

AMS 5599, AMS 5869, Nickel Alloy 625 Sheet & Plate

Typical Applications

Motor racing exhaust systems

Chemical Processing

Aerospace equipment

Jet Engine exhaust systems

Chimney Linings

Nuclear waste reprocessing equipment

Sour gas production tubes

Alloy 625 - AMS 5599, AMS 5869 (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.

Technical specification

Related Specifications

AMS 5599

AMS 5599 DDQ

AMS 5869

AMS 5879 LCF

ASTM B443

ASME SB 443

BS 3075 NA21

DIN 17750

Specific Gravity

8.44 g/cm³

Chemical Composition (WT %)

	Min	Max
Ni	Bal	-
Cr	20	23
Fe	-	5
Mo	8	10
Nb+Ta	3.15	4.15
C	-	0.10
Mn	-	0.50
Si	-	0.50
Ph	-	0.015
S	-	0.015
Al	-	0.40
Ti	-	0.40

Co

-

1.0

Mechanical Properties in annealed condition

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

Need more information? **Get in touch**

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