

Precipitation Hardening Stainless Steel

Typical Applications

- Aerospace
- Gas turbines
- Jet engine blades
- Afterburner parts
- Exhaust parts
- Turbine wheels
- Manifold components
- Screws

Product Description

A-286 is an age-hardenable, iron-nickel-chromium superalloy. The alloy combines high tensile strength with high temperature strength and good corrosion resistance. A-286 is used throughout the aerospace and oil and gas sector and can be used to produce products such as afterburner parts, jet engines and turbine components.

Key features

- High temperature strength
- Good corrosion resistance
- Used at high temperatures for lower stress applications
- High tensile strength
- Oxidation resistance

Availability

Bar and forgings

Corrosion resistance

Good

Formability

Good but work hardens rapidly and may require intermediate annealing in deep drawing or in forming intricate parts

Chemical Composition (weight %)

	C	Mn	Si	P	S	Al	Cr	Ni	Mo	Ti	V	B	Cu
min							13.00	24.00	1.00	1.90	0.10		
max	0.08	2.00	1.00	0.04	0.03	0.35	16.00	27.00	1.50	235	0.50	0.01	0.30

Mechanical Properties

Condition	0.2% Proof Stress N/mm ²	Tensile Strength N/mm ²	Elongation N/mm ²	Hardness Brinell HB	ROA % min
Solution Annealed Precipitation Aged	720	1000	15	250-355	25

Technical Assistance

Our knowledgeable staff backed up by our resident team of qualified metallurgists and engineers, will be pleased to assist further on any technical topic.

UK Service Centres:

Smiths Belfast **02895 908 897**
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 Main Office **0845 527 3331**

Quality & Testing:



www.smithmetal.com info@smithmetal.com