



Conform[®] Conform[®] Next

Cost-optimised multi-functional parts

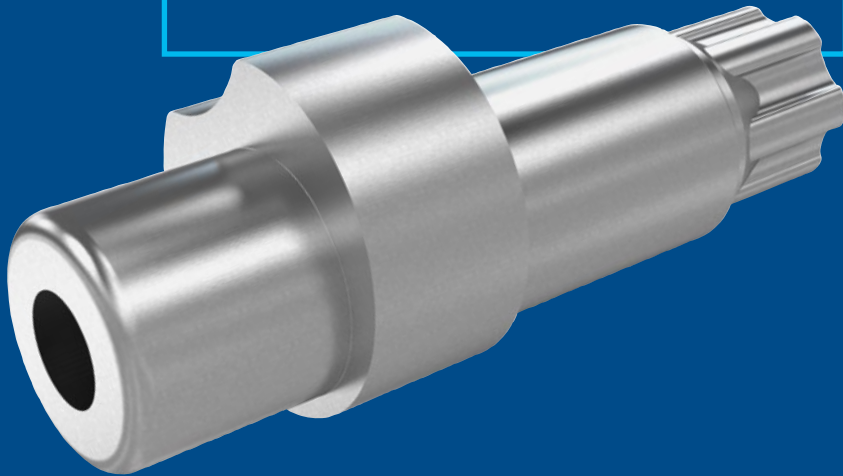
- + Ready for series production right from the start
- + An alternative to expensive milled/turned parts
- + Up to 80% cost saving
- + Rapid prototyping
- + Multi-functional applications
- + Multiple in-house production possibilities



80%

Cost savings

With our innovative multi-stage forming you save up to 80% on bulk production runs compared with milled/turned parts. These substantial savings are achieved because less material is required for non-cutting forming. Additionally, multi-stage pressing significantly increases production output compared to conventional lathes.



The Conform® effect

Customer-specific geometries

➤ Individual component geometry for optimum deployment, taking the customer's application into account.

Materials selected individually

➤ Joint development for optimal design and material selection aiming for cost, weight and CO₂ optimization.

Multi-functional fastening solution

➤ Combines various requirements in one multi-stage cold formed part.

Electrification and light-weight construction

➤ Requires appropriate material and design selection to meet weight savings, load capacity and conductivity requirements.

Conform® Cost-optimised multi-functional parts

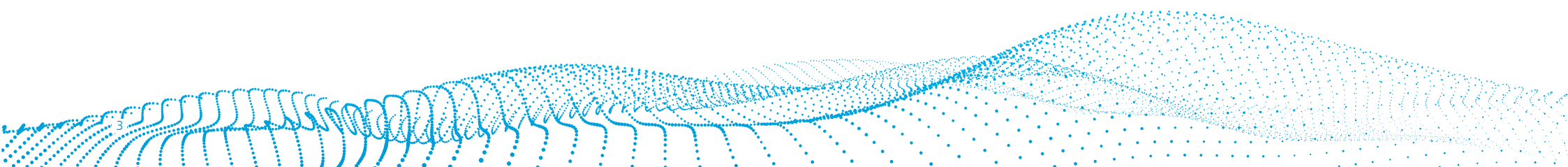
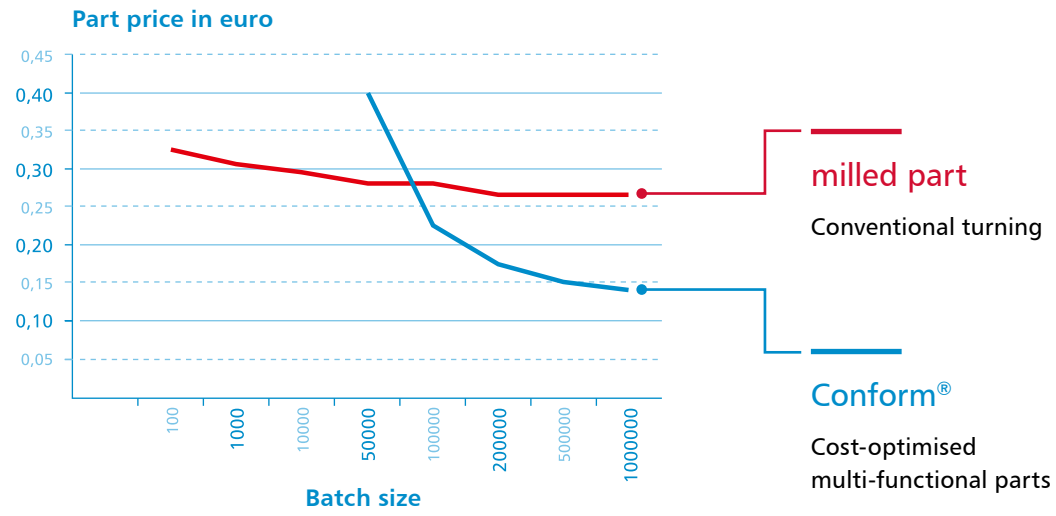


Complex cold-formed parts,
tailored to the customer

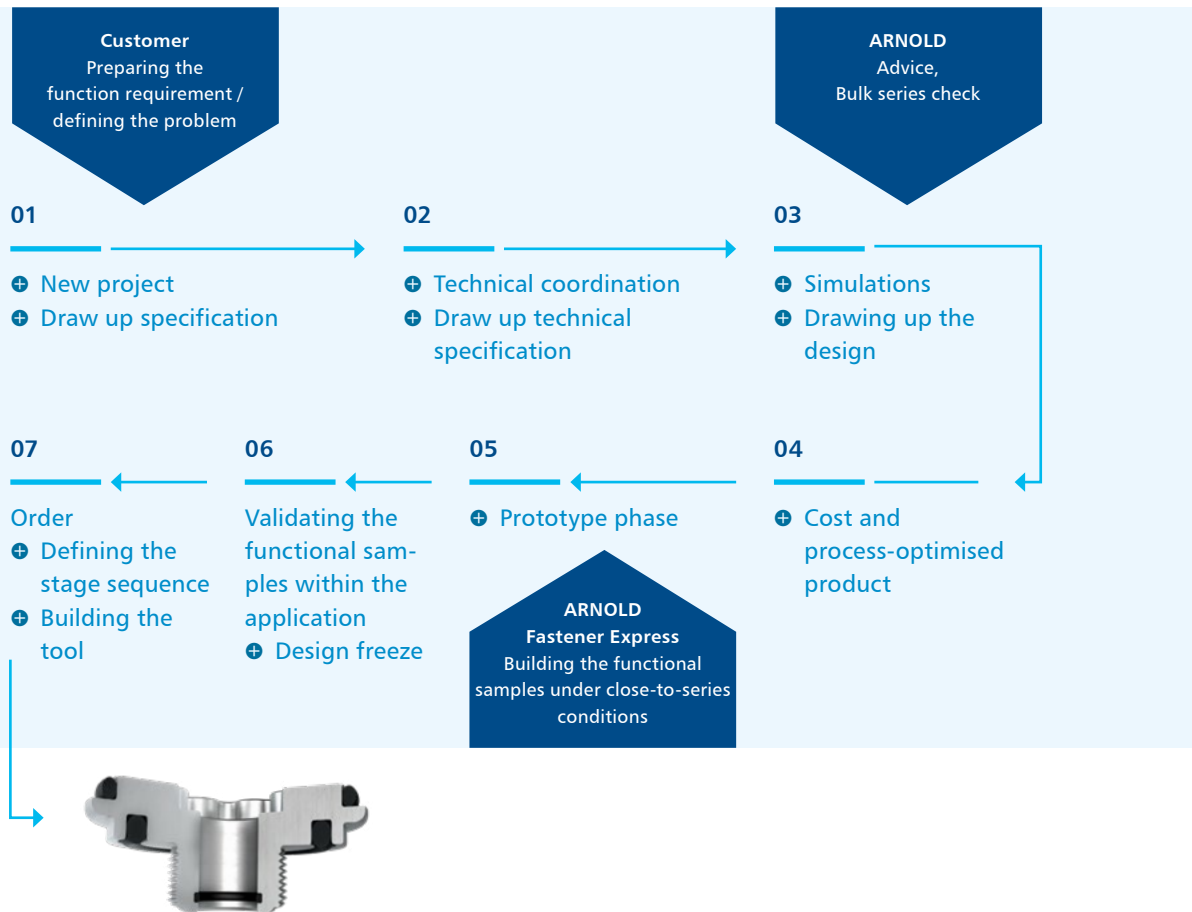
Conform® is an advanced manufacturing process we developed to produce complex cold-formed parts for multi-functional applications. These parts are highly customized to meet specific customer requirements and are manufactured using state-of-the-art facilities and cutting-edge machinery.



Sample cost comparison between milled part and Conform®



Conform® Optimum development process

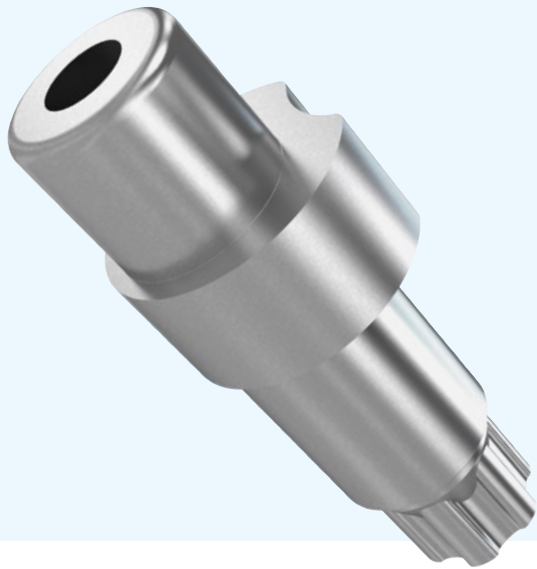


Quicker into series production with rapid prototypes

Engineering designers and developers see the benefits of our “ARNOLD Fastener Express”, where we develop prototypes and tools as close to serial production as possible. This service enables rapid prototypes to evaluate customer requirements as well as to prepare us for production.

Conform® – cold forming

Sustainable, cost-efficient, multi-functional



Thanks to appropriate post-production options, it is possible to implement additional contours, both external and internal. Thanks to appropriate post-production options, it is possible to implement additional contours and external and internal contours. We have our own heat-treatment and surface treatment facilities so that we can handle the entire manufacturing process in-house, in one continuous operation.

Production

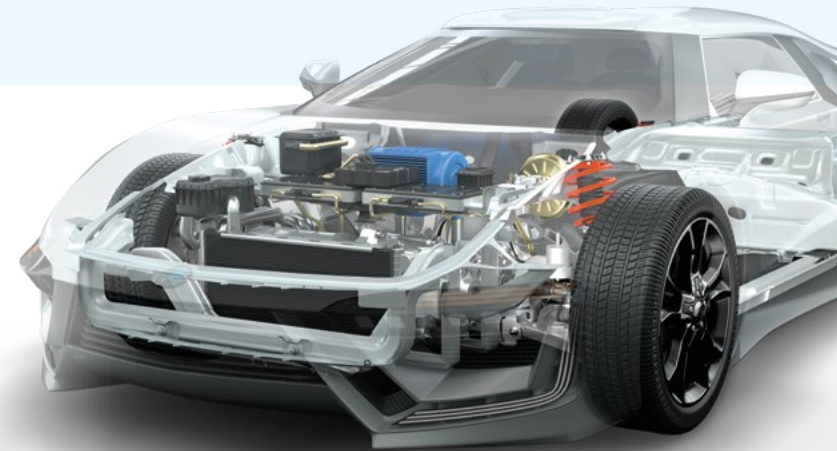
We produce our Conform® parts **using latest machinery and technology:**

- + Multi-stage header
- + Enhanced post-processing for complex internal and external features

Product range

Conform® product designs are almost unlimited. Our **comprehensive product range** includes:

- + External knurling
- + Form-rolled parts
- + Hollow and semi-hollow parts
- + Eccentric parts
- + Bearing Bushings



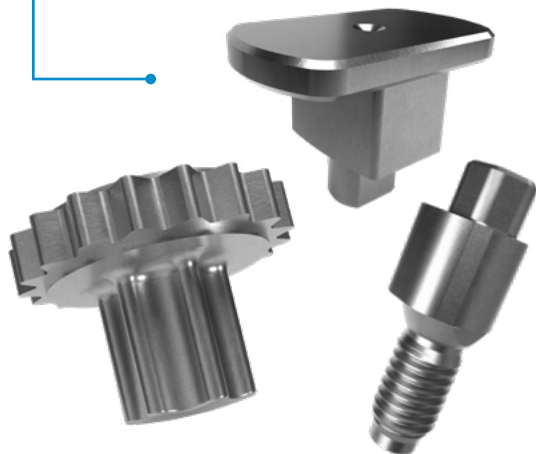
The Conform® - product range

From precision parts to component assemblies (in steel, aluminum, copper, stainless steel)

Conform® - special parts

We use the latest high-gloss polished and coated forming tools for our cold-forming process. This means we achieve very high accuracy. Some examples of Conform® special parts:

- + Friction welding elements
- + Components used in electronics
- + Spacer and connecting elements
- + Parts for riveting/peeling/press-fitting



Conform® – hollow and semi-hollow parts

The light structures required in the automobile industry demand savings in materials and weight, while at the same time using materials and components that possess high load capacities. Plastic-moulded bushings take account of this development. Eine beliebte Anwendung ist das Umspritzen einer Buchse zur Verstärkung von Kunststoffanwendungen, um Schwachstellen für tragende Elemente zu vermeiden und eine Vorspannkraft in der Befestigungsverbindung zu erreichen. Aluminiumbuchsen in Kombination mit einer gewindefurchenden Schraube (TAPTITE 2000®) sparen noch mehr Gewicht ein. Conform®-Buchsen ermöglichen eine hohe Genauigkeit in Länge und Durchmesser.

- + Components designed to avoid torque and pull-out
- + Thin-walled parts with external and / or internal thread
- + Compression limiters
- + Oblong bushings

Conform® – special parts with ancillary elements

Adding more value and functionality by developing a fastener with an integrated seal or washer to enhance performance in demanding applications, such as preventing leakage and meeting complex requirements. For example, special parts with mounted or vulcanized seals.

- + Battery housing fasteners
- + Coolant nozzle
- + Assemblies



Conform[®] Next - manufacturing to perfection sustainable, component-specific, multi-functional



Conform[®] Next – Sustainable production of cold-formed components for the mobility of the future. Our state-of-the-art facility, combined with our proprietary in-house processes, enable us to manufacture most complex products made out of aluminum and copper.

Production

We produce our Conform[®] Next parts using **a technology** that we developed ourselves:

- ⊕ Multi-stage presses with more than 10 forming stages
- ⊕ Inline progressions specific to the component for complex internal and external geometries
- ⊕ Various options for automated customer-specific testing, assembly and packaging
- ⊕ 100% leak-test capability
- ⊕ QR code for traceability

Product range

This ensures that the areas of application and the design possibilities for Conform[®] Next products are almost unlimited. Our comprehensive product range includes:

- ⊕ Components in special materials (aluminum and copper)
- ⊕ Thin-walled components with external and/or internal thread
- ⊕ Components up to 150 mm in length and 50 mm in diameter



Conform® Next - product range

For the mobility of the future.



Conform® Next – battery structural parts

For our structural elements, which are mainly subject to mechanical requirements, we use common materials for solid forming as well as aluminum materials from the body and chassis sector.

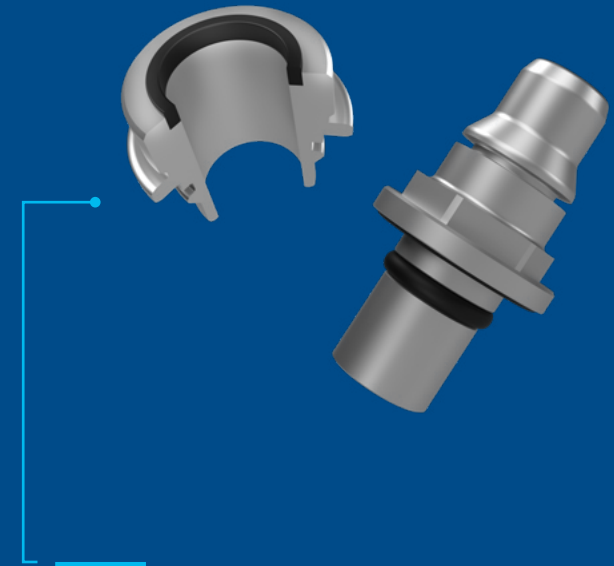
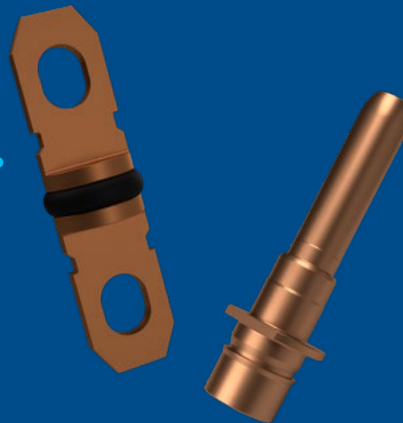
Examples listed below:

- ⊕ Through-hole bushings for screwing or welding
- ⊕ Multi-functional special screws with sealing features for example
- ⊕ Reinforcement components

Conform® Next – power electronic components

Utilize copper plug contacts as an alternative to conventional turned/milled parts. Our copper components are realized by economical production and efficient use of materials. Examples include:

- ⊕ High-voltage plug (round contacts, flat plug)
- ⊕ Power bushings
- ⊕ Components with transverse hole
- ⊕ Components with a sealing feature



Conform® Next – parts for coolant connections

Standardized Coupling features are possible to the same extent as customer-specific designs.

Specifically, the connection to the coolant circuit can be realized by welding or soldering as well as screw solutions with additional sealing.

- ⊕ Coolant nozzle for screw fastening or soldering
- ⊕ Fluid connectors
- ⊕ Distributor nozzle
- ⊕ Special design

The ARNOLD GROUP

www.arnold-fastening.com

Wherever customers need us.

ARNOLD – this name is internationally renowned for efficient and sustainable fastening systems at the highest level.

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 positioning of "BlueFastening Systems", this

development process will continue under a united and harmonised structure. Engineering, services, fasteners and functional parts, together with feeding and processing systems, all from a single source – efficient, sustainable and international.

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