ATLAS BALL & BEARING CO LIMITED

INCONEL® 625 BALL DATA SHEET

Attributes

Nickel-Molybdenum-Chromium Alloy has excellent corrosion resistance in a wide range of corrosive media, being especially resistant to pitting and crevice corrosion. It is a favourable choice for sea water applications.

Specification with equivalents

Inconel® 625
HAYNES® 625 Alloy
BS3076 NA 21
UNS N06625
DIN 2.4856

Chemical Analysis %

Ni	58.0 min	Mn	0.50 max
Mo	8.0 – 10.0	C	0.10 max
Cr	20.0 – 23.0	Al	0.40 max
Fe	5.00 max	P	0.015 max
Cb+Ta	3.15 – 4.15	S	0.015 max
Co	1.00 max	Si	0.50 max
Ti	0.40 max		

Typical uses/applications

Marine and aerospace industries, pollution control, chemical processing and nuclear reactors.

Mechanical/physical properties

Hardness	350-480 Hv
Tensile strength	800 – 1000 Mpa
Approx service temperature	-200 to +340^{o} C
Specific gravity (density)	8.44 g/cm^{3} (0.305 lb/in^{3})
Melting point	1350^{o} C
Coefficient of Expansion	12.8µm/m·^{o}C (20-100^{o}C)
Modulus of rigidity	79kN/mm^{2}
Modulus of elasticity	205.8 kN/mm^{2}

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