

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/cm³

Typical Applications

Related Specifications

Propellor Blades	AMS 5666
Propulsion Motors	ASTM B446
Springs	UNS N06625
Seals	W.Nr 2.4856
Bellows	BS 3076 NA21
Fasteners	ASME SB 466
Flexure devices	Din 17752

Chemical Composition (Wt %)

	Ni	Cr	Fe	Mo	Nb+Ta	C	Mn	Si	Ph	S	Al	Ti	Co
Min	Bal	20	–	8	3.15	–	–	–	–	–	–	–	–
Max	–	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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