

Reinforcement tube

Product information | Technical data sheet

Jansen Steel Tubes and Mubea Precision Steel Tubes produce welded precision steel tubes and profiles used as structural reinforcements in the automotive industry.

High-tensile materials are used for the structural reinforcement tubes. Applications within this automotive industry segment are very sensitive to quality and component failure in the event of an undesired deformation of the component may have serious consequences. The tight production

tolerances guarantee efficient and thus cost-effective tube processing during component production. The use of new modern air-hardening materials allows a significant reduction of the work involved by eliminating the tempering process, and thus a significant reduction in costs.



Tube requirements

Excellent formability

High levels of fatigue strength

High levels of strength and hardness according to Q+T

excellent surface conditions

Material properties

High levels of fatigue strength

Excellent reforming properties

Excellent hardening properties

Homogeneous strength properties and ductility

Structure

Homogeneous, fine-grain structure in weld seam and basic material

Minimised surface decarburisation of inner and outer surfaces (< 100 µm)

Very good weld seam quality

Very good reforming properties

Geometry

Minimised fluctuations in wall thickness and inner/outer diameter

Minimised deviations in concentricity and axial run-out

Minimised eccentricity

Tube end processing: sawn/brushed; chamfered

Surface

Excellent surface condition

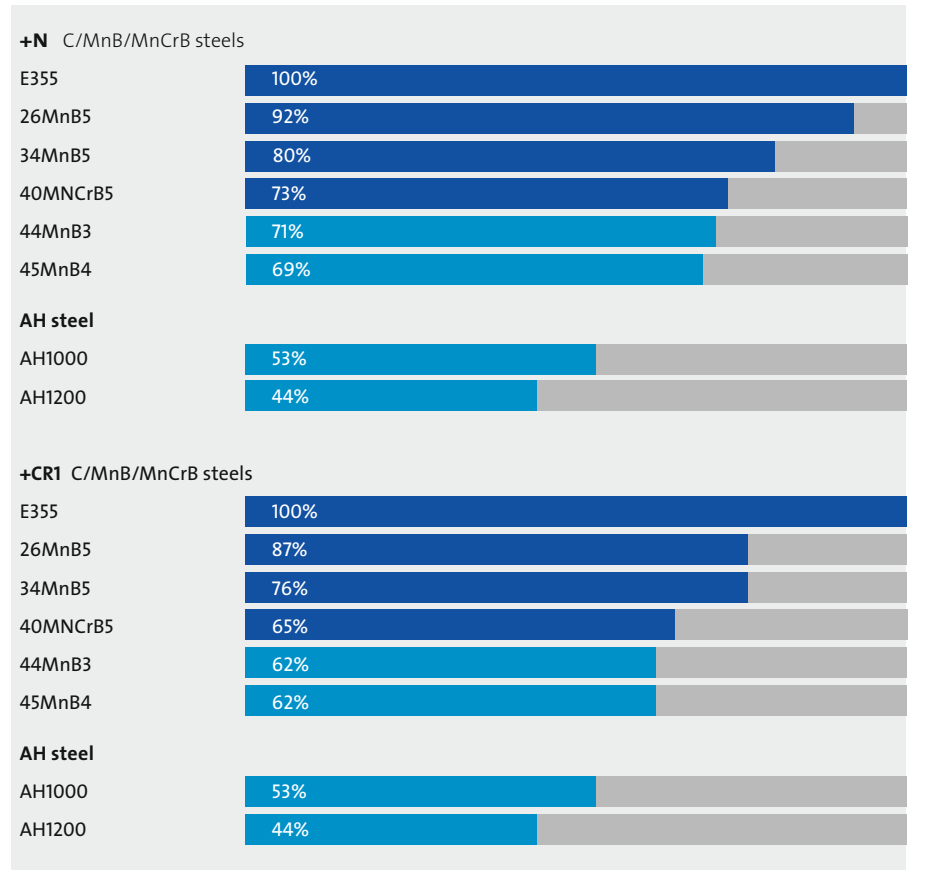
Minimised surface flaws (adhesions, scratches, dents, etc.)

Minimised corrosion protection, optionally specific corrosion protection

Materials & dimensions

Application	Tube standard	Steel grades	Delivery condition	Dimensions range mm
Reinforcement tube	✓ EN 10305-2	✓ E355	✓ +N	✓ AD 35 - 80
		✓ 26MnB5		
	✓ EN 10305-3	✓ 34MnB5	✓ +CR1	✓ WD 2 - 6.5
		✓ 40MnCrB5		
		* 44MnB3		
		* 45MnB4		
		* AH1000		
	* AH1200			

Extract from achievable weight-savings



✓ ■ Series production
* ■ in validation

AH: air hardening

TDT: Tailor Drawn Tube

OD: ø outside diameter

WT: wall thickness