

# ATLAS BALL & BEARING CO LIMITED

## HASTELLOY® B3 BALL DATA SHEET

### Attributes

Nickel-Molybdenum-Chromium Alloy gives excellent corrosion resistance to hydrochloric acid at all concentrations and temperatures. It also withstands sulphuric, acetic, formic and phosphoric acids and other oxidising media. Excellent resistance to pitting and crevice corrosion.

### Specification with equivalents

Hastelloy ®B3  
UNS N10675  
DIN 2.4600

### Chemical Analysis %

Ni	65 min	Mn	3.00 max
Mo	28.5	C	0.01 max
Cr	1.5	Ti	0.2 max
Fe	1.5	Al	0.5 max
W	3.0 max	Si	0.1 max
Co	3.0 max		

### Typical uses/applications

Chemical processing. Not recommended in the presence of ferric or cupric salts.

### Mechanical/physical properties

Hardness	350-480 Hv
Tensile strength	1600-2000 Mpa
Approx service temperature	-200 to +400 °C
Specific gravity (density)	9.22 g/cm <sup>3</sup> (0.333 lb/in <sup>3</sup> )
Coefficient of Expansion	10.6µm/m·°C (20-100 °C)
Modulus of rigidity	83kN/mm <sup>2</sup>
Modulus of elasticity	216 kN/mm <sup>2</sup>

### Corrosion Data

Available on application

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