





„Ever-increasing tolerance requirements are being placed on components. So it is important that we work alongside the customer as early as the design and development stage. That derives the greatest benefit for the customer,“

Marius Fallmann, Conform Team leader at  
ARNOLD UMFORMTECHNIK

production, with no further changes needed.

### There is a demand for aluminium and copper parts

AUT has been manufacturing Conform parts for several years now. In the past few years, the range of manufactured products has changed. Weight reduction and conductivity in aluminium parts have become increasingly important. And there is also a demand for copper parts because of their good conductivity. Examples of ideal applications are precision parts, toothed parts, hollow parts and nuts and bushes. As a rule, Conform products are produced on presses that have between five and seven stages. Depending on the geometry requirements they may require post-production rolling or some machine finishing. Of course, the biggest cost benefit occurs when cold-forming alone meets all the

requirements and the part can be produced without a finishing process. Another advantage of the Conform process is that Arnold Umformtechnik has its own tool-making department. The majority of the tooling is produced in-house.

### Technical and commercial benefits for customers

Due to this development in the mobility sector, the enquiry process has also changed. According to Arnold, it is necessary to assess, for example, conductivity, strength requirements for copper and aluminium - which are rather soft - and also copper-chromium-zirconium

or the surface voltages too. When it comes to the battery, of particular importance is the seal of the fastening solution as well as how the appropriate seal concept is drawn up. The result is that, together with the quotation for producing the part, customers receive a proposal drawing for cost-optimised implementation, as well as a manufacturing feasibility assessment. As an option, customers can also commission a carbon calculation as early as the development stage. Using its own carbon calculator - developed in-house - Arnold can determine the Product Carbon Footprint for the part the customer is enquiring about, and can then work with the customer to improve it.



Picture 2: A multi-functional fastener manufactured by cold-forming.  
(ARNOLD UMFORMTECHNIK)

Picture 3: As for the battery, what is especially important is the seal of the fastening solution and how the appropriate seal concept is drawn up. (ARNOLD UMFORMTECHNIK)

With Conform parts Arnold's customers are not only obtaining weight savings in their multi-functional fasteners. They are also able to generate many benefits. Customer-specific geometries can be handled, as can individual material selections, along with an early check of the series run. As well as the technical benefits, Arnold also asserts that cost-savings of up to 80 per cent can be made, the number of parts and handling can be reduced, assembly time can be shortened and development time cut with Fastener Express.



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With a foundation of many years of expertise in the production of intelligent fastening systems and very complex extruded parts, the ARNOLD GROUP has developed over a number of years into a comprehensive supplier and development partner for complex fastening systems. With our new positioning of "BlueFastening Systems" this development process will now continue under a united and harmonised structure. Engineering, fastenings, and functional parts, together with feeder processing systems, all from a single source – efficient, sustained and international.

Since 1994 ARNOLD has been part of the Würth Group.