

# 4130

Smiths Advanced Metals

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## Moderate Tensile Steel

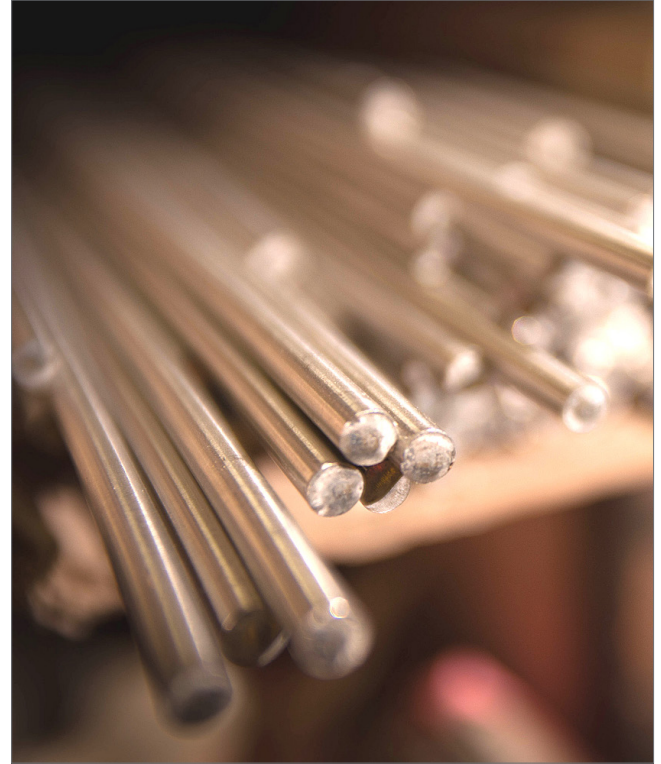
Chromium-Molybdenum Steel Bar.

4130 alloy is a chromium-molybdenum steel bar product that finds extensive use in aerospace.

The product offers various attractive performance characteristics, including ease of fabrication, good weldability and mild-hardenability. The alloy has sufficient strength for a broad range of commercial applications in the normalised delivery condition.

4130 is considered harder and stronger than most standard carbon steels and offers an excellent strength to weight ratio. High oxidation resistance is another impressive feature, and the alloy also responds well to nitriding, which results in good abrasion and wear resistance. Although overall weldability is good, pre and post-weld heat treatment is required to avoid cold cracking. Applications include aerospace and automotive components and use in general engineering.

We have available [4130 steel bars](#) in a wide range of sizes and condition (including normalised, hardened, quenched and tempered conditions).



### Grades / Specifications

- AISI 4130, SAE 4130
- UNS G41300
- AMS6346
- AMS6348
- AMS6370
- AMS-S-6758, MIL-S-6758
- ASTM A108
- ASTM A29
- ASTM A304

### Benefits

- Good weldability
- Good machinability
- Moderate tensile properties
- Stronger and harder than carbon steels
- Good malleability

#### \*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

\* As per AMS 6346

#### \* Mechanical Properties (minimum)

Tensile Strength	862 MPa
0.2% Proof Strength	689 MPa
Elongation(%)	17
Reduction in Area	55% min

\* Properties as per AMS 6346

### Processing

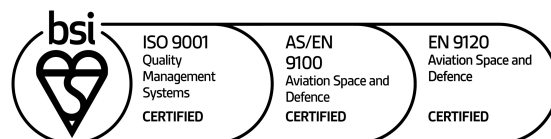
We offer comprehensive billeting services using a range of processing equipment. Bars are cut to tight tolerances to match our clients' needs, and in many cases, this added value service negates the need for any additional cutting which saves you money.

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