

MARKET SEGMENT AUTOMOTIVE

YOUR DEVELOPMENT PARTNER
FOR PRECISE SOLUTIONS

Individually tailored
Accurately executed
High-quality processing

“We explore the limits
of what is technologically
feasible with you.”

YOUR SATISFACTION IS OUR SUCCESS

Everything we do centers around our customers' individual requirements. With BENTELER Steel/Tube, one of three legally independent divisions of the BENTELER-Group, globally active with 30,000 employees at 161 locations in 40 countries, you will benefit from a strong partner. From our **many years of experience**, we know how important and decisive a trusting cooperation is for a project. For us, excellence can only be achieved through **customer proximity** and solutions expertise.

We, the **Market Segment Automotive**, rely on partnerships that are often sealed with a handshake. We listen to you and strive for the perfect solution by engaging in an intensive dialogue with you. For us, this also means that we openly communicate technological limits and continuously push forward the boundaries of what is technically feasible. This intensive customer orientation is our daily inspiration because satisfaction is our highest praise.

WE FULFILL YOUR DEMANDS

With individual service and logistics expertise



WE FOCUS ON YOUR APPLICATION

To us, service means dealing with our customers' needs on an individual basis. Our partners value the Market Segment Automotive as a solution-oriented development partner. We achieve this with our vertical integration of manufacturing processes, which enables us to develop materials for unique solutions together with our customers.

Special materials in small series

THE BEST EVEN IN SMALL SERIES

Customers and partners benefit from our attractive minimum quantities. For instance, we also supply small quantities of special materials from a requirement of 60 tons. Moreover, we offer special materials in small series, for example for sports and racing cars.

IN CLOSE CONTACT WITH THE CUSTOMER

As a globally operating company, we have established sales offices all over the globe. This creates customer proximity and leads to security. Our competent employees offer personal advice on site and support you in finding the right tube solution according to your requirements.

PACKAGED WITH CARE, DELIVERED ON TIME

We offer hundreds of packaging solutions to suit your needs and wishes. Thanks to our sophisticated logistics, we respond to customer requests in a flexible manner and can adapt the required quantities on short notice. Punctuality and reliability are a matter of course.

“Supplying customers in the short term is no problem thanks to our sophisticated logistics.”

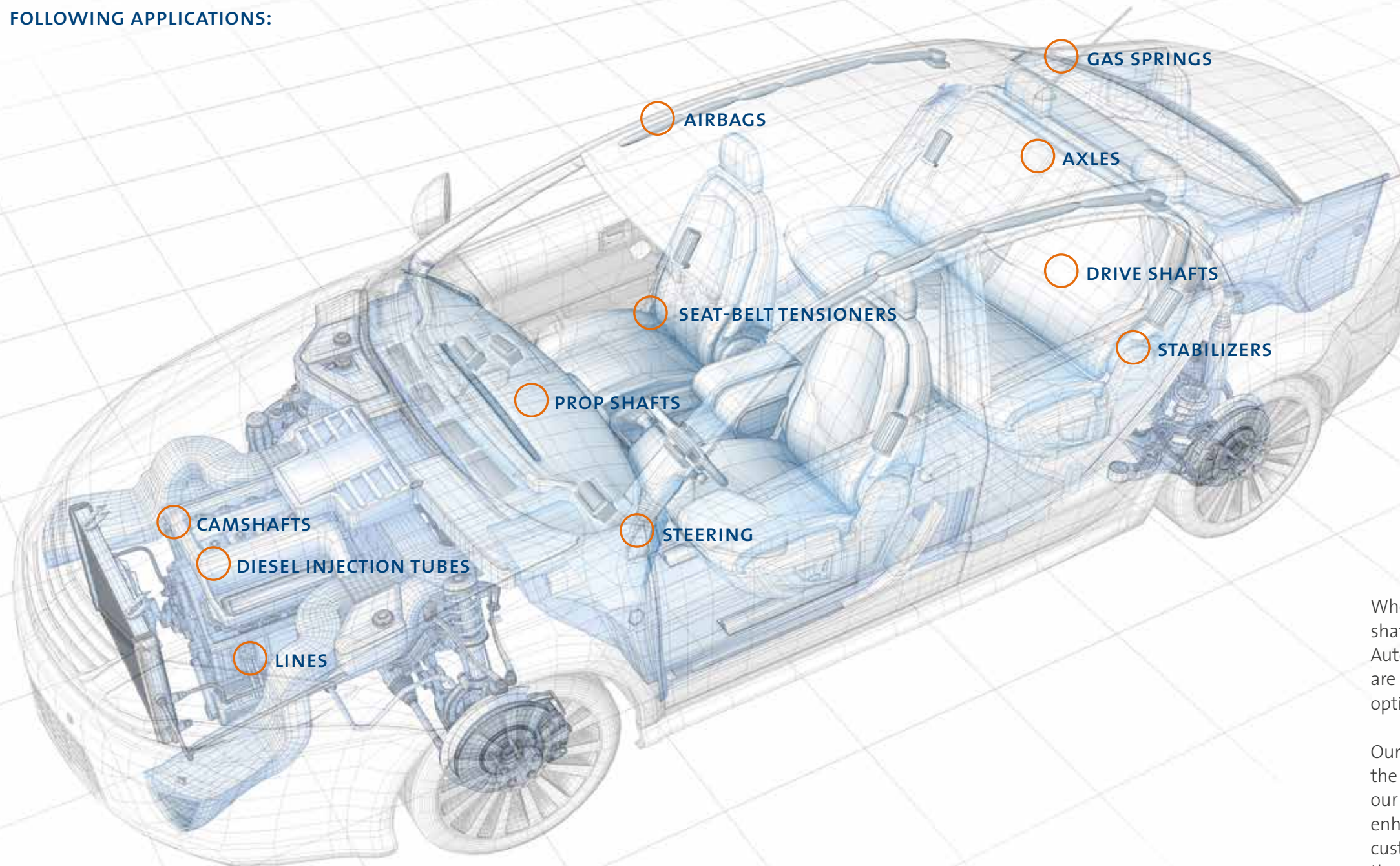


QUALITY IS OUR ELEMENT – SAFETY OUR PRINCIPLE

Discover
our
product variety

*“The Market Segment
Automotive gives your
project mobility.”*

BENTELER STEEL/TUBE SUPPLIES TUBE SOLUTIONS AMONG OTHERS FOR THE FOLLOWING APPLICATIONS:



Whether in the fields of body-in-white, powertrain, chassis, camshafts and steering or commercial vehicles: the Market Segment Automotive stands for seamless and welded tube products which are distinguished by particularly high strength, low weights and optimization along the integrated value chain.

Our customers in the area of passenger safety put their trust in the tube solutions of BENTELER Steel/Tube because they know that our products offer maximum safety. To this end, we are continuously enhancing and modifying our steel grades and – together with our customers – produce innovative tube solutions that are tailored to the requirements of the end product. In addition, we offer further processing steps and supply ready-to-use, tailor-made tube solutions according to customers' specifications.



AIRBAGS AND SEAT-BELT TENSIONERS

Making mobility safer: Airbag systems are among those vehicle components that have to meet the highest requirements when it comes to safety. With this goal in mind, we are continuously engineering innovative and economical tube products. In close cooperation with customers and partners, we develop tailored tube solutions for series productions. For airbag generators, we produce ready-to-fit shells: They can withstand a pressure of some 1,000 bar and are therefore extremely durable. Moreover, we manufacture tube solutions made of high-strength and low-temperature resistant steels in cut lengths with narrow tolerances.

Your advantage: Even in extreme temperatures of **far below 60 degrees Celsius**, the airbag systems convince through flawless functionality. The tolerances are always adapted to the requirements of the end product. This brings us closer to our goal of making mobility even safer.

“Our steel tubes are the result of precision work.”

CHASSIS

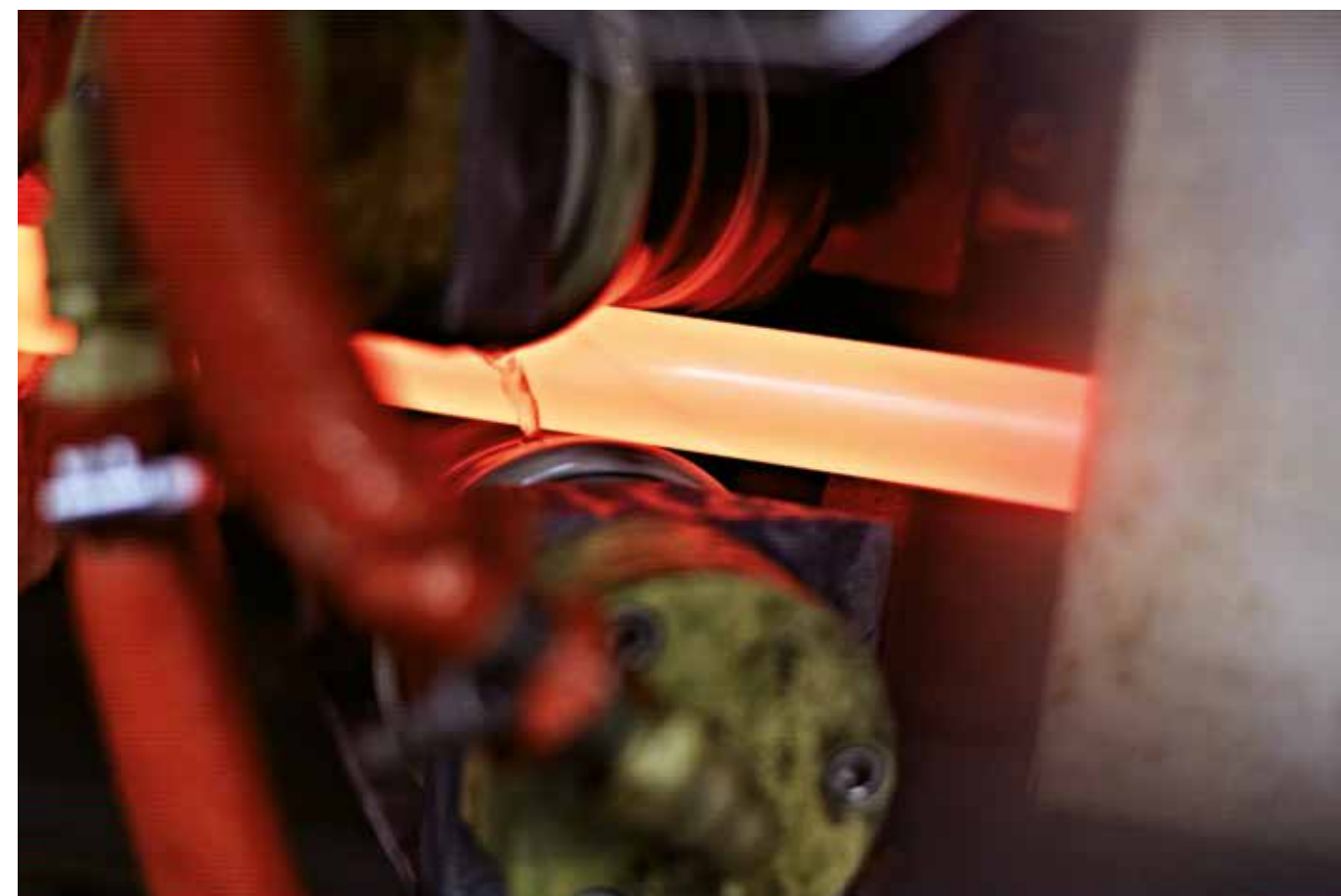
Stability that moves: As structural parts, our steel tubes fulfill supporting functions and are exposed to extreme forces. This requires high stability. We offer thin-walled tube solutions in the chassis area which are capable of replacing solid material due to their particular strength. In addition, they are made of high-strength steel which ensures weight reduction.

COMMERCIAL VEHICLES

Reducing costs with ease: Building commercial vehicles that are sustainably lighter and thus more cost-saving – this is achieved by our tubular stabilizers and tie rods with optimized surface properties and lower decarburization. We supply them as pre-treated tubes and deliver them cut. By using steel tubes for stabilizers, we are able to significantly reduce the weight of the component. This helps reduce fuel consumption on a significant scale. And the environment benefits as well. Thanks to our sophisticated logistics, we can respond to customer wishes in a very flexible way and supply the required quantities just-in-sequence.

POWERTRAIN

Good rotation: The substitution of solid material renders our tube-based drive shafts particularly light. Their good surface properties and low decarburization make for very high torsional fatigue strength. Thanks to their uniform wall thickness, our precise steel tubes are distinguished by low eccentricity. This enables efficient further processing for hot and cold forming.

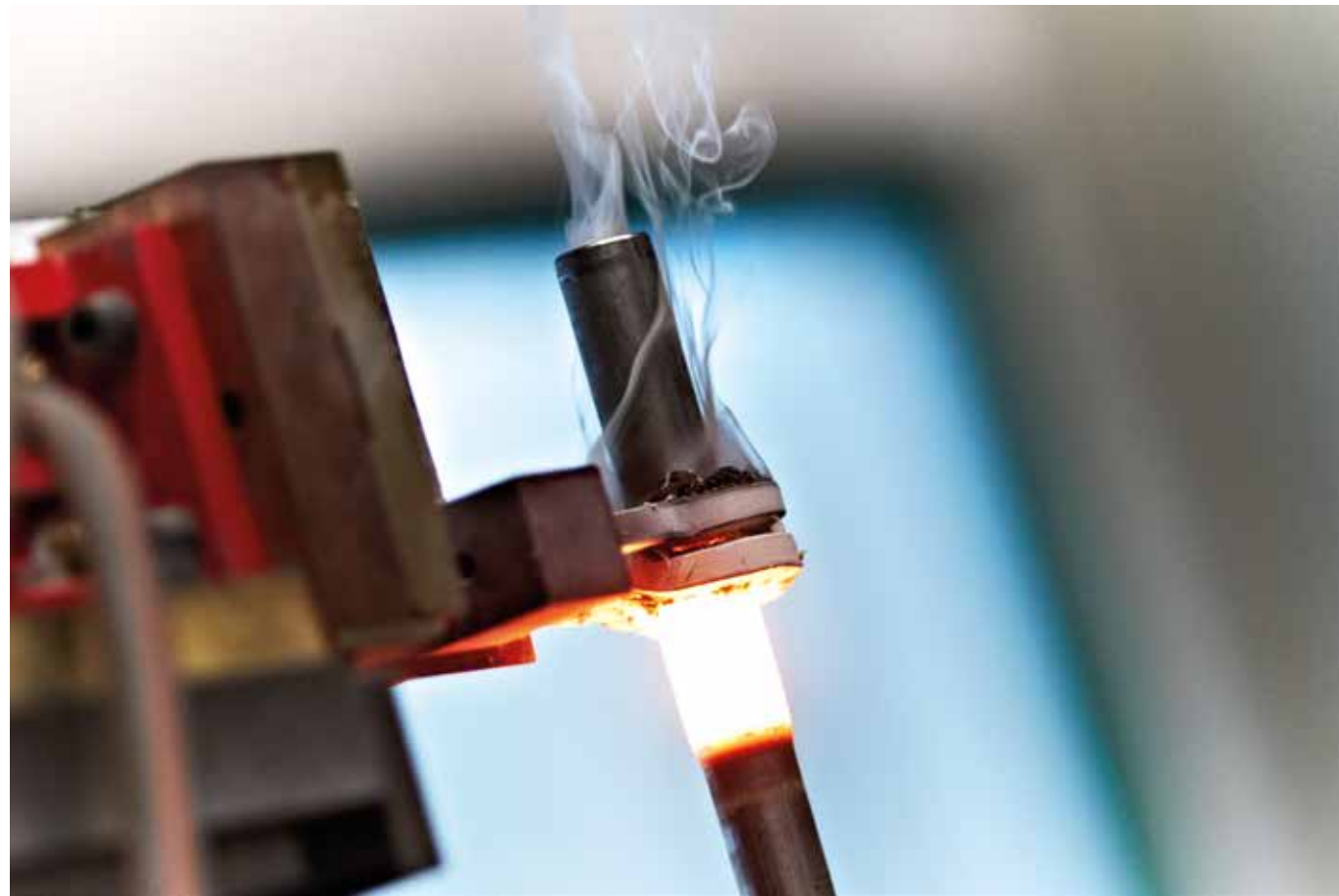


CAMSHAFTS

Convincing alternative

Our camshaft tubes offer a reliable and advanced alternative to solid material. With partially hardened tube sections and hot-formed integrated joints, they are the perfect substitute for products made of solid material, efficiently reducing fuel consumption and CO₂ emissions. We supply the tubes made of high-strength steels as ready-to-fit components.

You can also benefit from a variety of processing options and state-of-the-art production processes. We offer processing services in the quality you demand. This includes machining or final forming, which is implemented using our patented production processes.



“Our tube products give shape to your ideas.”

GAS SPRINGS

Securely held: Faultless functioning and a long service life – these are, among others, the demands for gas springs. With their excellent surface quality, our precision tubes securely and reliably satisfy these high expectations. Their homogeneous microstructure and low weight make them ideally suited for application in light-weight structures.

HOOD LIFTING SYSTEMS

Better protection in road traffic: Active protection systems play a major role when it comes to protecting pedestrians. Hood lifting systems make a great contribution to saving lives in car accidents. Our precise steel tubes significantly support this safety: we manufacture and supply ready-to-fit shells within the BENTELER-Group, which are distinguished by particularly high surface quality and thus help comply with the high safety requirements in an optimum way.

STEERING WITH PROFILE

Convincing crash safety: Our tube products for steering systems offer outstanding crash safety thanks to their tailor-made properties. They feature a homogeneous microstructure and convince through their good surface quality. At the same time, they offer optimum forming properties that enable smooth further processing. Numerous manufacturers all over the globe put their trust in our quality products. We develop and produce tube products with an inside profile for a global OEM platform.

“We develop the perfect solution together with you.”



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ABOUT BENTELER

With about 30,000 employees and 161 locations in 40 countries, the BENTELER-Group stands for a high degree of excellent material, production and technology in the areas of Automotive, Steel/Tube and Distribution. Continuing progress by means of new materials, technologies, and products as well as long-term, profitable growth are the supporting pillars of the 140-year success story of the BENTELER-Group, which is now in its fourth generation of family ownership.