



Additive Metal Alloys, Ltd
 427 West Dussel, #105
 Maumee, Ohio 43537
 800.687.6110 Phone
 419.865.9919 Fax
 additivemetalalloys.com
 sales@additivemetalalloys.com

AM 718 Data sheet

AM 718 is a gamma prime strengthened, nickel based superalloy. AM 718 exhibits corrosion resistance and excellent mechanical properties from cryogenic up through elevated temperatures.

Alloy Highlights

- Good Mechanical Properties
- Excellent Welding Characteristics
- Good Oxidation Resistance
- Good Corrosion Resistance

Typical Applications

- Gas Turbine Components
- Liquid Fuel Rocket Components
- Cryogenic Tanks
- Down Hole Oil Well Equipment

Mechanical Properties (as Sintered)		
Test	Horizontal	Vertical
Tensile Strength	152 +/-7 ksi	140 +/-8 ksi
Yield Strength	110 +/-10 ksi	91 +/-8 ksi
Elongation at break	25 +/-5 %	30 +/-5 %
Hardness (HRC)		30
Density (lb/in ³)		0.294
E Modulus (Msi)		23 +/-3

Chemistry		
Element	Range (%)	
	Min	Max
Al	0.30	0.70
B		0.006
Ca		0.01
C	0.02	0.08
Cr	17.00	21.00
Co		1.00
Nb+Ta	4.75	5.50
Cu		0.30
Fe	15.00	21.00
Mg		0.01
Mn		0.35
Mo	2.80	3.30
Ni	50.00	55.00
P		0.015
Se		0.005
Si		0.35
S		0.015
Ti	0.75	1.15

Applicable Chemistry Specifications

AMS 5662	B50TF202	DIN 2.4668
AMS 5596	B50A918	UNS N07718
AMS 5832	ASTM B537	ASTM B670