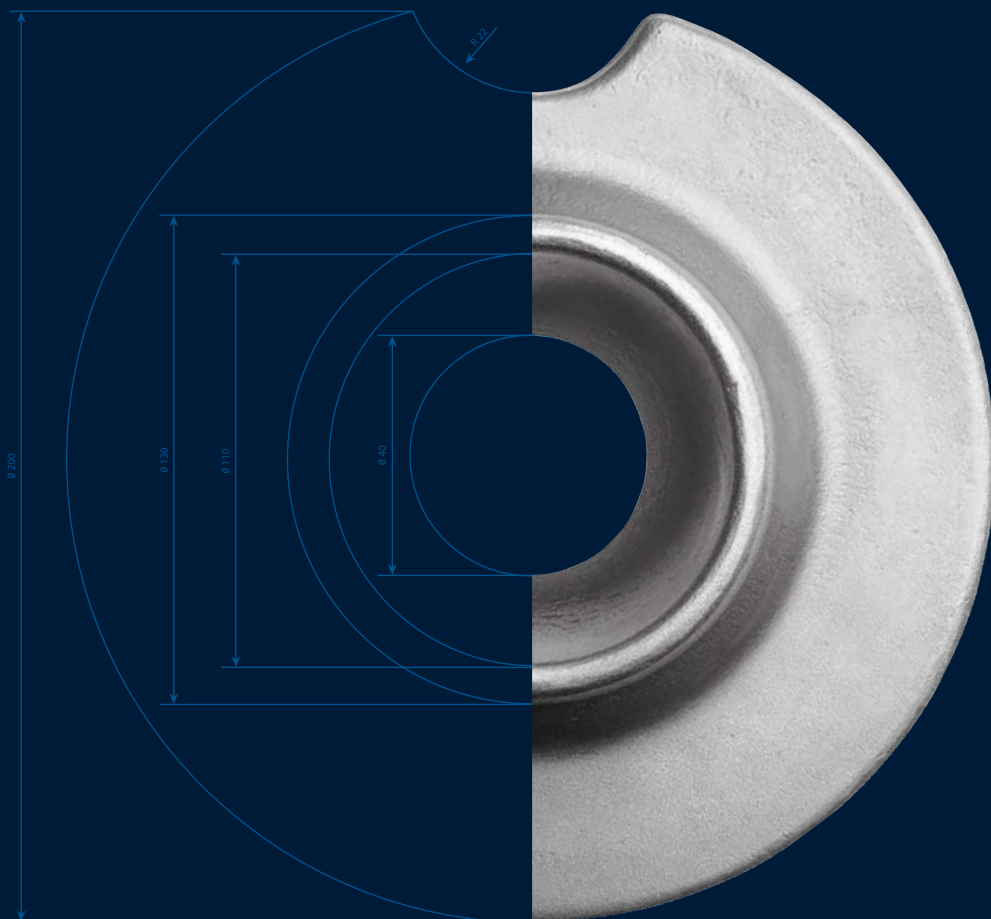


Forged parts
for life

www.gedore-forge.com

GEDORE 
TOOLS FOR LIFE



GEDORE 



iFORGE 

Competence in forging for over 150 years

At GEDORE's forging centre in Remscheid, the company forges individual items of the highest quality and durability for customers in industry all over the world.

As the renowned manufacturer of all kinds of tools, GEDORE is well known as an expert in forging to the very highest quality. However, GEDORE doesn't only manufacture forged items under its own brand. GEDORE's forging centre has also considered itself as a specialist in the manufacture of forged parts to individual customer specifications ever since the company was founded as Krumm & Co. back in 1864.

Our experience and expertise flow into the development and manufacture of your forged parts, and in doing so we pass our competence in forging on to you. With the GEDORE forged parts in our iFORGE division, we offer you the entire development and manufacturing process of a forged item with the full support of our know-how.

Whether for leading industrial divisions from branches such as machine construction, handling and conveying construction, agricultural machine construction, valve construction, fastening

technology and ship engine building – we offer custom-fit, efficient and stable solutions for every project. Depending on our customers' wishes, we develop constructions that can more than stand up to their tasks. Forged items are free from pores with a dense and even structure. This means they can often be smaller in dimension with no loss in load-bearing or stability.

Thanks to the experience that we have gained in the use of leading forging simulations combined with the correct hammering and tool machines, all our products are of a quality that we are proud of.

We use the greatest care,
clever ergonomics and the best
materials to make forged parts
for life.

From in-house tool construction to the finished forged part

Whether a challenging single project or major series order. We offer custom-fit solutions of unbeatable function, efficiency and stability for every single one of our customers.

We will accompany you through the entire process, from development and construction to your finished forged part. Our global success is based on 150 years of experience and the use of state-of-the-art technology. We are as skilled in traditional methods such as free-form pre-forging on a pneumatic hammer

as in the latest high-tech processes such as automated robot-led forging on a double-acting hammer. This clever interplay between traditional and modern allows us to offer a high level of competence that ensures that every single forged item is produced in the best possible way.



Precise
hammer milling



High-tech
pressure forging



CNC-controlled
surface treatments



Customised
constructions



Individual item
weights and batch
sizes



Strict
material controls



Development & construction

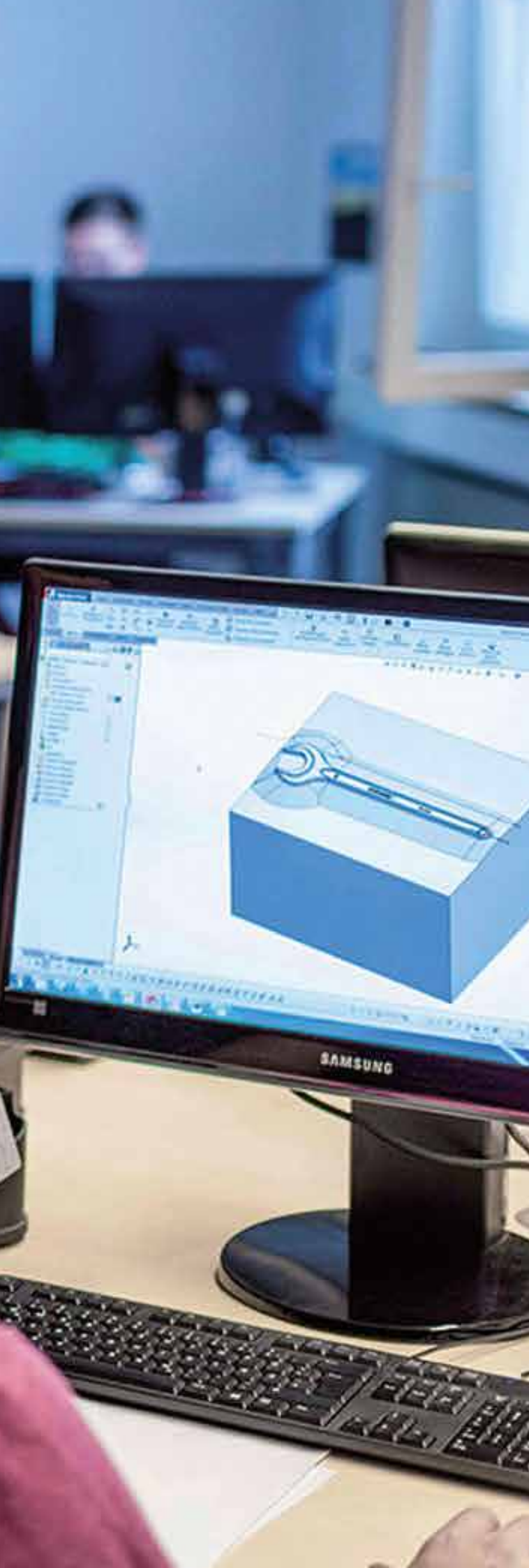
Good planning is the foundation
for GEDORE's forging quality.

GEDORE's typical high quality starts in the development and construction of forged items, their manufacturing tools and devices.

The results of our leading forging simulations and 3D CAD systems combined with years of experience are the customised constructions of forged items and their dies.

During the development stage, we prepare an individual, economical manufacturing strategy for every single forged item that allows us to manufacture it using the minimum of materials. Naturally, whilst fully retaining the customary form, function and stability.

Let us work together to develop
high-quality forged items of excellent
quality – made by GEDORE.

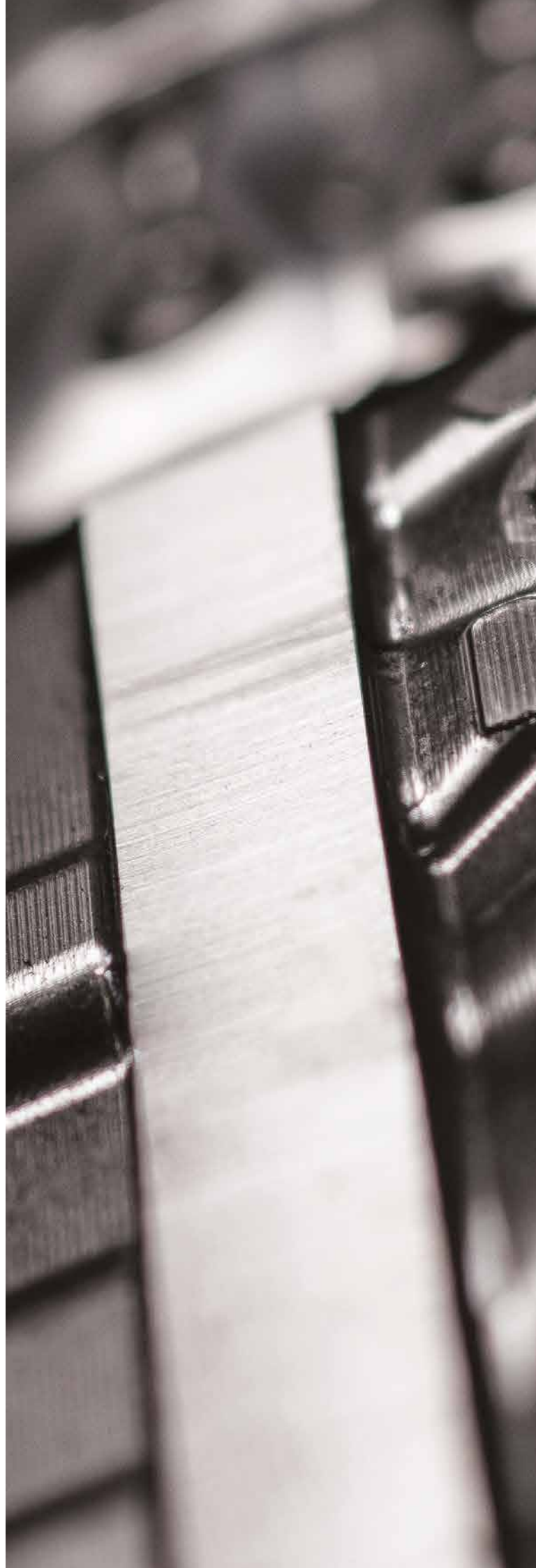


Tool construction in our own hands

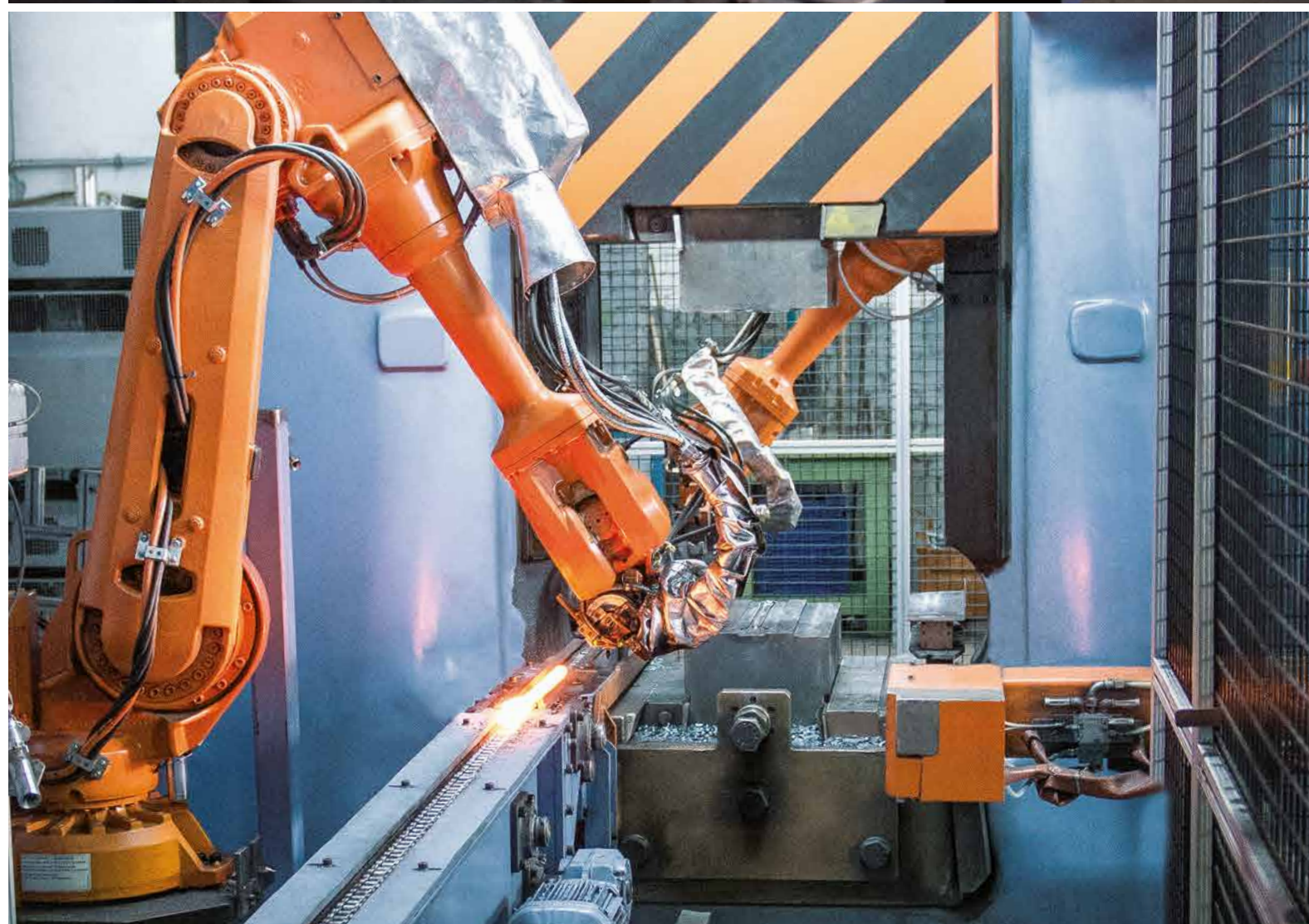
Precision with the latest technology.

The motto of "Everything from a single source" is an inherent part of GEDORE's corporate philosophy. In line with that, we manufacture our dies and other production tools in our in-house tool construction department. As the most important link between construction and forge, our tool construction department is important in the full implementation of your wishes. Thanks to the proximity of the tool construction department to the forge, we have the maximum possible flexibility in the production of new and the repair of forging tools. This means that we can also be a reliable partner to you for urgent and unplanned requirements.

The precision of a forged item is largely determined by the die. We only use high-quality tool steel for our dies, as this contributes towards their precision and durability. The dies are manufactured on modern, maximum precision CNC erosion and milling machines. The combination of high-quality die steel with machines of the leading technology and our many years of experience in tool construction results in dies that are manufactured in absolute precision with the drawings to form the basic situation for successful forging.







Forge with experience

Interplay between tradition and modern technology.

The GEDORE forge is the heart of the production of your forged parts. It is where the traditional and the modern meet; where an almost 100-year-old pneumatic hammer for skilled open-die forging stands close to modern, automated double-acting hammers with inductive heating systems and automated control.

The combination of inductive and conventional heating options enables us to process a range of material qualities and sections. We typically use carbon steels, heat-treated steel, stainless steels, corrosion-resistant steels and round and square aluminium steels. If required, we also use so-called blanks that we stamp from flat steel using special devices on a press to further optimise the use of raw materials.

Our high material competence is backed up by our own materials laboratory. Before we release raw materials for forging, they are first thoroughly checked by means of spectral analysis. We also carry out random samples for non-metallic inclusions, and supplier audits. This enables us to ensure that we only use pure, high-quality materials for your forged parts that comply absolutely with our requirements.

In our hammer forge, we use electronic-oil hydraulic forging hammers with impact energies between 6 and 125 kJ. Our hammers enable us to manufacture forged items weighing from just a few grams to approx. 85 kg. This tremendous bandwidth means that you receive forged parts of the most diverse dimensions from a single source.

We are experts in the field of open-die forging on pneumatic hammers. We elongate the raw material for specific forged parts by their geometry before we then turn it into the finished forged item in the die. Using the optimised initial shape makes the forging process in the die even more economical and better for the tools.

Our press forge contains horizontal rimming machines with pressing forces between 125 and 600 t that we use primarily to manufacture rotation-symmetrical forged parts from round steel in diameters from approx. 10 to 45 mm.

Regular investments in the maintenance and renewal of our machine park ensures that all GEDORE hammers and presses are always in the best possible condition.

Thanks to the combined use of hand-operated and automated systems, we are able to offer you forged items in small, medium and large batch sizes – from approx. 50 units to several tens of thousands.

We are also happy to further process your forged items if required. For instance, on modern CNC 5-axle processing centres. With the heat treatment of your choice, and a surface finish to your specific wishes.

[Benefit from our experience in forging in the production of your forged parts.](#)

Reliable to the end

A thorough, efficient final inspection ensures that quality is checked and documented in accordance with our customers' requirements.

Before a forged item leaves our premises on its way to you, we carry out a thorough final check. Together with our employees' own checks, the final check ensures that you only receive items that are absolutely flawless, and that the quality is checked and documented in full accordance with your requirements.

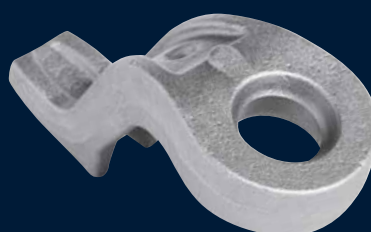
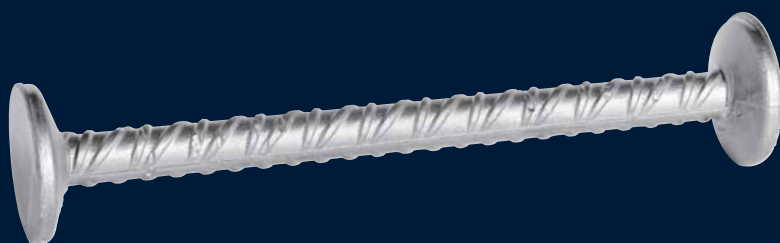
At your request, we will also carry out a 100% crack test for which our experienced quality

checker performs a magnetic powder test under the optimum conditions – on every single forged item.

GEDORE's high level of quality is regularly confirmed by certifications from bodies such as Lloyd's Register (forged items), TÜV guideline 97/23/EG (tested materials manufacturer) and, of course, DIN EN ISO 9001:2008 (quality management systems) and DIN EN ISO 50001:2001 (energy management systems) by renowned independent test organisations.



We are pleased to be by your side as a reliable and tested partner.



GEDORE 



iFORGE 



GEDORE-Werkzeugfabrik GmbH & Co. KG
Remscheider Straße 149
42899 Remscheid · GERMANY

T +49 21 91 596-0
F +49 21 91 596-230
schmiede@gedore.com
www.gedore-schmiede.de

Brands of the GEDORE Group
gedore.com · carolus.de · ochsenkopf.com