

TECHNICAL DATA

Incoloy 800 Series

Incoloy 800 series fasteners are known for high temperature and good strength during prolonged heat exposure. These fasteners are available in three variations: Incoloy 800; 800H with improved stress rupture properties; and 800HT optimum high temperature properties. These fasteners all offer excellent resistance to oxidation and carburization, as well as high creep rupture strength. In addition, Incoloy 800 bolts offer good corrosion resistance to many acids and sulfur-containing atmospheres.

Properties

Ultimate Tensile Strength	80 ksi
Yield Strength at 0.2%	35 ksi
Elongation %	25
Usable Temperature Limit	1400°F / 760°C

Chemistry & Specifications

Incoloy 800	Ni	Fe	Cr	C	AL	Ti	AL-Ti
Min %	30	39.5	19	-	0.15	0.15	0.3
Max %	35	-	23	0.1	0.6	0.6	1.2
Incoloy 800H	Ni	Fe	Cr	C	AL	Ti	AL-Ti
Min %	30	39.5	19	0.05	0.15	0.15	0.3
Max %	35	-	23	0.1	0.6	0.6	1.2
Incoloy 800HT	Ni	Fe	Cr	C	AL	Ti	AL-Ti
Min %	30	39.5	19	0.06	0.25	0.25	0.85
Max %	35	-	23	0.1	0.6	0.6	1.2

SPECIFICATIONS: UNS N08800/ N08810 / N08811 (800, 800H, 800HT), ASTM B408, ASME SB408, ASTM B564/ASME SB564, EN 10204-3.1, Werkstoff 1.4876 (800), Werkstoff 1.4876 H and 1.4958 (800H), Werkstoff 1.4876 HT and 1.4959 (800HT)

Key Benefits

- Excellent high temperature stability
- High creep rupture strength
- Excellent resistance to oxidation and carburization in high heat
- Good corrosion resistance to acids and sulfur-rich atmospheres
- Used in industries involving corrosive environments and high temperatures

Material Data

