

Nimonic fasteners are known for their high temperature, low-creep attributes and are ideal for high-strength, high-pressure applications. Nimonic fasteners are available in two grades. Similar to Inconel 600, Nimonic 75 bolts offer good mechanical properties, plus oxidation and scaling resistance to 1200°F. In comparison, age hardened Nimonic 80A fasteners are stronger. They offer a good combination of corrosion and oxidation resistance while maintaining extreme strength to 1500°F.

Properties

Ultimate Tensile Strength	109 ksi Nimonic 70 181 ksi Nimonic 80A
Yield Strength at 0.2%	39 ksi Nimonic 70 113 ksi Nimonic 80A
Elongation %	42 Nimonic 70 30 Nimonic 80A
Usable Temperature Limit	1200°F / 650°C Nimonic 70 1500°F / 815°C Nimonic 80A

Key Benefits

- Excellent ability to withstand extreme temperatures and pressure
- Good high temperature corrosion and oxidation resistance
- Excellent high temperature creep resistance

Chemistry & Specifications

Nimonic 75	Ni	Cr	Fe	Si	Mn	Ti	Cu	C
Min %	-	18.0	-	-	-	0.2	-	0.08
Max %	Bal	21.0	5.0	1.0	1.0	0.6	0.5	0.15

SPECIFICATIONS: UNS N06075, Werkstoff 2.4951 & 2.4630, DIN NiCr20Ti

Nimonic 80A	Ni	Cr	Fe	Ti	Co	Al	Mn	Si	Cu	Zr	C	S	B	Pb
Min %	-	18.0	-	1.8	-	1.0	-	-	-	-	-	-	-	-
Max %	Bal	21.0	3.0	2.7	2.0	1.8	1.0	1.0	0.2	0.15	0.10	0.015	0.008	0.0025

SPECIFICATIONS: UNS N07080, Werkstoff 2.4952 & 2.4631

Material Data

