ATLAS BALL & BEARING CO LIMITED

MONEL® 400 BALL DATA SHEET

Attributes

Nickel-Copper Alloy, resistant to sea water and steam at high temperatures as well as to salt and caustic solutions.

Specification with equivalents

Monel® 400
Alloy 400
DIN 2.4360
UNS N04400

Chemical Analysis %

Ni	63.0 min	C	0.15 max
Cu	28.0-34.0	Fe	1.0-2.5
Mn	1.25 max	Si	0.5 max
S	0.02	Ti	0.2 max

Typical uses/applications

Pumps and valves used in the manufacture of chlorinated plastics.

Mechanical/physical properties

Tensile strength	485 Mpa
Approx service temperature	- 200 to +230 ° C
Specific gravity (density)	8.85 g/cm^3 (0.320 lb/in^3)
Melting point	1350° C
Coefficient of Expansion	13.9 µm/m °C (20-100°C)
Modulus of rigidity	65.3 kN/mm^2
Modulus of elasticity	173kN/mm^2

Corrosion Data

Good resistance to sulphuric and Hydrofluoric acids. May be used to handle hydrochloric acid, oxidising salts present will greatly accelerate corrosive attack. Resistant to neutral, alkaline and acid salts. Poor resistance to ferric chloride.

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