

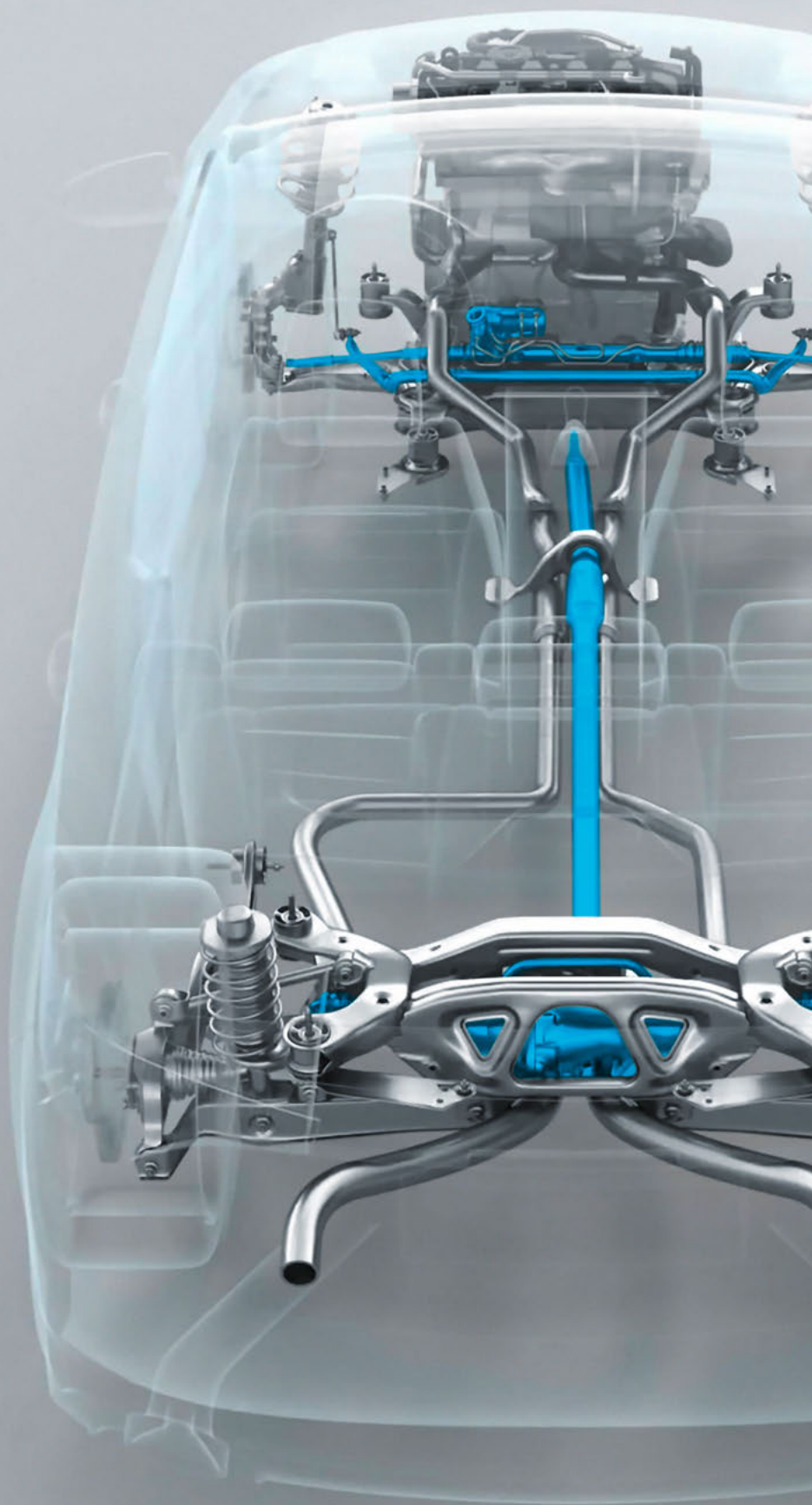
Steel


tubor[®] – application- optimized MnB steels for precision steel tubes

Premium material for lightweight
automotive manufacturing.



thyssenkrupp





High-strength precision steel tubes offer great potential for reducing weight in automobile manufacturing. With our application-optimized manganese-boron alloyed tubor[®] steels, we offer you the ideal materials for manufacturing precision steel tubes that are optimally suited for powertrain and chassis applications. Additionally, you can depend on our experts from Technical Customer Service when it comes to materials and how to work them – for your lightweight structural designs.

All the best properties: tubor[®] – everything precision steel tubes need

With our materials for precision steel tubes – such as our manganese-boron alloyed tubor[®] steels, heat-treatable steels and even unalloyed structural steels – you can face the ever more demanding vehicle safety and comfort requirements and the consequent increase in vehicle weight with confidence.



Manganese-boron alloyed tubor[®] steels delivered with excellent forming characteristics



High strength and homogeneity of mechanical properties after heat treatment



Complete material spectrum with high lightweight potential, comprehensive application consulting, custom solutions



In development: **segregation-optimized tubor[®] grades with even greater strength** and enhanced ductility in heat-treated state

Light, formable, hardenable, incomparable

Whether as stabilizers for the chassis or cam shafts for the powertrain: with weight reduction playing an ever greater role in the automotive industry, components made of precision steel tubing are essential for lightweight automotive manufacturing. When it comes to precision steel tubes, our application-optimized tubor® steels are the material of choice of vehicle designers, as they meet the requirements for high strength combined with enhanced ductility.

Material with potential.

Our tubor® steels are delivered in a highly formable state and have an even surface, and are very well suited for fabricating welded, cold-rolled or cold-drawn precision steel tubes. The material features a homogeneous and fine-grained microstructure with a low sulfur and phosphor content. Segregations in the microstructure are significantly reduced by means of special technical processes. Thanks to the combination of an optimized manufacturing process on the one hand and chemical analysis attuned to the end application on the other, the tubor® steel grades offer greater strength and enhanced ductility after quenching and tempering.

Right in every way: our material spectrum.

Whether MnB alloyed tubor® steel, unalloyed quenched and tempered steel or unalloyed structural steel – all our materials meet the requirements of the automotive industry.



Portfolio of precision steel tubes

Hot strip, non-pickled/pickled/pickled-annealed
Strip steel, non-pickled/pickled/pickled-annealed

Product group	Steel grade	Reference grade
Manganese-boron steel according to DIN EN ISO 683-2	tubor® 26	26MnB5
	tubor® 34	34MnB5
	Others on request	
Unalloyed C-steel according to DIN EN ISO 683-1	C22	C22
	Special analyses	
Unalloyed structural steel according to DIN EN 10025-2	S235J*	S235J*
	S355J*	S355J*

Because light
should be easy:
our service.

Together with you, we not only develop material conceptions but also give you access to the extensive know-how of our research and application technology experts if you have any questions relating to processing.

Our
know-how



Material
concepts



Process
optimization



Processing
support

Your
benefits



Performance



Weight
optimization

Steel

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