

# ATLAS BALL & BEARING CO LIMITED

## HASTELLOY® B2 BALL DATA SHEET

### Attributes

A solid solution strengthened, nickel-molybdenum alloy, typically used in extreme reducing conditions. also shows good resistance to hydrogen chloride, sulphuric acid and phosphoric acids and has excellent resistant to pitting and stress corrosion cracking in the heat-affected zone. This material has limited availability and we suggest you consider Hastelloy B3 as an alternative.

### Specification with equivalents

Alloy B2  
UNS N10665  
W.Nr. 2.4617

### Chemical Analysis %

Ni	Balance	Si	0.10 max
Mo	26.0 – 30.0	P	0.040 max
Fe	2.00 max	S	0.030 max
Co	1.00 max	C	0.020 max
Cr	1.00 max		
Mn	1.00 max		

### Typical uses/applications

Chemical process plants,  
Vacuum furnace components  
components in reducing environments

### Mechanical/physical properties

Hardness	350-480
Tensile strength	1400-1900
Approx service temperature	-200 ° C to +400 ° C
Specific gravity (density)	9.22 g/cm <sup>3</sup> (0.333 lb/in <sup>3</sup> )
Melting point	1370°C
Coefficient of Expansion	10.3 µm/m °C (20 - 100°C)
Modulus of rigidity	84 kN/mm <sup>2</sup>
Modulus of elasticity	217 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

Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet.

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