

AMS 5596, AMS 5597 - NICKEL ALLOY 718 TÔLES ET PLAQUES

L'alliage 718 (également connu sous le nom commercial de Special Metals Inconel 718) est un alliage nickel-chrome qui peut être traité thermiquement pour donner une résistance élevée, une bonne résistance à la corrosion et est facilement fabriqué en pièces complexes avec une très bonne résistance à la fissuration après soudage. L'alliage 718 peut fonctionner efficacement entre -423 et 1300 degrés F.

Specific Gravity															
7.98 g/cm3															
Typical Applications								Related Specifications							
Exhausts Liquid rocket components involving cryogenic temperatures								AMS 5596 AMS 5597 UNS N07718 ASTM B670							
Chemical Composition (Wt %)															
	Ni	Cr	Fe	Mo	Nb+Ta	C	Mn	Si	Ph	S	Ti	Cu	B	Al	Co
Min	50	17	Bal	2.8	4.75	–	–	–	–	–	0.65	–	–	0.20	–
Max	55	21	–	3.3	5.50	0.08	0.035	0.35	0.015	0.015	1.15	0.30	0.006	0.80	1.00
Mechanical Properties in the annealed condition															
											0.2% Proof Stress	Tensile Strength	Elongation		
											MPA	MPA	%		
											Max	Max	Min		
Sheet and strip											550	965	30		
Plate											725	1035	30		
Mechanical Properties in the solution treated and precipitation heat treated condition															

0.2% Proof Stress	Tensile Strength	Elongation
MPA	MPA	%
Min	Min	Min
1035	1240	12

* Every effort has been made to ensure that our technical specifications are accurate. However, technical specifications included within Dynamic Metals Ltd should be used as a guideline only and are subject to change without notice.

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