

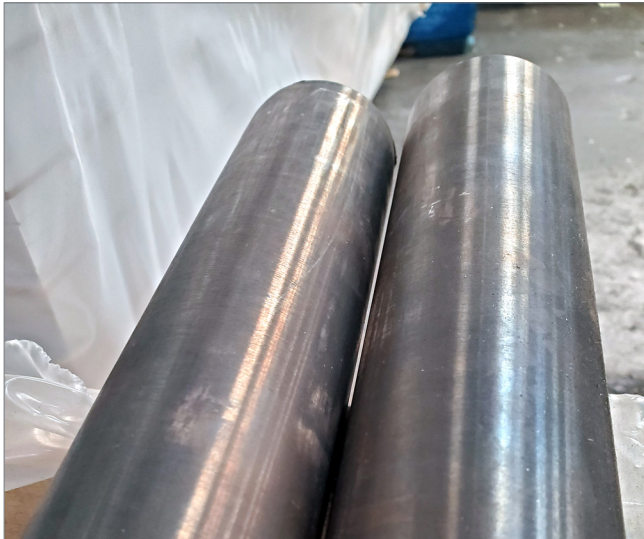


THAMES
STOCKHOLDERS

UNS S17400 (AMS 5643)

PRECIPITATION HARDENED STAINLESS STEEL

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Product Overview

UNS S17400 (AMS 5643) is hardened by a single low-temperature precipitation hardening treatment and contains 4% copper.

After treatment, S17400 offers excellent mechanical properties at a high strength level. The alloy can be magnetised and has a typical density of 7.75kg/ dm³. We also supply AMS 5643, the American specification of this material. Use of UNS S17400 in the annealed condition is not possible.

Stock Availability:

We stock UNS S17400 in round bar and plate form, which we also process on site to your size requirements.

Key Features

- High-strength alloy with good corrosion resistance
- Suitable for the manufacture of intricate parts
- Excellent weldability
- Excellent mechanical properties after treatment

Applications

- Missile components
- Motor shafts
- Aerospace and Defence components
- Gears, valve stems

Chemical Composition (weight, %)

	C	Mn	P	S	Si	Cr	Ni	Cu	Mo	Nb
Min.						15.00	3.00	3.00		5XC
Max.	0.07	1.00	0.04	0.03	1.00	17.50	5.00	5.00	0.50	0.45

Physical Properties (minimum, unless otherwise stated)

Condition	Tensile Strength (MPa)	0.2% Proof Stress (MPa)	Elongation on 4D G.L. (%)	Reduction of Area (%)	Hardness (HB)
H900	1,310	1,172	10	40	388 - 444
H925	1,172	1,069	10	44	375 - 429
H1025	1,069	1,000	12	45	331 - 401
H1075	1,000	862	13	45	311 - 375
H1100	965	793	14	45	302 - 363
H1150	931	724	16	50	277 - 352



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