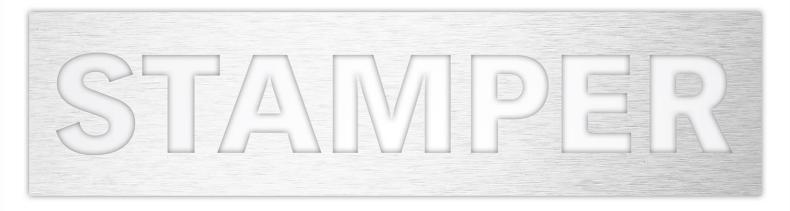
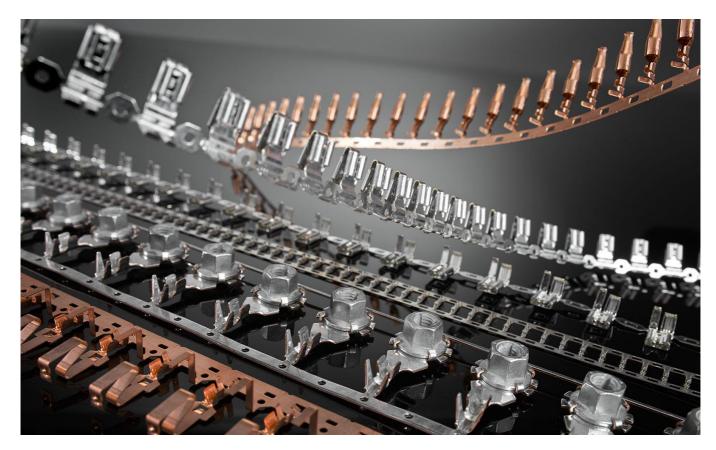
BRUDERER APPLICATION STORIES.

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STOCKO - all the right contacts.

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> The village of Andlau, near Strasbourg in the Alsace region of France, is best known for its wine production and trading. It is also home to STOCKO CONTACT Eurl, the French base of STOCKO, the leading European supplier of electro-mechanical components headquartered in Wuppertal, Germany. What began in 1957 as a way of entering the French market is now a area specialised in stamping technology. The factory in Andlau, which employs 170 staff, produces top quality electrical contacts and connector systems which are primarily used in domestic appliance technology, heating technology, industry and in the automotive sector. STOCKO's customer list reads like a "Who's who" of respective market leaders, with the company's products seen in many households and objects of daily use, such as washing machines, dish-washers and vehicle



Tools are developed and built in-house which leads to innovation at the highest

Comprehensive expertise.

The tool making capability is one of STOCKO's secrets of its success. Most of the employees have been with the company for many years and are highly-trained specialists. Their expertise is an important commodity in a region where these skills are increasingly hard to find. All press and moulding tools are developed and built by STOCKO in-house. The parts produced are processed using state-of-the-art equipment and finished and assembled on specially designed and constructed processing systems. Quality and efficiency can thus be ensured from day one through to production completion, all in-house.

The machine shop for production contains 25 precise highperformance machines for grinding, milling and EDM in multiple shift operation. As technical director Jean-Bernard Herrbrech explains, 2,500 - 3,000 tonnes of metal, primarily steel, copper, brass and bronze, are processed every year in a production area stretching over 8,000 square metres. In Andlau alone, some 12 million parts are produced every day. The STOCKO range has around 5,000 products, with a third of them made in Andlau.

Sales manager Pascal Dell points out that STOCKO products from Andlau are sold in 47 different countries around the world directly

from the factory, with over 30 % of them going to the French market. The and increasingly China, with sales to the automotive sector increasing

biggest purchasers are Germany, Turkey by 50 % in the past five to six years

Jean-Bernard Herrbrech (Technical Director STOCKO CONTACT Eurl).

alone. In order to maintain the standards required by customers, the contacts that are produced undergo strict analysis in the company's own laboratory and are tested for homologation. Head of the laboratory Francine Mertz and her team in Andlau use a wide variety of measuring tools and equipment, including a climate chamber and an oven for temperatures of up to 300° Celsius. One of the main advantages of using processing systems and tools developed in-house is that it makes it easier to adhere to the strict UL standards. This equipment can be integrated by customers into existing machines, making STOCKO a UL-certified one-stop shop.

Looking to the future with BRUDERER.

Stamping is one of the core competencies of the STOCKO factory in Andlau, which acquired its first BRUDERER automatic stamping press at the beginning of the 1970s. The CEO at the time was looking for a machine which could stamp more quickly than what they already had, in order to significantly improve manufacturing processes. Better production processes are still one of the secrets of STOCKO success and a catalyst for many of their internal innovations. There are currently 22 BRUDERER presses in the stamping department, with pressing forces ranging from 18 to 160 tonnes. Head of production Jean Weiss is particularly impressed by the reliability of the machines as well as their flexibility of implementation and their precision. The production centre in Hellenthal also has 12 machines from BRUDERER. Strips are processed in Andlau in a three-shift operation, with widths of 10 – 200 millimetres and thicknesses of 0.15 – 2.5 millimetres.

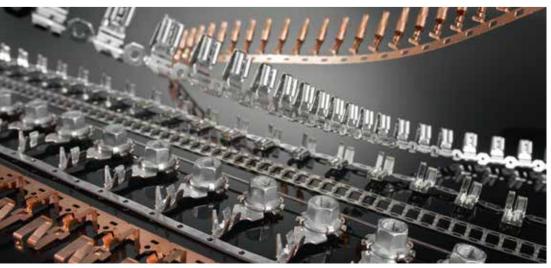
For white goods and in the automotive sector, there is a continued trend towards having more electronics and functions, which is expressed by increasingly large and more complex tools when it comes to stamping. The development of new products brings with it new demands in terms of manufacturing and leads to the acquisition of new machines and feeds. STOCKO thus purchased a Bruderer BSTA 810 with a BSV 300 servo-feed for Andlau two years ago. This high-performance automatic stamping press has a tool loading area of 145 centimetres and is capable of handling work processes with complex progressive tools. Just a few weeks ago, BRUDERER delivered a BSTA 1600 with a 181 centimetres bed length with a BSV 500. This machine is being used to produce connector's for new applications in electrical engineering, enabling STOCKO to tap into new markets and customer groups. At the same time, the company is looking to use this technology to anticipate future market demands, and opted to acquire one of the latest BRUDERER automatic stamping presses for its bed length, stamping force, speed and for the repeatable precision of the machine.

STOCKO has been happy to rely on the feed technology developed by Bruderer for many years and utilises every last ounce of the performance available. The latest generation of large BRUDERER servo feeds are particularly suited to these new applications. "The performance of all this equipment is very impressive," says head of production Jean Weiss.

Building work is currently ongoing at STOCKO in Andlau to create more space for all departments, in particular for manufacturing and stamping. The overall floor space is being increased by about a third, and Herrbrech hopes that this will enable enough capacity to be created in the medium term to meet the ever-increasing demand. Quicker stamping and more complex components are what customers are seeking nowadays, with quality standards of course being maintained. The automotive industry is also seeing hybrid technology, e-cars and high-performance electronics creating new requirements and products. "Customers always want some sort of extra added value from their suppliers," Herrbrech explains, "and we can offer that courtesy of our high performance manufacture and the integration of a variety of different technologies. STOCKO contacts are versatile – just like the people who produce them."



successful innovations have come out of improvements in production processes.



Consistent quality in connectors and contacts - thanks to the high-performance automatic stamping presses