



Bessemer Road  
Sheffield S9 3XN  
Tel: +44 (0) 114 2434366  
Fax: +44 (0) 114 2441199  
[sales@specialqualityalloys.com](mailto:sales@specialqualityalloys.com)  
[www.specialqualityalloys.com](http://www.specialqualityalloys.com)

## ALLOY 625+ Alloy 716 UNS N07716

### APPLICABLE SPECIFICATIONS

ASTM B805 API6A CRA NACE MR-0175/ISO 15156

A precipitation hardenable Nickel-Chromium-Molybdenum based super alloy with high strength combined with excellent corrosion resistance. Offers similar strength to Alloy 718 with additional benefit of corrosion resistance similar to that provided by Alloy 625

### CHEMICAL ANALYSIS RANGE (WT%)

C	0.03 Max	Ni	59.0 – 63.0	Al	0.35 Max
Si	0.2 Max	Cr	19.0 – 22.0	Fe	Balance
Mn	0.2 Max	Mo	7.00 – 9.50	B	0.006 Max
P	0.015 Max	Nb (+ Ta)	2.75 – 4.00	Cu	0.23 Max
S	0.01 Max	Ti	1.00 – 1.60	Pb	0.001 Max

### HEAT TREATMENT

SQA bar stock is in the Solution Annealed and Aged condition. Material may be supplied Solution Annealed only upon request.

### TYPICAL MECHANICAL PROPERTIES IN SOLUTION ANNEALED & AGED CONDITION

0.2% Yield Strength	120000 PSI Min
Tensile Strength	150000 PSI Min
Elongation	20% Min
Reduction of Area	35% Min
Hardness	32 - 43 HRC Max (NACE)
Charpy V-Notch @ 60 DEG C	43/37 Joules

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