

# ATLAS BALL & BEARING CO LIMITED

## HASTELLOY® G30 BALL DATA SHEET

### Attributes

G-30 is a high Nickel based alloy which shows superior corrosion resistance over most other Nickel and Iron based alloys in phosphoric acids as well as many complex environments containing highly oxidising acids such as nitric, hydrofluoric and sulphuric.

### Specification with equivalents

W.NR 2.4603  
UNS N06030

### Chemical Analysis %

Ni	Balance	Mn	1.50max
Cr	28.0 – 31.5	Nb/Ta	1.00 – 2.40
Fe	13.0 – 17.0	Si	0.80 max
Mo	4.00 – 6.00	P	0.04 max
Co	5.00 max	V	0.03 max
W	1.50 – 4.00	S	0.02 max
Cu	1.00 – 2.40		

### Typical uses/applications

Nuclear fuel reprocessing  
Nuclear waste processing  
Pickling operations  
Petrochemical processing

### Mechanical/physical properties

Hardness	320-450 Hv
Tensile strength	1000-1500 Mpa
Approx service temperature	-200 to +400° C
Specific gravity (density)	8.22 g/cm <sup>3</sup> (0.297 lb/in <sup>3</sup> )
Melting point	1399° C
Coefficient of Expansion	12.8 µm/m·°C (20-100° C)
Modulus of rigidity	77.6 kN/mm <sup>2</sup>
Modulus of elasticity	202 kN/mm <sup>2</sup>

### Corrosion Data

Available on application