



# AI Materials Ltd

++44 (0) 114 243 1206

## Alloy 625

Alloy 625 combines nickel chromium and molybdenum, giving high strength (from room temperature to 816°C), ease of fabrication, and excellent corrosion resistance. Alloy 625 is particularly useful in situations where oxidation resistance and avoidance of pitting is required. In the annealed condition, Alloy 625 is fully austenitic and is suitable for machining. Alloy 625 can be hot or cold worked (although as it does work harden, intermediate heat treatments are advisable), formed and welded.

AI Materials stock Alloy 625 in the annealed condition to provide good strength and hardness, and typical applications are where contact with sea water and other harsh chemical environments and high mechanical stresses apply.

**We stock the following Specifications:** ASTM B446, UNS N06625, BS3076:NA21

**In the following Sizes:**

6 mm	10 mm	12 mm	12.7 mm	15.87 mm
15.87 mm	19.05 mm	20 mm	25.4 mm	28.575 mm
31.75 mm	34.925 mm	38.1 mm	40 mm	44 mm
44.45 mm	50.8 mm	53.975 mm	57.15 mm	63.5 mm
69.85 mm	76.2 mm	88.9 mm	94 mm	101.6 mm
114.3 mm	120 mm	127 mm	139.7 mm	150 mm
159 mm	160 mm	165.1 mm	177.8 mm	203 mm
220 mm	249 mm	260 mm	299 mm	319 mm
		400 mm		

**AI Materials can also supply rings and bored bar – please contact us with your requirements.**

**Technical data – nominal percentages:**

	C	Mn	Si	P	S	Cr	Ni	Mo	Ti	Al	Co	Fe	Nb	
Min	-	-	-	-	-	20.0	58.0	8.00	-	-	-	-	.15	%
Max	0.10	0.50	0.50	0.015	0.015	23.0	Bal	10.0	0.40	0.40	1.0	5.0	4.15	%

**Mechanical data**

Tensile Strength, min		Yield Strength (0.2% offset) min		Elongation in 4X Dia min %	Brinell Hardness Number	Rockwell C Hardness
Ksi	Mpa	Ksi	Mpa	%	HB Max	HRC Max
120	760	50	345	25	331	35

++44 (0) 114 243 1206