TECHNICAL DATASHEET

4130

Smiths Advanced Metals

Rev: SAM/datasheets/speciality-steels/4130-tube/feb-2022

Chromium-Molybdenum Steel Tubes

Heat-treatable and Hardenable.

4130 steel tube is a general-purpose steel product that has been a mainstay of the aerospace sector for many years.

The alloy is often referred to as 'chromoly' or 'chrome moly' due to chromium and molybdenum content. 4130 offers good fabricability, is malleable, and weldable, although welding to other carbon steels is not recommended. Heat treatments at the pre and post-weld stage are advisable to avoid cold cracking. The alloy provides good abrasion and impact resistance.

4130 offers greater hardness and strength than standard carbons steel grades and provides a good strength to weight ratio. As the product is stronger than carbon steel, tubing with a thinner wall can be used, which reduces weight. The alloy benefits from widespread use, including bicycle frames, roll cages and aerostructures.

We stock 4130 steel tubes in various sizes and conditions (including normalised, cold drawn and hot finished conditions). We also offer an in-house tube cutting service where we process your steel tubes to exact lengths.

Grades / Specifications

- AMS6360
- AMS6361
- AMS6371
- AMS6735



Benefits

- High mechanical strength
- Good weldability
- Good fabrication
- Greater hardness than standard carbon steels

*Cherr	*Chemical Composition (weight %)										
	С	Mn	Si	Р	S	Cr	Ni	Мо	Cu		
min.	0.28	0.40	0.15			0.80		0.15			
max.	0.33	0.60	0.35	0.025	0.025	1.10	0.25	0.25	0.35		

* As per AMS 6361

*Mechanical Properties (minimum)

Tensile Strength	862 MPa
0.2% Proof Strength	689 MPa
Elongation(%)	12% min

* Properties as per AMS 6361

Metallurgical Support

Our UKAS Accredited Testing Laboratory is unique to the stockholding sector and we offer our customers a range of testing services combined with comprehensive metallurgical support.



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