

17-4PH Stainless

Smiths Advanced Metals

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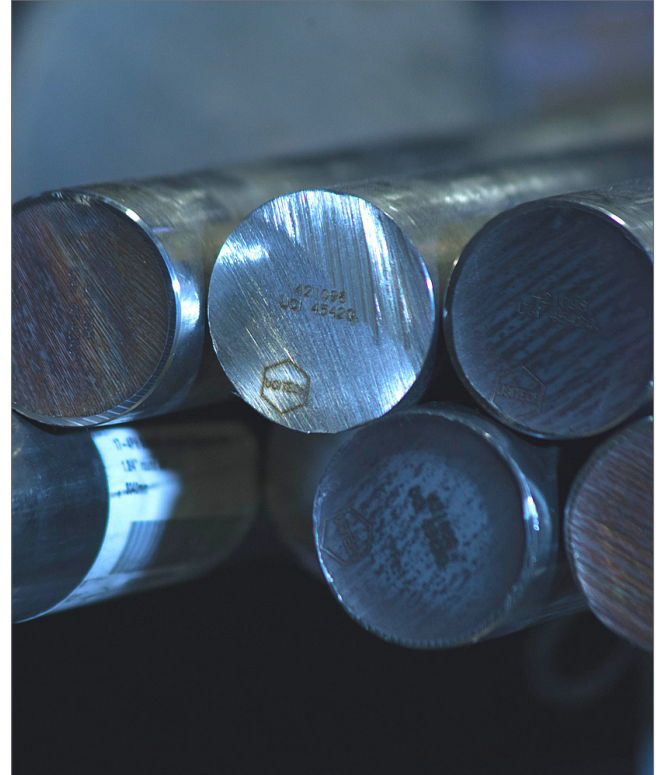
Chromium Nickel Stainless Steel Bar

High strength and high toughness.

17-4PH is a nickel-chromium precipitation hardening stainless steel suitable for applications requiring much higher strength, toughness and good corrosion resistance.

The alloy offers various attractive performance characteristics. The material possesses good stress corrosion resistance, high fatigue resistance and resistance to galling. 17-4PH is readily weldable by all conventional methods, and there is no requirement for pre or post heating which is usually the case for standard hardenable stainless steels. A single, low-temperature heat treatment will harden the alloy.

17-4PH is highly suitable for applications where the production of intricate parts is a requirement, especially if these parts require machining, welding and have freedom from distortion. Examples include aircraft structural parts, high-performance fasteners, pump shafts, valve stems and gears. We stock and supply [17-4PH stainless steel bars](#) in a wide range of sizes, shapes and tempers (including annealed, H925, H1000, H1025, H1100 and H1150).



* 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 |

* As per AMS 5643

Grades / Specifications

- 1.4548
- UNS S17400
- Z6CNU 17.04
- Z8CND 17.04
- ABS5692
- AIR9160
- AISI630
- AMS5622
- AMS5643
- ASME SA564
- ASTM A564
- DIN65038
- LN1013
- LN668
- MSRR 6601

Benefits

- High strength and toughness
- Good Transverse properties in remelted grade
- Good corrosion resistance
- Good galling resistance properties
- Readily weldable
- Good stress corrosion resistance

Processing

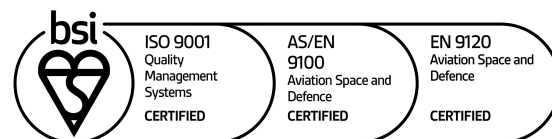
Our central processing warehouse in Biggleswade processes more than 2 million billets every year. We use ultra-high volume CNC machines to cut your stainless bars to exact lengths. Our processing services are also ISO 9001:2015 approved.

www.smithsadvanced.com

info@smithsadvanced.com



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



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