

ATLAS BALL & BEARING CO LIMITED

WASPALLOY® BALL DATA SHEET

Attributes

An age hardenable nickel base alloy with very high strength at elevated temperatures comparable with Rene 41 and generally superior to Inconel 718

Specification with equivalents

Waspaloy
Alloy 685
UNS N07001
DIN 2.4654

Chemical Analysis %

C	0.02-0.10	Mn	0.10 max
Si	0.10 max	P	0.010 max
S	0.010 max	Cr	18.00-20.00
Co	12.00-15.00	Mo	3.50-5.00
Ti	2.75-3.50	Al	1.20-1.60
B	0.003-0.010	Zr	0.04 max
Fe	2.00 max	Cu	0.10 max
Ni	Bal		

Typical uses/applications

Aerospace components

Mechanical/physical properties

Hardness	400-490 Hv (est)
Tensile strength	1300-1600 Mpa
Specific gravity (density)	8.16 g/cm ³ (0.298 lb/in ³)
Melting point	1330° C
Coefficient of Expansion	12.2µm/m·°C (20-100°C)
Modulus of rigidity	81 kN/mm ²
Modulus of elasticity	211 kN/mm ²

www.atlasball.co.uk

Waspaloy is a trade name of United Technologies Corporation
Whilst every care has been taken we cannot accept liability for any errors contained within this data sheet.

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