



Nimonic Alloy 80A

Nimonic Alloy 80A is a Nickel-Chromium Alloy which has good oxidation and corrosion resistance. Nimonic Alloy 80A also has high creep-rupture and tensile properties at temperatures up to approximately 815°C.

Nimonic Alloy 80A performs well in high temperatures and when put under continuous stress. So, Alloy 80A is used in a number of applications which require these properties, including components in gas turbines, parts in nuclear generators, die-casting inserts and many others.

Nimonic Alloy 80A Grades & Equivalents:

- UNS N07080
- ASTM B637
- Werkstoff 2.4631 & 2.4952
- BS3076 NA20
- HR 201
- HR 401
- HR 601
- DIN 17742
- DIN 17754

Typical Chemical Analysis

C	Si	Mn	P	S	Cr	Ni	Mo
0.04-0.10	1.00	1.00		0.015	18.0-21.0	Balance	
W	N	Cb/Nb	Ti	Co	Cu	Al	B
			1.80-2.70		0.20	1.0-1.80	0.008
V	Fe	Mg	Ta	Ca	O	Bi	Se
	1.50						
Sn	Zn	Pb	Y	Cb/Nb + Ta	Ni + Co	H	PREN

Typical Mechanical Properties

Tensile Strength	930 N/mm ² min
0.2% Proof Stress	620 N/mm ² min
Elongation	20%
Reduction of Area	
Hardness	
Impacts	
Stress Rupture	760°C. Stress 325 N/mm ² min for 23 hrs min. 3.5mm Elongation
Other Remarks	

Product Forms Available:

- Hexagon Head Bolts
- Hexagon Nuts
- Studbolts
- Socket Capscrews
- Socket Countersunk Screws
- Socket Setscrews
- & Many other special fasteners and bespoke machined parts

Products can be produced to customer drawings or relevant British (BS), American (ASME, ANSI), European (DIN, UNI) or International Standards (ISO).

The size ranges M3 to M120 Metric and 3/16" to 4.75" Imperial can be supplied. Thread forms include UNC, UNS, UNF, BSW, BSF, Whitworth, Metric, Metric Fine.



Callywhite Lane
Dronfield
Derbyshire
S18 2XR

T: +44 01246 291111

www.westspecialfasteners.co.uk
sales@westspecialfasteners.co.uk