

# ATLAS BALL & BEARING CO LIMITED

## HAYNES 25® BALL DATA SHEET

### Attributes

A Cobalt-Nickel-Chromium-Tungsten alloy that combines excellent high-temperature strength with good resistance to oxidising environments up to 980<sup>0</sup> C

### Specification with equivalents

Haynes 25  
Udimet L605  
UNS R30605  
DIN 2.4965

### Chemical Analysis %

Cr	19.00-21.00	Ni	9.00-11.00
Fe	3.00 max	C	0.05-0.15
Si	0.40 max	W	14.00-16.00
Mn	1.00-2.00	P	0.04 max
S	0.03 max	Co	Bal

### Typical uses/applications

Parts for gas turbine engines and bearings

### Mechanical/physical properties

Hardness	420-540 Hv (est)
Tensile strength	1400-1800 Mpa
Specific gravity (density)	9.13 g/cm <sup>3</sup> (0.330 lb/in <sup>3</sup> )
Melting range	1330-1410 <sup>0</sup> C
Coefficient of Expansion	12.4µm/m·°C (20-100°C)
Modulus of rigidity	98kN/mm <sup>2</sup>
Modulus of elasticity	225 kN/mm <sup>2</sup>

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