



BRODER METALS GROUP 718 AMS 5663 / ASTM B637

Alloy 718 is a precipitation hardenable nickel chromium alloy. As the major alloy elements are molybdenum, niobium + tantalum, aluminium and titanium, Alloy 718 gives exceptionally high yield, good corrosion resistance, tensile and creep rupture properties at temperatures up to 700C (1300F).

ASTM B637 differs from other specification as it is typically used within the aerospace sector, however it also has relevance within the motorsport's industry.

Stock

Broder Metals Group hold 718 stock in sizes from 12.7 mm (1/2") to 101.6mm (4"), mainly in the API 6A 718 and NACE specifications. However, we can also convert billet to customer specific sizes or to fill in gaps between mill deliveries.

Chemistry Analysis (nominal percentages)

	C	S	Cr	Ni	Mn	Si	Mo	Ti	Nb
Exact	0.03	<0.001	18.48	53.02	0.03	0.07	3.04	0.94	5.26
	Cu	Fe	P	0.0002	Co	B	Ta	Se	Bi
	0.03	18.42	0.005	0.56	0.05	0.004	0.01	<0.0003	0.00003

Heat Treatment

Solution Treatment	Temp ° F	Temp ° C	Hold - hours	Cool	Precipitation Hardening	Temp ° F	Temp ° C	Hold - hours	Furnace cool to ° F	Furnace cool to ° C	Total time hours	Cool
Min	1700	924	0.5	Air	-	1300	704	8	1125	607	18	Air
Max	1850	1010	-	-	-	1350	732	-	1175	635	-	-

Broder Metals provide this alloy with our global same day quote, next day dispatch service. All our metals are fully traceable for your confidence, with clear certification delivered electronically or sent with the material as requested. For further information, contact us .



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