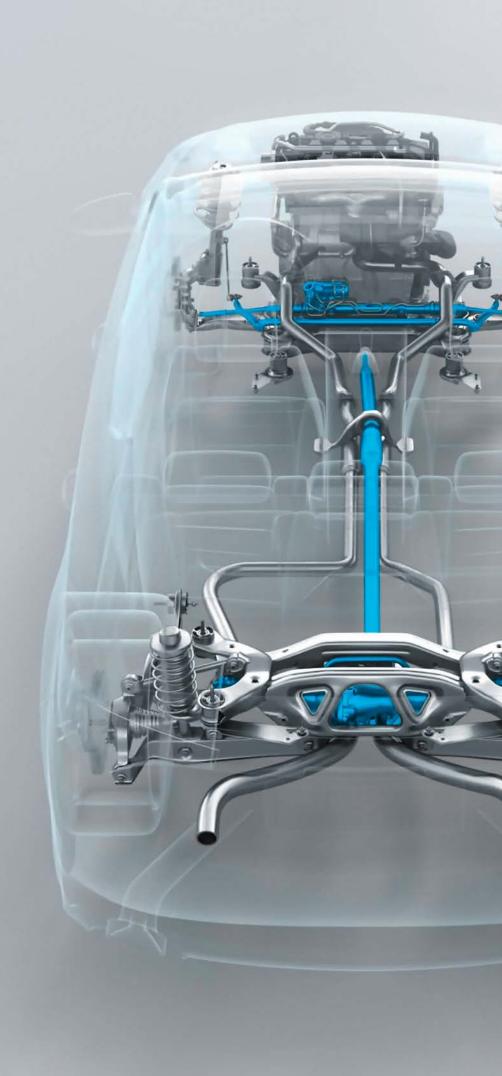
Stee

#### Highperformance materials for precision steel tubes

Premium material for lightweight automotive manufacturing.







# All the best properties: everything that precision steel tubes need

With our materials for precision steel tubes – such as manganese-boron (MnB) steels, heat-treatable steels and even thermo-mechanically rolled steels for cold forming – you can face the ever more demanding vehicle weight requirements with confidence.



Manganese-boron steels delivered with excellent forming characteristics



High strength and homogeneity of mechanical properties after heat treatment



Complete material spectrum, comprehensive application consulting, custom solutions



New segregation-optimized MnB steels with greater strength and significantly enhanced ductility in the heattreated state

## Light, formable, hardenable, beyond compare

With weight reduction playing an ever greater role in the automotive industry, components such as stabilizers made of precision steel tubing are indispensable in suspensions. Manganese-boron steels are the first choice of vehicle designers in particular, as they meet the need for high strength combined with enhanced ductility.

#### Material with potential.

All our manganese-boron steels are delivered in a highly formable state and have an even surface. Our new segregation-optimized MnB steels are additionally characterized by even greater strength, improved ductility, tight analysis ranges, a homogeneous structure and low sulfur and phosphorus content.

### Right in every way: our material spectrum.

Whether we are talking about standardized boron-alloy grades, special mill grades with reduced segregation potential, unalloyed structural steel or high-strength thermo-mechanically rolled steel for cold forming – all our materials meet the requirements of the automotive industry.





Product range for precision steel tubes		
		Standard
lot strip, non-pickled/pickled/pickled-annealed trip steel, pickled/pickled-annealed		
Product group	Steel grade	
Manganese-boron steel	20MnB5	DIN EN 10083
	26MnB5	Special mill grade
	34MnB5	Special mill grade
	Others on request	
Unalloyed C-steel	C22	DIN EN 10083
	Special analyses	Special mill grade
Thermo-mechanically rolled steel for cold forming	perform® 315	DIN EN 10149-2
	perform® 340	Special mill grade
	perform® 355	DIN EN 10149-2
	perform® 380	Special mill grade
	perform® 420	DIN EN 10149-2

 ${\sf Cold-rolled, high-strength\ multiphase\ steels\ for\ precision\ tubes\ on\ request.}$ 

## 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 applications technology experts if you have any questions relating to processing. Our segregation-optimized materials offer the best basis for an efficient manufacturing process. Our Technical Customer Service will be pleased to answer all your questions.

## Our know-how







Process optimization



Processing support

Your benefits



Cost reduction



Weight optimization

#### Stee

thyssenkrupp Steel Europe AG Kaiser-Wilhelm-Straße 100 47166 Duisburg, Germany P: +49 203 52-0 F: +49 203 52-25102 www.thyssenkrupp-steel.com info.steel@thyssenkrupp.com

#### Industry

P: +49 203 52-41048