

15-5PH Stainless

Smiths Advanced Metals

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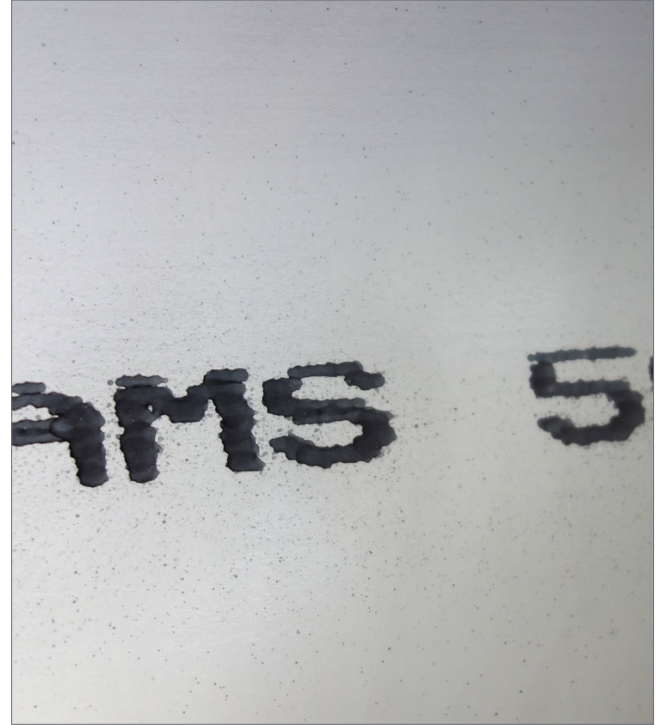
Precipitation Hardened Sheet

With improved toughness.

15-5PH offers high strength and toughness with good corrosion resistance and is a variant of 17-4PH. The alloy is a martensitic precipitation hardening stainless steel.

The material offers the same performance characteristics as 17-4PH, including excellent ductility and transverse notch toughness, but, in comparison, has superior overall toughness. A solitary, low-temperature heat treatment achieves all these characteristics. The heat-treatment temperature range may be adjusted to dictate the actual strength and toughness of the resulting alloy. 15-5PH offers good corrosion resistance and superior mechanical properties compared to 17-4PH in larger sections. Typical applications for 15-5PH sheet includes nuclear reactor components, military structural components and aerospace components.

We stock [15-5PH stainless steel sheets](#) in a wide range of thicknesses and conditions (including annealed, H900, H1025 and H1100 conditions). We also guillotine your stainless sheets to size in-house.



Grades / Specifications

- AMS5862
- ASTM A693
- BMS 7-240
- UNS S15500

Grades / Specifications

- Excellent transverse toughness
- Moderate corrosion resistance
- Good ductility strength
- Tougher than 17-4PH

* Chemical Composition (weight %)

	C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Nb
min.						14.00	3.50		2.50	5xC
Max.	0.07	1.00	0.030	0.015	1.00	15.50	5.50	0.50	4.50	0.45

* As per AMS 5862

* Mechanical Properties (minimum)

Condition	Tensile Strength (MPa)	0.2% Proof Stress (MPa)	Elongation on 4D G.L. (%)	Reduction of Area
H900	1,310	1,172	10	35%
H925	1,172	1,069	10	35%
H1025	1,069	1,000	12	40%
H1075	1,000	862	13	45%
H1100	965	793	14	45%
H1150	931	724	16	50%

* Properties as per AMS 5862, for thicknesses over 15.88mm up to and including 101.60mm.

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