

4130

Smiths Advanced Metals

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

Page: 1 of 1

Heat-Treatable Steel Sheet

With High Tensile Strength.

Smiths Advanced Metals stocks 4130 steel sheets in a broad range of thicknesses and conditions (normalized and annealed).

4130 offers high tensile with mild hardenability and is easy to fabricate. The alloy provides greater strength and hardness when compared to standard carbon steel, and the strength to weight ratio of the material is also good. 4130 responds well to nitriding, which results in a product with superior wear and abrasion resistance. This grade also promotes high oxidation resistance, and weldability is also good though pre and post-weld heat treatments will be necessary to avoid cold cracking. Though hardenable, 4130 sheet is relatively easy to machine after heat-treatment and offers a tensile strength of 860 N/mm².

4130 finds use in various engineering applications, including aerospace, military and motorsport. We stock [4130 sheets](#) in closer incremental sizes and offer an in-house guillotining service where your steel sheets are cut to tight tolerances.



Grades / Specifications

- AMS6345
- AMS6350
- AMS6351
- ASME SA240
- ASTM A505, ASTM A506
- MIL-S-18729
- UNS G4130

Benefits

- Excellent machinability
- Excellent weldability
- Very good abrasion resistance
- High oxidation resistance

*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 6345

*Mechanical Properties (minimum)

Size	Tensile Strength	0.2% Yield	Elongation
up to 1.57mm (excl.)	655 MPa min	517 MPa min	8% min
1.57-3.18mm (incl.)	655 MPa min	517 MPa min	10% min
3.18-4.76mm (incl.)	655 MPa min	517 MPa min	12% min
4.76-6.35mm (incl.)	621 MPa min	483 MPa min	15% min
6.35-19.05mm (incl.)	621 MPa min	483 MPa min	16% min
19.05-38.10mm (incl.)	621 MPa min	483 MPa min	18% min

* Properties as per AMS 6345, long-transverse.

www.smithsadvanced.com

info@smithsadvanced.com



Stratton Business Park,
London Road, Biggleswade,
Bedfordshire SG18 8QB
Tel: **+44 (0) 1767 604710**

