

Incoloy 800H has excellent corrosion resistance in the water media at extremely high temperature of 500°C. Its higher nickel content made it have good stress corrosion resistance cracking properties in the water corrosion condition. High chromium content made it better resistance to pitting and crevice corrosion cracking. This alloy can resist nitric acid and organic acid, but it is not so fine in the sulfuric acid and hydrochloric acid.

Incoloy 800H Specification

Grade	UNS	W.Nr
Alloy 800H	N08810	1.4958

Incoloy 800H Chemical composition

Grade	%	Ni	Cr	Fe	C	Mn	Si	Cu	S	Al	Ti	P
Alloy 800H	Min	30	19	Bal,	0.05					0.15	0.15	
	Max	35	23		0.10	1.5	1	0.75	0.015	0.60	0.60	0.03

Incoloy 800H Mechanical properties: (Minimum value at 20°C)

Tensile Strength σ_b /MPa	Yield Strength $\sigma_{p0.2}$ /MPa	Elongation σ_5 /%
≥ 450	≥ 180	≥ 35

Incoloy 800H Standard

Bar/Rod	Forging	Sheet/Strip	Wire	Pipe/Tube
ASTM B408	ASTM B564	ASTM B409	ASTM B408	ASTM B407 ASTM B163 ASTM B514 ASTM B515

Incoloy 800H Size Range

Wire: Dia 0.08-12mm

Bar: Dia 1.0-300mm

Strip(Coil): 0.2-20mm TCK x 10-300mm W

Sheet: min.0.7mm TCK x 1200mm W max.

Tube & Forging & Machine Parts: customized

Welding wire: 0.8mm,1.0mm,1.2mm,2.0mm,2.4mm,3.2mm,3.8mm,4.0mm etc

Welding Strip: 0.4-0.7mm TCK x 25-60mm W