

Nimonic 80a, Nickel Alloy 80a

Typical Applications

Bolts

Exhaust valves

Gas turbine components

Tube supports in nuclear steam generators



Alloy 80A (alternatively known by Special Metals trade name Nimonic 80A) is a nickel chromium alloy similar to Alloy 75 but made precipitation hardenable by additions of aluminium and titanium.

Alloy 80A has good corrosion and oxidation resistance and high tensile and creep rupture properties at temperatures up to 1500 deg F.

Related Products

Alloy 200 201

Alloy 625 Bar

Alloy 625 Sheet And Plate

Alloy 718 Bar

Alloy 718 Sheet Plate

Alloy 75

Alloy 80A

Alloy X750

Alloy X Bar

Alloy X Sheet Plate

C263

Mp159 R Bar

Mp35N R

Rene 41

Waspaloy

Alloy 90

Alloy 901

Technical specification

Related Specifications

BS 3076 (NA20)

BS HR1

BS HR601

ASTM B637

UNS N07080

MSRR 7011

W.Nr 2.4952

W.Nr 2.4631

DIN 17742

Specific Gravity

8.19 g/cm³

Chemical Composition (WT %)

	Min	Max
Ni	Bal	-
Cr	18	21
Fe	-	3.0
C	-	0.10
Mn	-	1.0
Si	-	1.0
S	-	0.015
Ti	1.8	2.7
Al	1.0	1.8
Cu	-	0.2
B	-	0.008
Zr	-	0.15

Typical Mechanical Properties

0.2% Proof Stress	MPA	Min	620
Tensile Strength	MPA	Min	1000
Elongation	%	Min	20
Reduction of area	%	Min	12
Hardness	HV	Min	300

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Need more information? **Get in touch**

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