

Stainless Steel

AMS 5646 (2S130D)

Datasheet Updated
05 August 2021

SPECIFICATIONS

Commercial	2S130D
Aerospace	AMS 5646

An austenitic 18/9 chromium-nickel stainless steel in the British Standard Aerospace series of alloys.

CHEMICAL COMPOSITION

Element	% Present
Carbon (C)	0.00 - 0.08
Chromium (Cr)	17.00 - 19.00
Nickel (Ni)	9.00 - 11.00
Manganese (Mn)	0.50 - 2.00
Phosphorous (P)	0.00 - 0.04
Sulphur (S)	0.00 - 0.25
Silicon (Si)	0.00 - 0.75
Niobium (Columbium) (Nb)	0.00 - 1.10
Molybdenum (Mo)	0.00 - 1.00
Iron (Fe)	Balance

ALLOY DESIGNATIONS

- AISI 347
- UNS S34700 in ASTM A276 & A479
- AMS 5646

SUPPLIED FORMS

- Bar
- Forgings
- Pipe
- Sheet
- Rod

APPLICATIONS

- Aerospace components and fasteners
- Breweries
- Dairies
- Fermentation industry
- Food processing,
- Machine tool industries
- Nuclear engineering
- Paper mills
- Production of explosives

CHARACTERISTICS

- High strength
- Good oxidation resistance up to 900°C
- High corrosion resistance

MECHANICAL PROPERTIES

ASTM A240 Sheet

Property	Value
Proof Stress	210 MPa
Tensile Strength	540 MPa
Elongation A50 mm	35 %
Hardness Brinell	255 HB

DISCLAIMER

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