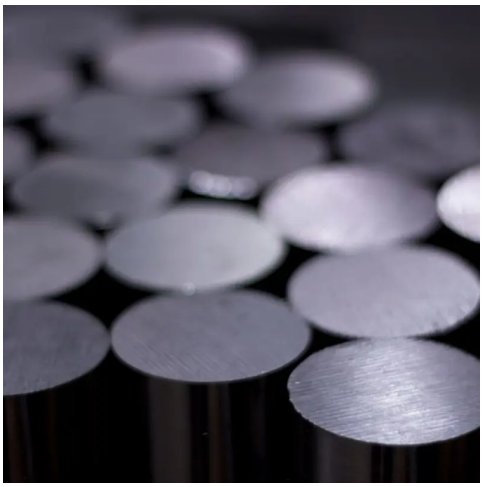
AMS 5754, AMS 5798 - Nickel Alloy X Bar

Typical Applications

Gas Turbine engine components



Alloy X is an austenitic nickel base alloy containing approximately 22 percent chromium for outstanding resistance to oxidation at high temperatures. In addition, the alloy, which is solid solution strengthened, possesses exceptional strength at elevated temperatures.

The alloy (AMS 5798, AMS 5754) has good high temperature and stress rupture properties above 1450°F and can be used for applications up to 2200°F. In addition Alloy X contains high levels of nickel and molybdenum providing good levels of corrosion resistance similar to high nickel alloys more customarily used in corrosion applications.

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

AMS 5754

AMS 5798

UNS N06002

ASTM B572

Specific Gravity

8.22 g/cm3

Chemical Composition (WT %)

	Min	Max
Cr	20.5	23
Mo	8	10
Co	0.58	2.5
W	0.2	1.0
Al	-	0.5
Ti	-	0.15
B	-	0.01
C	0.05	0.15
Fe	17	20
Mn	-	1.0
Si	-	1.0
P	-	0.04
S	-	0.03
Cu	-	0.5
Ni	-	Bal

Typical Mechanical Properties

		Temp deg f	70	1000	1200	1400	1600
0.2% Proof Stress	MPA	-	379	284	276	268	221
Tensile Strength	MPA	-	765	702	654	529	355
Elongation	MPA	-	44	49	54	53	58

Need more information? ***Get in touch***

General Enquiries

+44(0) 1525 217 556

Email us here

Head Office

40 Eden Way
Chartwell Business Park
Leighton Buzzard
Bedfordshire
LU7 4FY

T: +44 (0)1525 217 556

Conversion Centre

Suite 2 Meadowhall Riverside
Meadowhall Road
Sheffield
South Yorkshire
S9 1BW

T: +44 (0)1143 030 320

Useful Links

Privacy Policy

Sitemap