

4130 (AMS 6346)

Technical Datasheet



Service. Quality. Value.

Chrome Molybdenum Steel Tube

Typical Applications

- Aerospace component manufacture
- Gears
- Automotive parts
- Rock crushing machinery
- Used for resistance welding
- Bearings
- Cutting tools

Product Description

4130 is a chromium-molybdenum alloy which is of the most widely used aircraft steels because of its combination of ease of fabrication, weldability and mild hardenability. It has adequate strength for many applications and when resistance to wear and abrasion is required, it may also be nitrided. 4130 is a high quality product melted under the best steel making practices for aircraft quality steels. It is vacuum degassed to meet the magnetic particle inspection standards of AMS 2301. The density of this material is typically 7.85kg/dm³.

Production Tolerances

Manufacturing limits are as stated in the Table AMS 2251. For further assistance please contact our Sales Dept / Laboratory.

Corrosion Resistance

Low resistance to corrosion.

Machinability & Weldability

70% for annealed and cold drawn condition. Based on 100% for AISI 1212 steel. Weldability is good.

Related Specifications

- SAE 4130
- UNS G41300
- AMS 6348 (Normalised condition)

Availability

Tube

Chemical Composition (weight %)

	C	Mn	Si	P	S	Cr	Ni	Mo	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

Mechanical Properties

Tensile Strength	862	MPa
0.2% Proof Strength	689	MPa
Elongation on 4D G.L.	17	%

Bars under 12.70mm hardened and tempered and cold finished.
Bars over 12.70mm hot finished and hardened and tempered or if specified hardened and tempered and cold finished.
Ground and turned or polished shall be free from decarburisation on the ground, turned or polished surfaces.

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

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