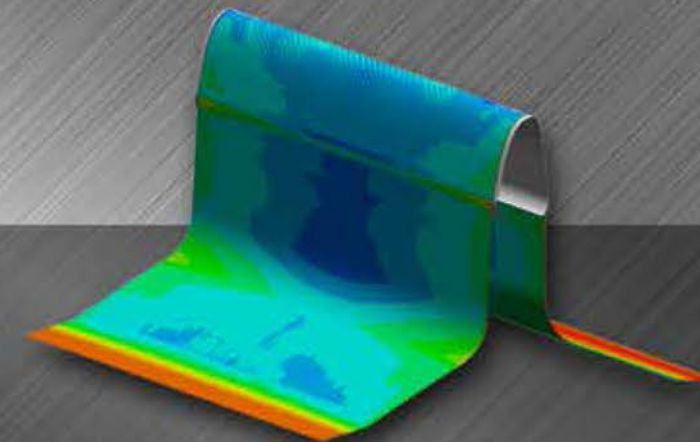
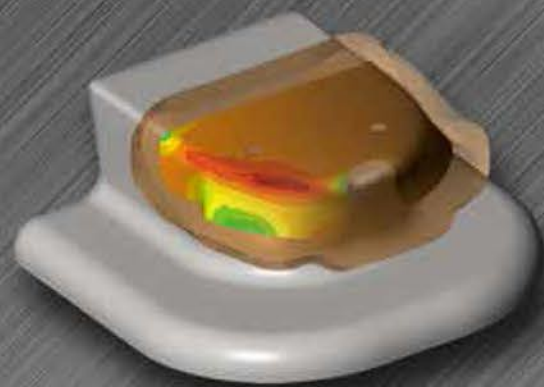
## Stretch-forming of panels and profiles:

Stretch-forming is a very attractive process since it is capable of accurately forming a wide variety of complex curved sheet metal parts and profiles. This is an essential process for body panels in the automotive industry as well as aircraft skin and wing panels or leading edges in the aerospace industry. Stampack users can easily define the simple or tangential stretch-forming process and adjust the trajectories of the jaws and forming tools accordingly.



## Other special forming processes:

Specific operations may be defined such as Hemming, Roll-forming, metal packaging, Flow-forming, Spinning, Forming of multiple blanks, Seaming, Impact tests, Die-less forming (Incremental Forming). The specifically designed windows allow the easy definition of any combination of forming processes.



# STAMPACK

## Features & Benefits

Stampack is practical software oriented to product and process design engineers so that knowledge and experience of finite element analysis (FEA) is not required. Most of the simulation workaround is simplified and automated, leaving engineers to concentrate on the engineering problems and solutions rather than on the numerical parameters.

- Easy-to-install PC software under Windows OS platform
  - Better memory management with 64 bit architecture
    - Powerful and comprehensive 3D modelling tools
      - Industrial and easy interaction with users
- Equipped with a complete material database and material models for metals
- Unique element technology, 3D shell and 2D-3D metal forming with volumes
- Accurate formability for metal flow, wrinkle, fracture and surface defects prediction
- Spring-back prediction and spring-forward algorithm for tooling compensation
  - Multi-processor technology to give computing efficiency
- Powerful results visualization and evaluation for quick process evaluation
  - Multi-lingual interface and helpful documentation for global use
- Continually improved to meet the standards demanded by customers

