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

ALLOY 625 – UNS N06625

APPLICABLE SPECIFICATIONS

ASTM B446 (BAR) ASTM B564 (FORGINGS) NACE MR-0175/ISO 15156

A Nickel-Chromium-Molybdenum based super alloy with high strength, outstanding corrosion resistance and wide temperature range application. Ideal for sea water applications with excellent resistance to pitting and crevice corrosion, high corrosion fatigue strength and good resistance to chloride-ion stress corrosion cracking.

CHEMICAL ANALYSIS RANGE (WT%)

Ni	58.00 Min	C	0.10 Max	Mn	0.50 Max
Cr	20.00 – 23.00	Al	0.40 Max	P	0.015 Max
Fe	5.0 Max	Ti	0.40 Max	S	0.015 Max
Mo	8.00 – 10.00	Nb(Cb)+TA	3.15 – 4.15		
Co	1.00 Max	Si	0.50 Max		

HEAT TREATMENT

SQA bar stock is in the Annealed condition. Material may be supplied Solution Annealed (or aged from either of these states) upon request.

TYPICAL MECHANICAL PROPERTIES IN SOLUTION ANNEALED & AGED CONDITION

	Section size up to & including 4"	Section above 4"
0.2% Yield Strength	60000 PSI Min	50000 PSI Min
Tensile Strength	120000 PSI Min	110000 PSI Min
Elongation	18% Min	18% Min
Reduction of Area	35% Min	35% Min
Hardness	35HRC Max	35HRC Max
Charpy V Notch @ -60 Deg C	27/19 Joules	27/19 Joules