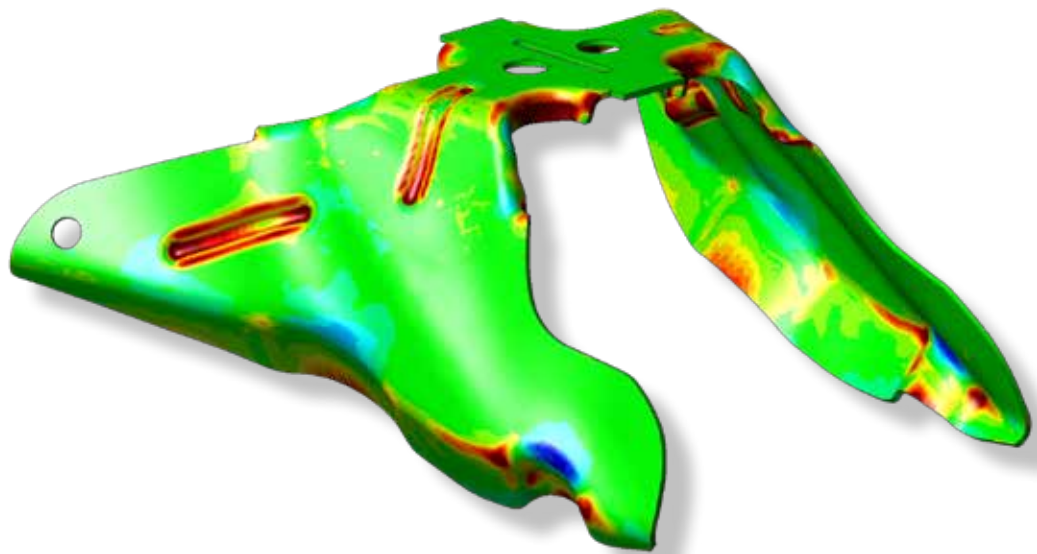




# STAMPAK Xpress

**Sheet metal forming simulation  
for every tool designer**

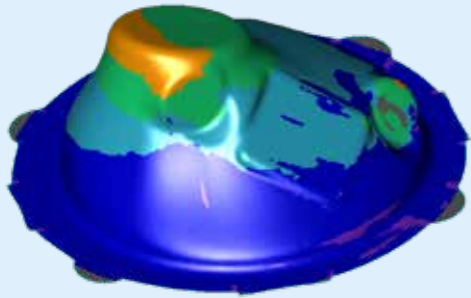


## Virtual feasibility study

### Stampack Xpress

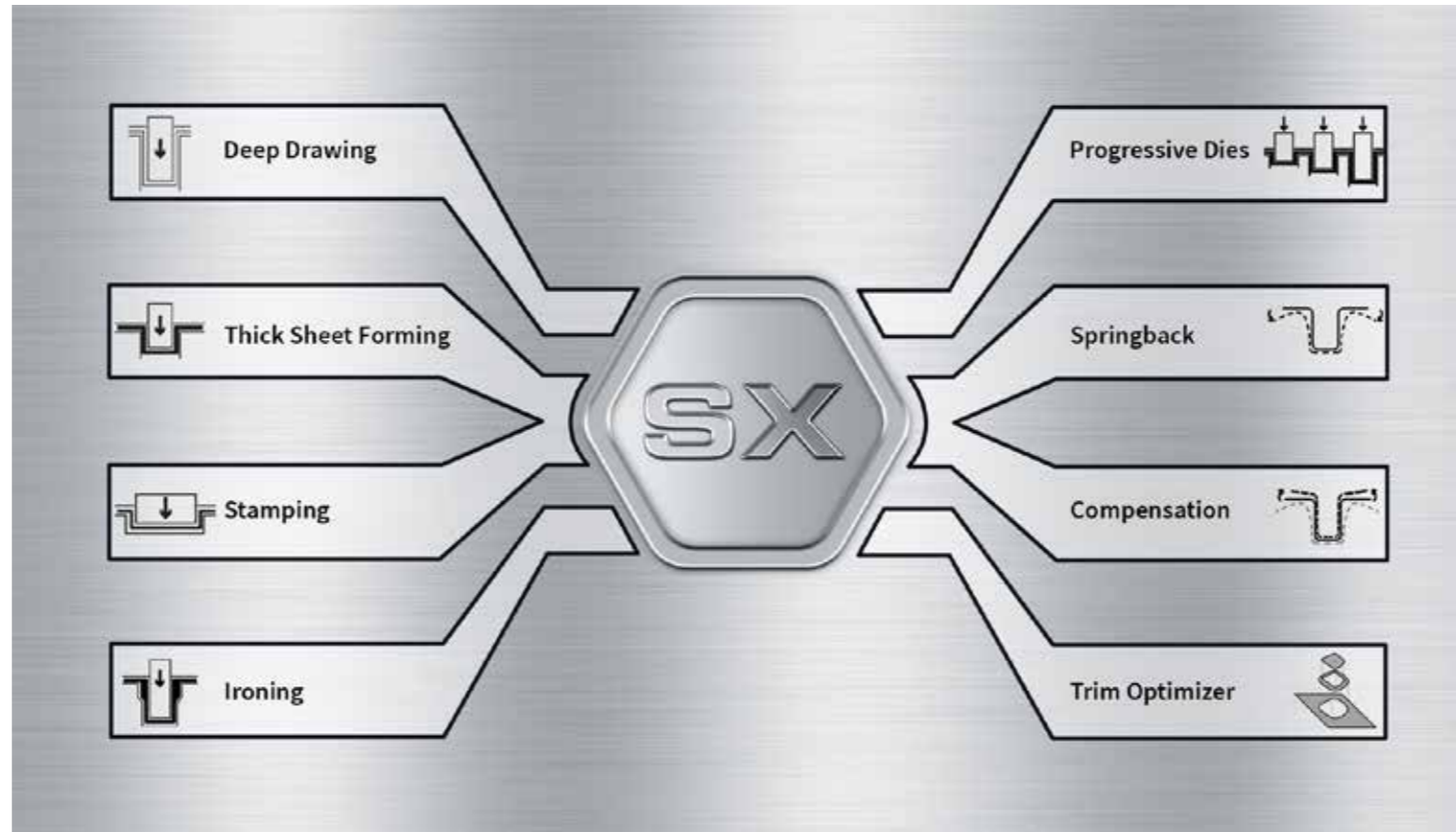
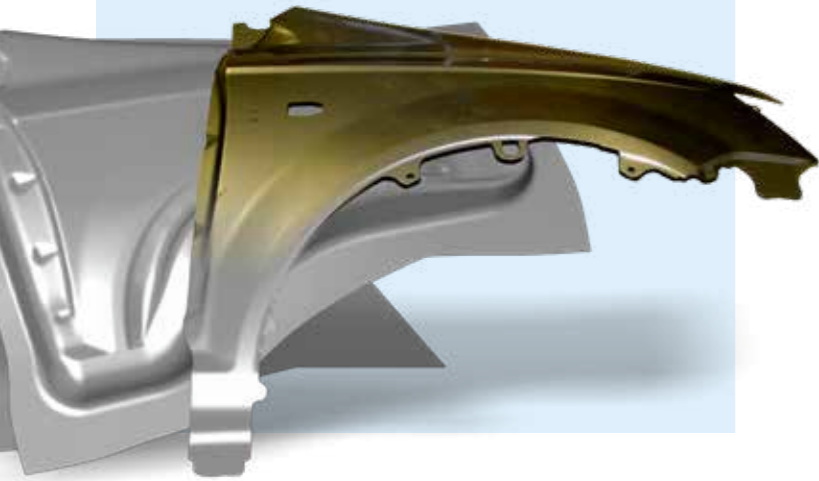
is an indispensable instrument for tool designers.

Stampack Xpress efficiently simulates forming processes for progressive dies and line dies in a short time. Tool designers and method planners use Stampack Xpress to identify problems in the method at an early stage and secure the process right through to manufacturability. As a result, they significantly reduce the number of cost-intensive optimization loops. The software offers intuitive user guidance, consistently speaks the language of the toolmaker and requires no prior knowledge of the finite element method.



### Stampack Xpress stands for:

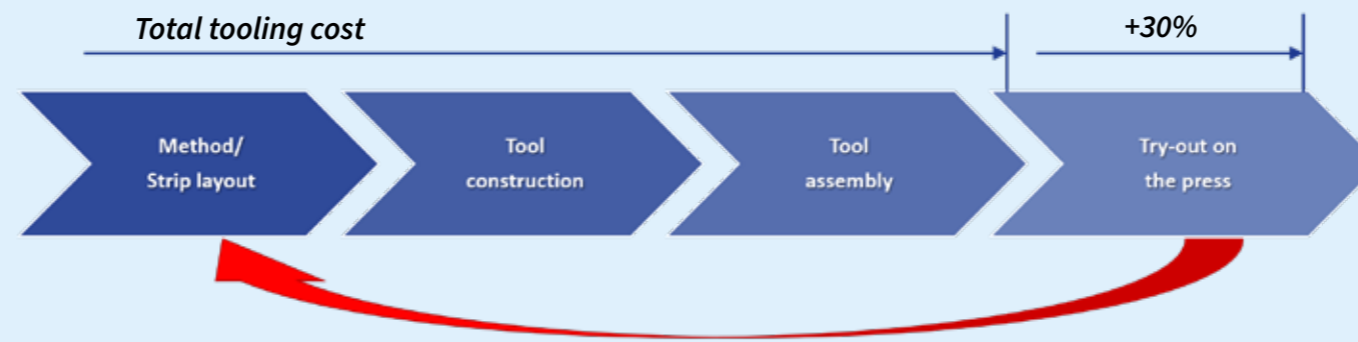
- ✓ Solid simulation for maximum accuracy
- ✓ Shell simulation for quick feasibility study
- ✓ 5 steps to the finished forming simulation
- ✓ Saving long and cost-intensive prototypes
- ✓ No additional costs for using multiple cores



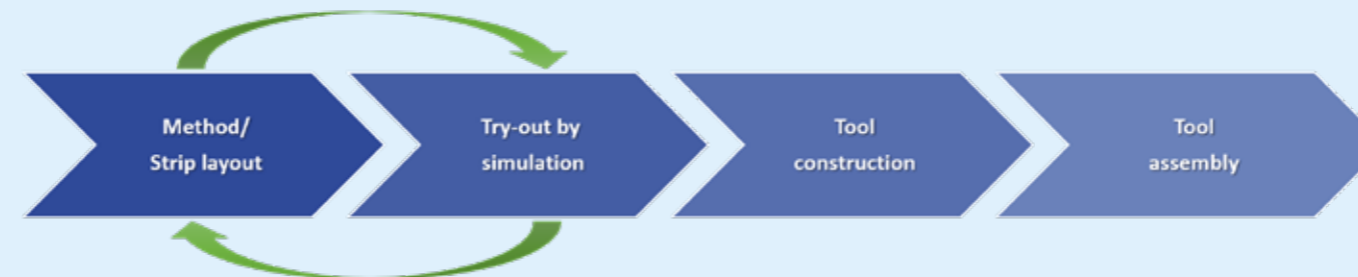
### Method planning without physical try-out

Stampack Xpress replaces the try-out on the press with a virtual try-out by simulation directly during method development. Consequently, Stampack Xpress optimizes the tooling method before the detailed tool design and replaces the tedious and expensive construction of prototypes. Especially when several optimization loops are required, the application of Stampack Xpress saves up to 30% of the total tool costs.

### Process chain without simulation



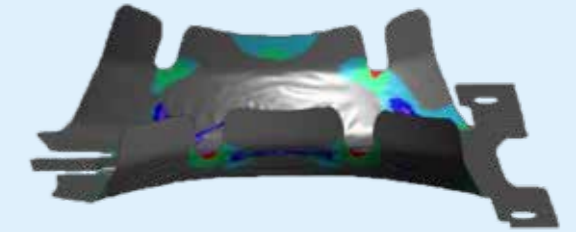
### ... with Stampack Xpress



## Technology for cost reduction and quality improvement

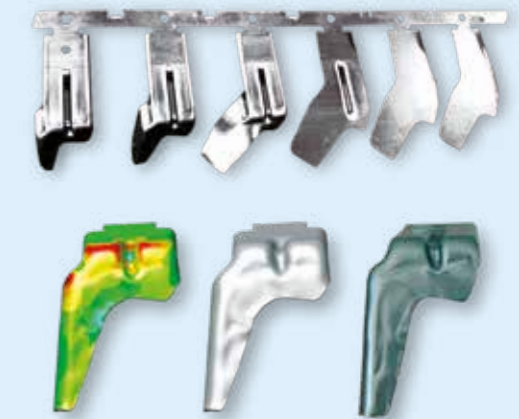
### Stampack Xpress Shell

With the shell simulation Stampack Xpress offers the possibility to simulate forming processes with thin-walled sheets and large drawing radii in detail. Due to the short calculation time, the shell simulation provides also for thick sheet processes a meaningful first impression for tool designers and estimators.



### Stampack Xpress Solid

With the solid simulation Stampack Xpress offers the possibility to map the forming process with maximum accuracy. The three-dimensional solid model also takes stresses and strains in thickness direction into account which leads to a higher resolution. Especially forming processes with thick sheets, small radii or reduction of material thickness can only be validated reliably with the solid simulation. Additionally, markings and slightly damaged surfaces are displayed in detail.



### Stampack Xpress Springback

With the Springback module Stampack Xpress offers the possibility to simulate the springback of the part after forming and to compensate the tool surfaces accordingly. The springback can be calculated using shell or solid.

### Stampack Xpress Trim Optimizer

With the Trim Optimizer module, Stampack Xpress offers an indispensable tool for designing the initial blank with optimum trim lines. These trim lines are determined such that a user-defined target contour is achieved at the end of the forming.

# STAMPACK GMBH

## Development of efficient CAE-software

Stampack GmbH, headquartered in Bietigheim/Baden, Germany, develops advanced and efficient simulation software for all sheet metal forming processes.

The highly practice-oriented simulation **software Stampack** is equally suitable for tool designer and method planner due to its user-friendly operability. Knowledge and experience in the finite element method are not required.

With Stampack the forming processes deep drawing, stretch forming, hydroforming, forming of thick-walled sheets as well as other special forming processes can be simulated. A special highlight is the Stampack solver offering both the 3D-solid and the shell technology for forming simulations.

The use of Stampack avoids the creation of physical prototypes and thus reduces time and costs in the product manufacturing process.

- ✓ Short training time
- ✓ Simple and logical user interface
- ✓ Timely detection and avoidance of errors
- ✓ Increased process reliability
- ✓ Affordable software



Software Provider:

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