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ALLOY 725

APPLICABLE SPECIFICATIONS

ASTM B805, UNS NO7725, API6A CRA, NACE MR-0175/ISO15156

A nickel chromium molybdenum niobium alloy, developed to provide the corrosion resistance of Alloy 625, combined with the high strength characteristics of Alloy 718.

TYPICAL APPLICATIONS

Valves & actuators, sealing products, seal rings, gaskets, downhole drilling & pumps.

CHEMICAL ANALYSIS RANGE (WT%) AS PER API6A CRA

С	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	Мо	7.00 - 9.50		
Р	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		

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