

### 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 <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation N/mm <sup>2</sup>	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.

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