

# 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	145 – 220 Hv
Tensile strength	800 – 1000 Mpa
Approx service temperature	-200 to +340° C
Specific gravity (density)	8.44 g/cm <sup>3</sup> (0.305 lb/in <sup>3</sup> )
Melting point	1350° C
Coefficient of Expansion	12.8µm/m·°C (20-100°C)
Modulus of rigidity	79kN/mm <sup>2</sup>
Modulus of elasticity	205.8 kN/mm <sup>2</sup>