ALLOY 725 – UNS N07725

APPLICABLE SPECIFICATIONS

API6A CRA   ASTM B805 (Chemistry)   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%) AS PER API6A CRA

C	0.03 Max	Ni	55.0 - 59.0	Al	0.35 Max
Si	0.2 Max	Cr	19.0 - 22.50	Fe	Balance
Mn	0.35 Max	Mo	7.00 - 9.50		
P	0.015 Max	Nb (+Ta)	2.75 - 4.00		
S	0.01 Max	Ti	1.00 - 1.70		

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 min – 43HRC max NACE
Charpy V Notch @ -60 DEG C	43/37 Joules or higher – as per API6A CRA