

Camshaft assembled

Product information | Technical data sheet

Jansen Steel Tubes and Mubea Precision Steel Tubes produce welded-drawn precision steel tubes made of standard materials and high-tensile steel grades for assembled camshafts.

For the manufacturers of camshafts, accurate concentricity, high degrees of roundness and straightness as well as stringent dimensional tolerances are important aspects in the selection of tubes. Low levels of surface decarburisation allow a partial hardening. As a result of the trend towards lightwei-

ght design, high-tensile materials are increasingly in demand. The use of modern high-tensile materials allows further weight savings by reducing the wall thickness while maintaining the comparable physical properties.



Tube requirements

High strength values (elongation at break, tensile strength)
High torsional strength and reverse bending strength
High geometrical accuracy
Excellent surface condition
High levels of strength and hardness after Q+T

Material properties

High torsional strength and durability
High levels of tensile strength
Homogeneous strength properties and ductility
Potential for reduced wall thickness

Structure

Homogeneous, fine-grain structure in weld seam and basic material
Minimised surface decarburisation of inner and outer surfaces (< 50 µm)
Very good weld seam quality

Geometry

Minimised fluctuations in wall thickness and inner/outer diameter
Low levels of deviation from straightness
Minimised deviations in concentricity and axial run-out
Minimised eccentricity
Specific tube end processing: sawn/brushed; chamfered, completely processed/chamfered

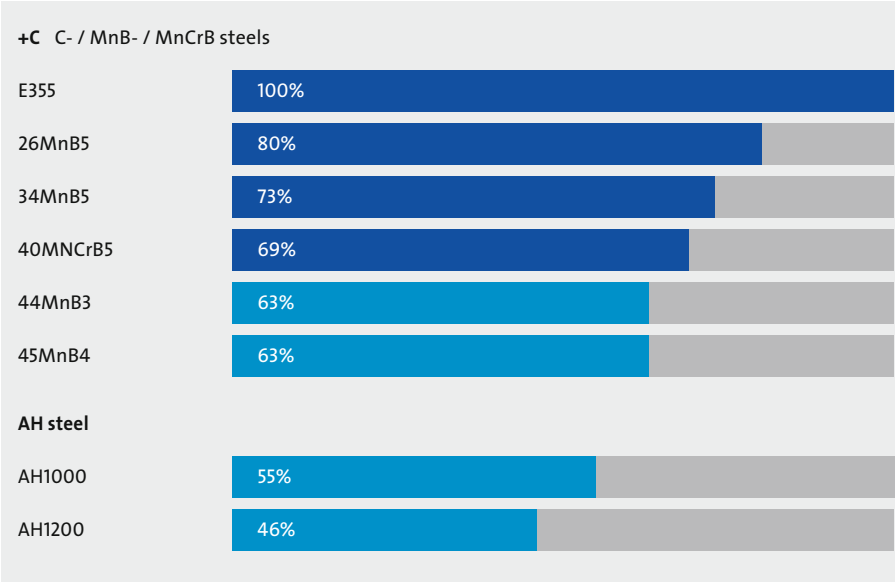
Surface

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
Camshaft	✓ EN 10305-2	✓ E355 ✓ 26MnB5 ✓ 34MnB5 ✓ 40MnCrB5 * 44MnB3 * 45MnB4 * AH1000 * AH1200	✓ +C	✓ OD 22 - 60 ✓ WT 2.5 - 6.5 also available as TDT tube with variable wall thickness

Extract from achievable weight-savings



✓ ■ Series production
* ■ in validation

AH: air hardening OD: ø outside diameter
TDT: Tailor Drawn Tube WT: wall thickness