

# ATLAS BALL & BEARING CO LIMITED

## HASTELLOY® C22 BALL DATA SHEET

### Attributes

Nickel-Molybdenum-Chromium Alloy with better overall corrosion resistance than any other NiCrMo alloy available. It has excellent resistance to localised corrosion and to a variety of mixed industrial chemicals.

### Specification with equivalents

Hastelloy® C22  
Inconel® Alloy C22  
UNS N06022  
DIN 2.4602

### Chemical Analysis %

Ni	Balance	Mn	0.50 max
Mo	12.5 – 14.5	C	0.015 max
Cr	20.0-22.5	V	0.35 max
Fe	2.00 – 6.00	P	0.02 max
W	2.50 – 3.50	S	0.02 max
Co	2.50 max	Si	0.08 max

### Typical uses/applications

Chlorination systems, nuclear fuel reprocessing and pickling systems

### Mechanical/physical properties

Hardness	350-480 Hv
Tensile strength	1400-1700 Mpa
Approx service temperature	-200 to +400° C
Specific gravity (density)	8.69 g/cm <sup>3</sup> (0.314 lb/in <sup>3</sup> )
Melting point	1399° C
Coefficient of Expansion	12.4 µm/m·°C (20-100°C)
Modulus of rigidity	78.6 kN/mm <sup>2</sup>
Modulus of elasticity	205.5 kN/mm <sup>2</sup>

### Corrosion Data

Available on application

[www.atlasball.co.uk](http://www.atlasball.co.uk)

Hastelloy is a trade name of Haynes International  
Inconel is a trade name of Special Metals Group of Companies  
Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet.

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