

## AMS 5666, ALLOY 625 BAR

Alloy 625 (alternatively known by Special Metals trade name Inconel 625) is a nickel chromium alloy used for its high strength, excellent fabricability and very good corrosion resistance. Excellent creep and rupture strength make it a good choice for high temperature applications, while exceptional fatigue resistance widens its uses. Alloy 625 is extensively used in the marine industry as well as chemical, motorsport, nuclear and aerospace applications.

### Specific Gravity

8.44 g/cm<sup>3</sup>

### Typical Applications

Propellor Blades  
 Propulsion Motors  
 Springs  
 Seals  
 Bellows  
 Fasteners  
 Flexure devices

### Related Specifications

AMS 5666  
 ASTM B446  
 UNS N06625  
 W.Nr 2.4856  
 BS 3076 NA21  
 ASME SB 466  
 Din 17752

### Chemical Composition (Wt %)

	Ni	Cr	Fe	Mo	Nb+Ta	C	Mn	Si	Ph	S	Al	Ti	Co
<b>Min</b>	Bal	20	–	8	3.15	–	–	–	–	–	–	–	–
<b>Max</b>	–	23	5	10	4.15	0.10	0.50	0.50	0.015	0.015	0.40	0.40	1.0

### Mechanical Properties after heat treatment

0.2% Proof Stress	Tensile Strength	Elongation	Reduction of area	Hardness
MPA	MPA	%	%	HRB
Min	Min	Min	Min	Min
414	827	30	40	145

\* This data has been supplied in good faith and is indicative only. It has been provided for general information purposes only and is not to be relied upon in place of the full specification. Mechanical properties can vary considerably with different supply conditions such as heat treatment or temper and product dimensions.

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