

BÖLLHOFF

FORMTEC

Engineering and manufacturing of tailor-made cold forged products





Contents

	Page
Expertise in cold forging	4
What is FORMTEC?	5
FORMTEC Applications	6
Your benefits	8



Expertise in cold forming

As innovative partner for joining technology with assembly and logistic solution, Böllhoff has extended the current product range by an additional technology – the cold forming and subassemblies process for customer specific solutions - FORMTEC.

From A to Z we are the partner for your projects – from the first concept to final production. Our dialogue with you is the thread of our working process. Thanks to smart innovation management and close working relationships we develop tailor-made solutions along your supply chain.

Get to know us personally and find out all about
the difference, cooperation with us can make!



What is **FORMTEC**?

The FORMTEC name refers to the cold forming technology and stands for engineering special metal parts and sub-assemblies.

Böllhoff, with its high level of expertise and facilities, has developed strong competencies in the development of specific cold forged parts especially for the automotive industry.

With its modern and well equipped technical facilities Böllhoff is able to create many simulation or mechanical tests that guarantee excellent design of parts.

As a leading system supplier for fastening and assembly technology, we also supply the matching assembly solutions for the fasteners.

The following pages give you an overview of the great versatility of our FORMTEC range – just turn the page.



Engine battery mass stud



This stud with plastic cage has been designed and developed with the aim of reducing the cost of a previous turned solution

Customer advantages:

- Visibility in the engine with the addition of the blue color
- Weight gain
- Screwing time divided by two

Mounting the air intake

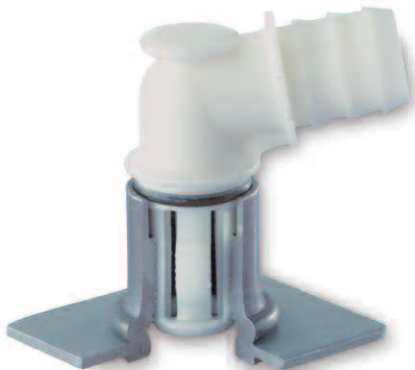


On a car engine the air intake system must be fastened securely onto the engine block. This smart cold forged solution enables robust and fast assembly.

Customer advantages:

- Robust and fast assembly (setting by press)
- High torque resistance
- Cost saving

Glass roof drain



Rain falling between the glass roof and the car body has to be drained to prevent corrosion.

Customer advantages:

- Easy to assemble (manual assembly)
- Robust watertight solution
- Cost saving solution (no impact on the car design)

Fixing of the towing eye



When a car must be towed, the towing eye has to be securely fastened on the sub frame. The specific system that has been developed enables the towing eye to be mounted directly inside the car plastic frame.

Customer advantages:

- High mechanical performances
- Low cost solution
- Robust and fast assembly (setting by press)

Spare wheel fixing



With its double thread (internal & external), it can both be fastened on the car body and be used to tighten the wheel.

Customer advantages:

- Double thread (internal & external)
- Safe and secure locking

Cabinet latch



This very special latch has been developed in order to rapidly fix, unfix and quickly move the rear bars of cabinets.

Customer advantages:

- Time saving in the process
- Grounding feature



Project management

The foundation of our competence is an efficient concept of counselling, development and support. Our expertise and know-how reflect in a worldwide network.

The joint aim is to achieve the most technically optimal and economically effective solution. Our project management offers you product-specific expertise and support.

Our team can draw on many years of experience in planning technical products and provide you with tailor-made solutions according to your requirements.

Our project management stands for interdisciplinary coordination of complex activities. That means planning, controlling and monitoring in all project phases. Before we start, we carry out a thorough review to evaluate your needs. After that, we conduct the project and carefully coordinate the process steps.

Knowledge transfer starts from development and does not end until the final production.



Development

Your very first ideas are our starting signal to develop tailor-made solutions. Special design requirements, component assembly, precision parts, hybrid articles or subassemblies – we invite you to benefit from our development, production and assembly know-how.

With the world undergoing changes, product development must always be one step ahead.

Thanks to our design and simulation departments, we are able to validate a concept in a very short time.

To make those ideas become reality, close cooperation with you, creative dialogue and modern technologies will be the keys to real innovations.

Your project will be subject to permanent progress tracking and systematic quality checks to become a success.

Production

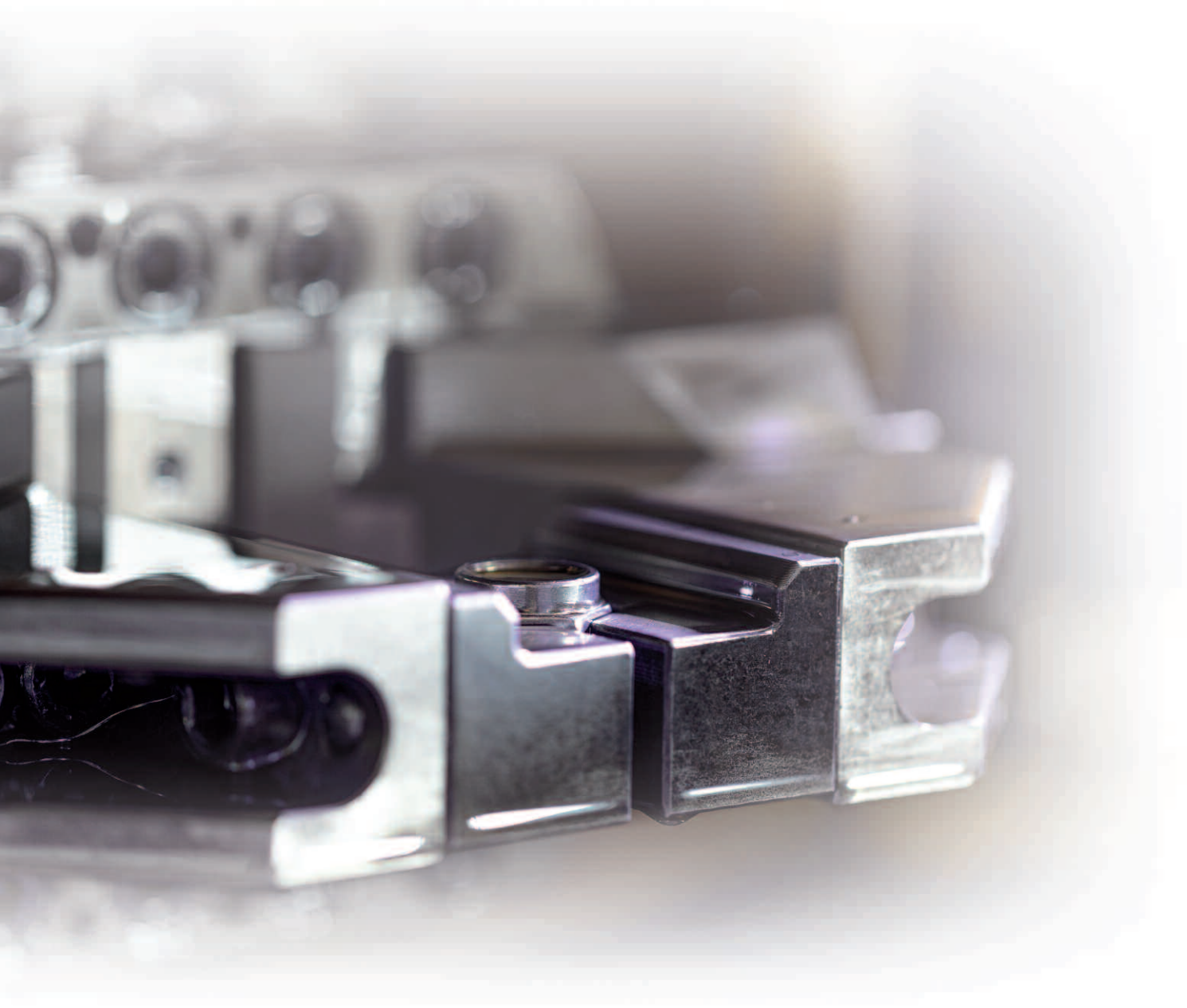
Our products are manufactured with a wide variety of available machinery based on different technologies.

- Cold forging (steel, stainless steel aluminum)
- Rolling
- Stamping
- Overmolding
- Assembled parts
- Turning & milling

Böllhoff is consistently successful in re-engineering existing parts and developing new ones by simplifying processes, improving functionality and reducing time and production costs.

We work closely with our customers understanding both their needs and the demands of a competitive marketplace.

We help address these challenges by providing the right information, getting the right product, then achieving significant savings by acting on the process.

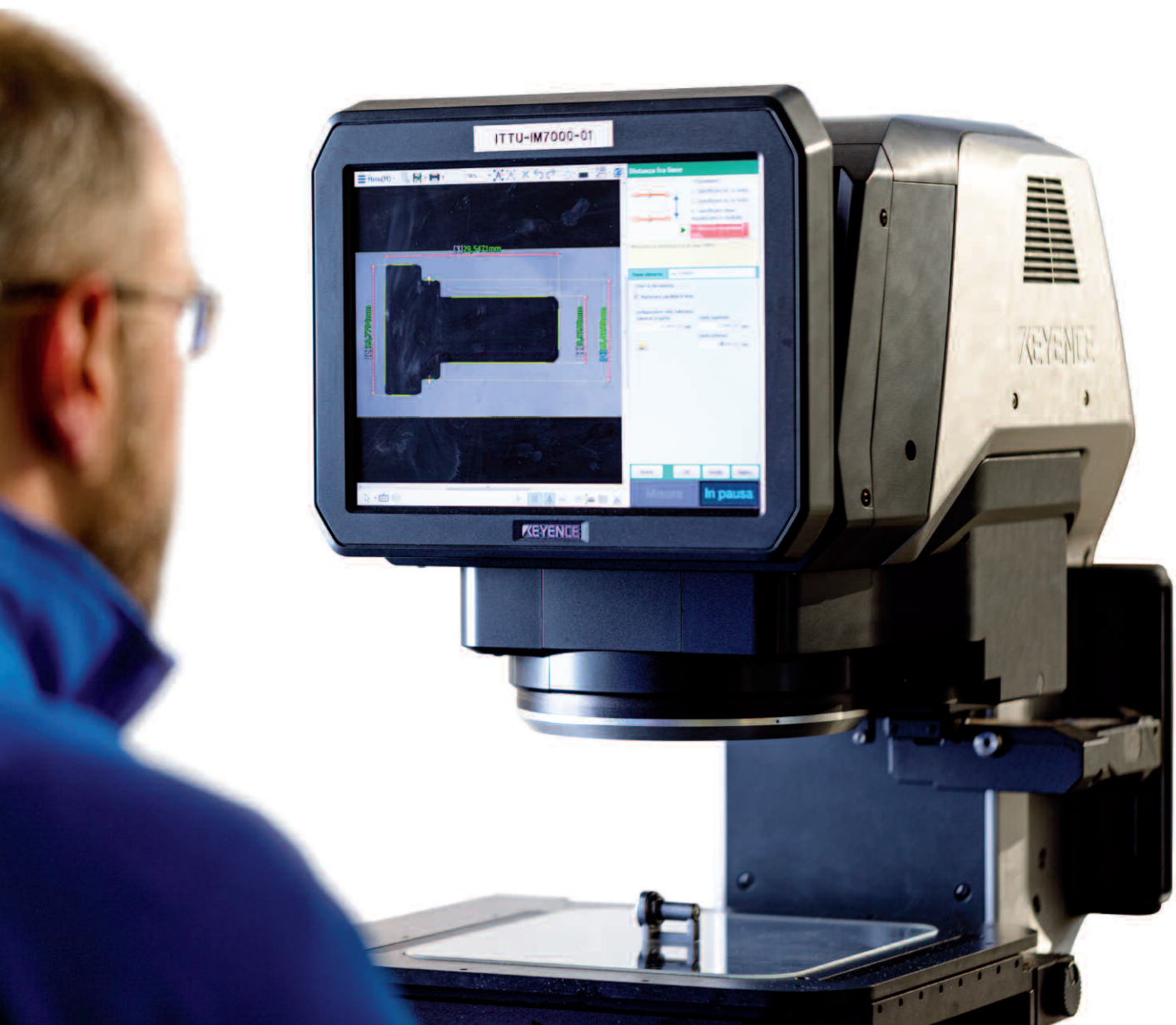


Quality

Böllhoff is always focused on sophisticated production processes and up to date measurements.

The customer simply has to share all the technical requirements with our qualified teams which will assess through the feasibility of the product.

During this process the customer can rely on the support of our certified laboratories with ultimate equipment fulfilling mechanical, chemical and metallographic tests.



BÖLLHOFF



Böllhoff Group

Innovative partner for joining technology with assembly and logistics solutions.

Find your local partner at www.boellhoff.com or contact us at fat@boellhoff.com.

Passion for successful joining.