

Haynes® 188 Data Sheet

Specifications:

AMS 5608 AMS 5772 AMS 5801 UNS R30188

Properties:

(Cold Worked 0%) Tensile: 192 ksi; Yield: 136 ksi; Elongation: 34% (Cold Worked 20%) Tensile: 224 ksi; Yield: 161 ksi; Elongation: 5.6% (Cold Worked 37%) Tensile: 292 ksi; Yield: 238 ksi; Elongation: 4.1% (Cold Worked 50%) Tensile: 263 ksi; Yield: 314 ksi; Elongation: 3.3%

Description:

Haynes® 188 is a cobalt-nickel-chromium-tungsten that has excellent high-temperature strength with good resistance to oxidizing environments in prolonged exposures up to 2000°F. It also has good resistance to sulfate deposit hot corrosion. This alloy can be forged or other hot-worked, maintaining that it is held at 2150°F until the entire piece comes to temperature. All hot or cold worked parts should be annealed and rapidly cooled in order to restore the best balance of properties. This alloy also has an excellent resistance to molten chloride salts and to gaseous sulfidation. It is typically used in aerospace as well as military and commercial gas turbine engines.

Available in multiple sizes and diameters in wire and spool.

Chemical Composition (Wt%):

Co)	Ni	Cr	W	Fe	Mn	Si	C	В	La
В	AL	22	22	14	3 max	1.25 max	0.35	0.10	0.015 max	0.03

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

CAUTION: Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.