STAMPACK

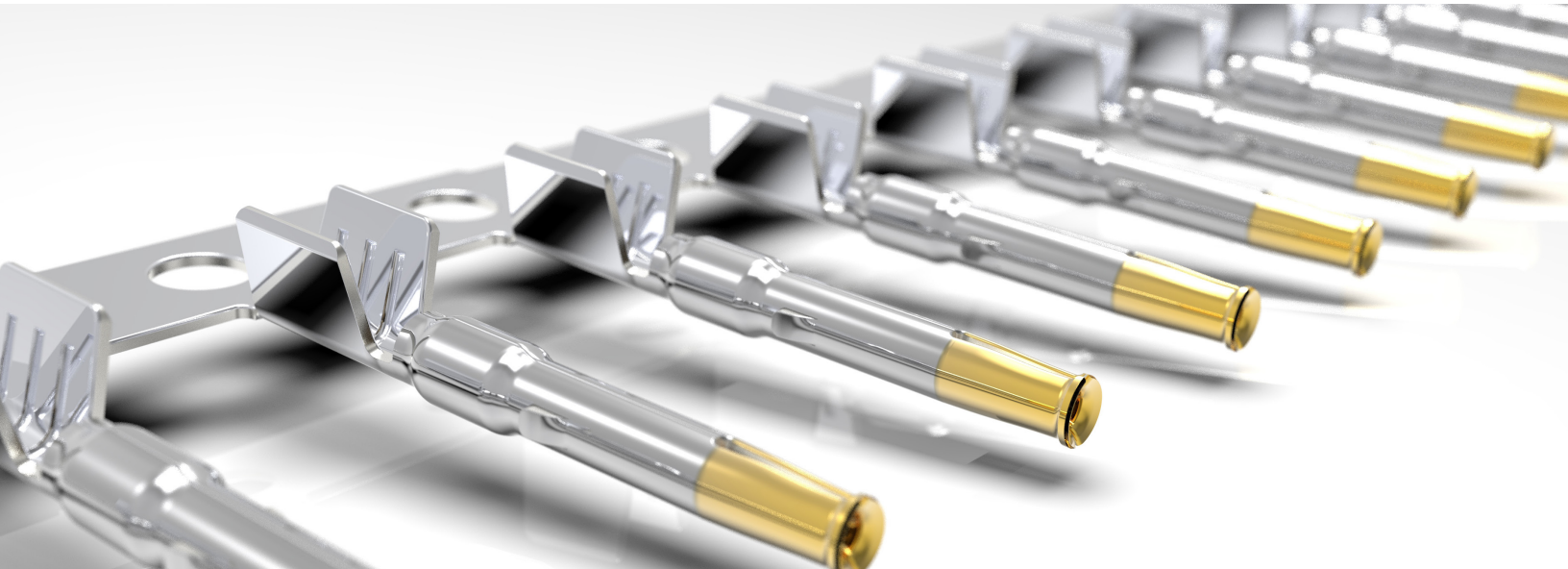
FORMING SIMULATION

Case Study
Rosenberger Stanztechnik GmbH & Co. KG

- Simulation reduces development time -

Stampack is used by every designer to assess feasibility and determine the trimming contour. (Pictures: Rosenberger Stanztechnik)

Headquartered in Fridolfing, Germany, the Rosenberger Group employs more than 15,000 people worldwide and supplies customers in the telecommunications, data technology, medical electronics, industrial instrumentation, automotive electronics, and electromobility sectors with connector solutions for use in high-frequency, fibre-optic, and high-voltage technology. This is where the company's strengths come into play: high product quality, technological expertise, and a high degree of vertical integration. Against this background, Rosenberger Stanztechnik GmbH & Co. KG is an excellent addition to the existing production of stamped parts: The subsidiary specialises in the production of sophisticated, high-precision contact parts for the automotive, telecommunications and electronics industries. Rosenberger Stanztechnik, based in Neuenbürg near Pforzheim, Germany, has its own toolmaking and design department. It has been using Stampack simulation software since January 2022. "During the selection process, we were particularly impressed by Stampack's interface to our existing CAD system VISI and its handling adapted to toolmaking" emphasises Stefan Maier, Head of the Technical Competence Centre (TCC) at Rosenberger Stanztechnik. "Stampack provides us with excellent services, especially when it comes to method planning during layout creation and feasibility studies.



As a result, we have been able to reduce coordination times for change loops.” Stampack calculates an initial estimate with the fast shell solver and then an accurate description of the forming process in the solid without changing the simulation definition. Springback and its compensation calculation are also included, as well as tolerance checking, which can be used in the software to check compliance with production tolerances and to graphically display deviations. The fast solid solver accurately simulates the processes in forming both thick sheets and coining, and is therefore also ideal for simulating progressive die processes. Stampack has fully met the expectations of the specialists at Rosenberger Stanztechnik. In the past, the coordination work for very complex products with multiple steps was very time-consuming and cost-intensive for some projects. After all, the geometry of the blank sometimes had to be determined in several tests, and support had to be provided during product development and feasibility analyses. “Thanks to Stampack, we have been able to achieve the goals we set ourselves, such as shortening tool coordination times and thus reducing throughput times. In addition, we can now save resources and production capacity by reducing recursions and detecting blank cracks at an early stage during heavy forming” concludes Stefan Maier. “In addition to the short calculation times of the solid solver, we particularly like the user-friendliness of the software, which enables our designers to visualise even complex forming processes on the computer in a very short time. Due to these consistently positive experiences with Stampack, the software is now also being used at the headquarters of Rosenberger Hochfrequenztechnik GmbH in Fridolfing.”

Rosenberger Stanztechnik focuses on the production of sophisticated, high-precision contact parts for the automotive, telecommunications and electronics industries.

Rosenberger Stanztechnik GmbH & Co. KG is based in Neuenbürg near Pforzheim.

Stampack GmbH, based in Bietigheim, Germany, develops and distributes Stampack simulation software for forming tool design. Since its market launch in 2010, Stampack has become the leading simulation software for progressive dies. Thanks to enormous improvements in the computing speed of its own solid (3D volume) solver, Stampack is suitable for complex forming processes from the connector sector to large-area automotive parts. New developments such as iterative springback compensation and automatic blank line determination make Stampack a complete package that has become indispensable in the development process for more than 170 customers world wide. The practical software is aimed at both product developers and process planners. No previous knowledge or practical experience of FEM is required.