

Stainless Steel

S31009 (310H) Pipe & Fittings

Datasheet Updated
05 August 2021

SPECIFICATIONS

Commercial	310H
US	S31009

A high carbon modification of 310 developed for enhanced creep resistance.

CHEMICAL COMPOSITION

ASTM A312 S31009 Pipe

Element	% Present
Carbon (C)	0.04 - 0.10
Chromium (Cr)	24.00 - 26.00
Nickel (Ni)	19.00 - 22.00
Manganese (Mn)	0.00 - 2.00
Phosphorous (P)	0.00 - 0.05
Sulphur (S)	0.00 - 0.03
Silicon (Si)	0.00 - 1.00
Iron (Fe)	Balance

SUPPLIED FORMS

- Fittings & Flanges
- Pipe

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 A312

Pipe

Property	Value
Proof Stress	205 Min MPa
Tensile Strength	515 Min MPa
Elongation A50 mm	35 Min %

DISCLAIMER

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