

**Stainless Steel**
**S31008 (310S) Sheet and Plate**
**Datasheet Updated**  
05 August 2021

**SPECIFICATIONS**

Commercial	310S
US	S31008

A low carbon version of grade 310 that is less prone to embrittlement and sensitization in service.

**CHEMICAL COMPOSITION**
**ASTM A240  
S31008 Plate**

Element	% Present
Carbon (C)	0.00 - 0.08
Chromium (Cr)	24.00 - 26.00
Nickel (Ni)	19.00 - 22.00
Manganese (Mn)	0.00 - 2.00
Phosphorous (P)	0.00 - 0.04
Sulphur (S)	0.00 - 0.03
Silicon (Si)	0.00 - 1.50
Iron (Fe)	Balance

**ALLOY DESIGNATIONS**

- 1.4845
- AISI 310S

**SUPPLIED FORMS**

- Sheet
- Plate

**APPLICATIONS**

- Cryogenic components
- Food processing
- Furnaces-burners, doors, fans, piping and recuperators
- Fluidized bed furnaces-coal combustors, grids, piping, wind boxes
- Ore processing/Steel plants-smelter and steel melting equipment, continuous casting equipment
- Petroleum refining-catalytic recovery systems, flares, recuperators, tube hangers
- Power generation-coal gasifier internals, pulverized coal burners, tube hangers
- Sintering/Cement plants-burners, burner shields, feeding and discharging systems, wind boxes
- Thermal processing-annealing covers and boxes, burner grids, doors, fans, muffles and retorts, recuperators, walking beams

**CHARACTERISTICS**

- Excellent corrosion resistance
- Retains superior strength in elevated temperatures and hold good toughness at sub-zero temperatures
- Resistant to sulfidation and can also be used in moderately carburizing atmospheres

**MECHANICAL PROPERTIES**
**ASTM A240  
Sheet and Plate**

Property	Value
Proof Stress	205 Min MPa
Tensile Strength	515 Min MPa
Elongation A50 mm	40 Min %

**DISCLAIMER**

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