

BÖLLHOFF

ELASTEC®

Customised silicone and elastomer mouldings



We are with you all the way to the finished product

You have some idea on your mind? We shape it!
Your initial concepts are the starting signal for the development of customised solutions.

We support you throughout the whole product development process – from development to prototyping to taking the step to series production.

Böllhoff offers everything to do with elastomer and multi-component parts from a single source.

Product development

In cooperation with you, we develop innovative solutions ranging from elaborate seals to composite parts.

- Profile seals
- Membranes
- O-rings
- Precision mouldings
- Frame seals
- Multi-component composite parts
- Optical components



Materials knowledge

Depending on the requirements for your product, we decide on the appropriate material for your application.

Since we closely cooperate with leading raw material manufacturers, new perspectives are constantly emerging.

- VMQ (HCR + LSR)
- Highly transparent liquid silicones
- FVMQ
- FKM

- Component sizes from 400 x 400 mm
- Component weight from 0.25 g
- Shot weight up to 275 g

Tool manufacture

To comply with the high quality requirements, we lay the foundation to high-quality end products through in-house tool manufacture. Since design and production are closely intertwined, you can rely on a maximum degree of customisation.

Intelligent tool concepts including master moulds and mould inserts increase flexibility and permanently reduce costs.

Moreover, considerably shorter cycle times can be achieved through fully automated handling.



Our competencies – one by one

Certified laboratory

State-of-the-art measuring and test devices are the basis for reliable quality assurance and high-quality products.

In our certified laboratory, our specialised personnel compose detailed test reports as a documentation and basis for decision.

Numerous special test methods such as vibration tests under temperature change complete the assortment.

Prototyping

Through rapid prototyping, initial concepts can be realised and tested within no time.

Different steps of validation allow the fast transition from prototypes to series production.

In-house sampling to produce experimental tools rounds off our range of products and services.

- Compatible with all current CAD systems
- Filling simulation
- FEM simulation
- Rapid prototyping



Production and logistics

Modern, highly automated machinery and efficient downstream logistics allow economic manufacture.

Thanks to an innovative logistics management we can also guarantee the worldwide availability of our products.

Our services comprise everything from special packagings to supply systems.

We are right where you need us – by your side

Each economic sector is unique and has its very own requirements.

The requirements are changing fast, new developments emerge while older ones are disappearing. As a family-owned company we have been standing for long-term success through innovative capacity and local presence since 1877. We know the specific needs of our customers from all industries and support them in enabling successful connections. Around 3,400 employees continuously shape the future of joining technology – both at our headquarters in Bielefeld, Germany, and in our subsidiaries around the world.

Do not hesitate to contact us – your partner for 360° joining technology with assembly and logistics solutions.



Frame and profile seals

Components for:

- Filter systems
- Air conditioning systems
- Heat exchangers

Requirements for:

- Temperature resistance
- Tightness
- Media resistance

Precision mouldings

Components for:

- Fasteners
- Isolation elements
- Housing seals

Requirements for:

- Precision of components
- Damping behaviour
- Constant component properties within a wide temperature range
- Tightness



Multi-component composite parts

Components for:

- Functional modules
- Housings
- Seal stabilisation
- Seal integration

Requirements for:

- Material adhesion on plastics/metal
- Precision of components
- Tightness

Optical silicone components

Components for:

- Diffusers
- Lenses
- Light guides

Requirements for:

- Even distribution of light
- High transparency
- High temperature resistance
- High media resistance
- Integrated seal

And many more. Please do not hesitate to contact us.



VMQ (LSR)

Thanks to its properties, the range of applications of LSR (Liquid Silicone Rubber) is wide. Supplied to the machine as components A and B, the material is made highly fluid during injection moulding. When the components are mixed exactly as the process requires using a perfectly suited injection moulding tool, your idea adopts a permanent shape. The LSR material is characterised by an excellent compression set value and high media resistance. With respect to shape and function, the wide temperature range makes LSR almost an all-rounder.

VMQ (HCR)

High-consistency rubber or high-temperature vulcanised solid silicones expand the fields of use for silicone. With this solid compound which is ready for processing, customised requirements for material, colour and component can be met, also for smaller quantities. Similar to LSR, Böllhoff processes HCR through injection moulding. Crammer feeders or strip feeders are used to feed the rubber into the tool system. Because of its composition, HCR is characterised by even better tensile strength, elasticity, tear propagation resistance and elongation properties.



FVMQ

Apart from high- and low-temperature properties, fluorosilicone is characterised by its resistance to fuels and mineral oils. It is mainly used in sealing technology for the automotive and aviation industries.

FKM

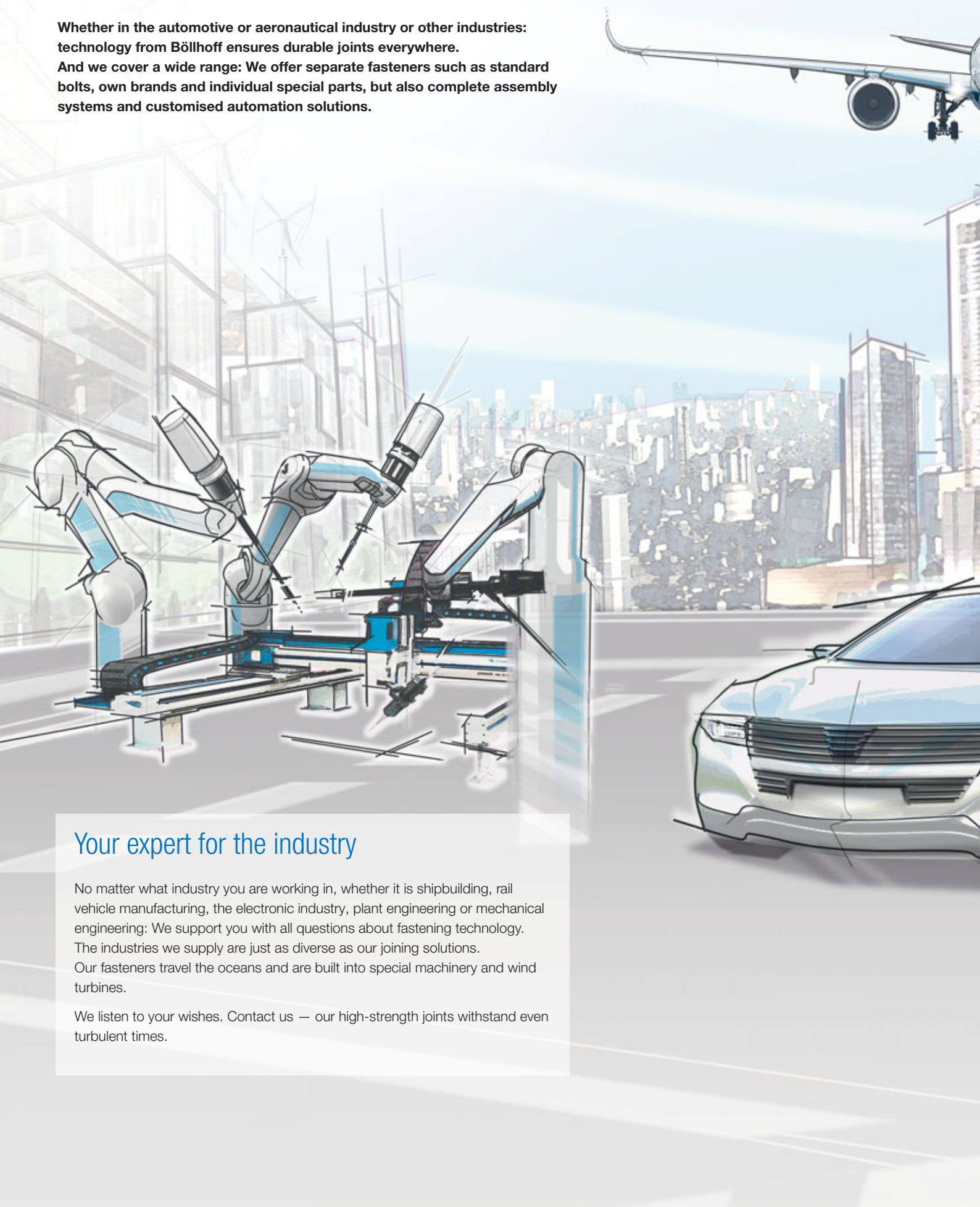
Fluororubber is highly resistant to mineral oils, hydrogen chlorides, acids and alkalis. The temperature resistance ranges from -40 °C to +200 °C.

Apart from that, its ageing resistance is most important.



Tailor-made solutions thanks to customer-specific industry know-how

Whether in the automotive or aeronautical industry or other industries: technology from Böllhoff ensures durable joints everywhere. And we cover a wide range: We offer separate fasteners such as standard bolts, own brands and individual special parts, but also complete assembly systems and customised automation solutions.



Your expert for the industry

No matter what industry you are working in, whether it is shipbuilding, rail vehicle manufacturing, the electronic industry, plant engineering or mechanical engineering: We support you with all questions about fastening technology. The industries we supply are just as diverse as our joining solutions. Our fasteners travel the oceans and are built into special machinery and wind turbines.

We listen to your wishes. Contact us — our high-strength joints withstand even turbulent times.



Your expert for the aerospace industry

Who doesn't want to fly safely? We also take a second look and support you when it comes to fulfilling the requirements of the current development trends of the aerospace industry.

To increase the energy efficiency and save resources, aeronautical engineers and engine manufacturers also systematically analyse and optimise the production processes. For decades, we have been a partner for the industry and offer special joint solutions.

Get on the early plane with us and give your developments the necessary drive.

Your expert for the automotive industry

The automotive industry continues to be among the most important economic sectors and is around the world regarded as the source of many product and process innovations — also for many other industries. Lightweight construction, alternative propulsion technologies, gradual development of safe automated and connected driving: We are familiar with today's challenges in the automotive industry.

Join in and shape the mobility concepts of the future together with us.

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.