

## AMS 5754, AMS 5798 - NICKEL ALLOY X BAR

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.

Specific Gravity	
8.22 g/cm <sup>3</sup>	
Typical Applications	Related Specifications
Gas Turbine engine components	<b>AMS 5754</b> <b>AMS 5798</b> <b>UNS N06002</b> <b>ASTM B572</b>

### Chemical Composition (Wt %)

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

### Typical Mechanical Properties

	0.2% Proof Stress	Tensile Strength	Elongation
	MPA	MPA	MPA
Temp deg f			
<b>70</b>	379	765	44
<b>1000</b>	284	702	49

<b>1200</b>	276	654	54
<b>1400</b>	268	529	53
<b>1600</b>	221	355	58

\* This data has been supplied in good faith and is indicative only. It has been provided for general information purposes only and is not to be relied upon in place of the full specification. Mechanical properties can vary considerably with different supply conditions such as heat treatment or temper and product dimensions.

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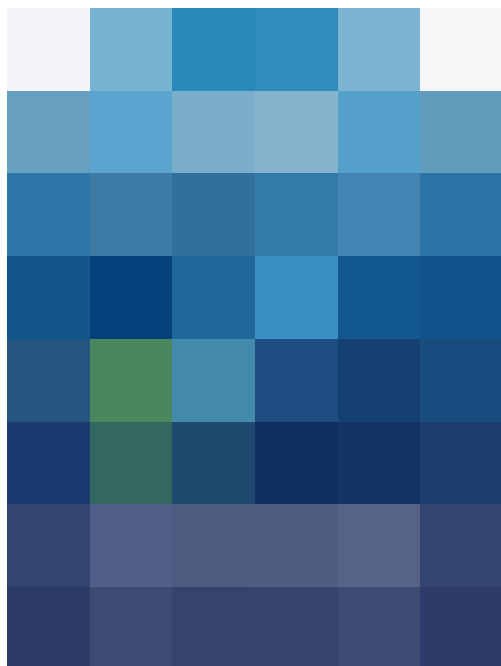
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