



ALLOY 200

UNS N02200 N02201



C	CU	MN	NI	S	SI	FE
MAX	MAX	MAX	MIN	MAX	MAX	MAX
0.02	0.25	0.35	99.0	0.01	0.35	0.40

CHEMICAL COMPOSITION %

DESCRIPTION

Alloy 200 is an unalloyed wrought nickel. It offers excellent corrosion resistance, good mechanical, magnetic and magnetostrictive properties and useful thermal and electrical conductivities.

DESIGN FEATURES

- Excellent resistance to many corrosive media from acid to alkaline.
- Extremely high resistance to caustic alkalis including the molten state.
- Resistance to mineral acids varies according to temperature and concentration and whether or not the solution is aerated. Corrosion resistance is better in non-aerated acids.
- In acid, alkaline and neutral salt solutions, Alloy 200 shows good resistance, however, severe attack occurs in oxidizing salt solutions.
- Resistant to all dry gases at room temperature.

TYPICAL APPLICATIONS

- Food production, such as the handling of cool brines, fatty acids and fruit juices
- Vessels in which fluorine is generated and reacted with hydrocarbons
- Storing and transportation of phenol - immunity from any form of attack ensures absolute product purity
- Manufacture and handling of sodium hydroxide, particularly at temperatures above 570°F
- Production of viscose rayon and manufacture of soap - general corrosion resistance and

AVAILABILITY	SPECS	
FLANGES	1/2" - 8"	B160, B564, B16.5
FORGINGS		B564
TUBING		B161

TENSILE REQUIREMENTS	
TENSILE STRENGTH	(KSI) 50 min
YIELD STRENGTH 5" AND UNDER OVER 5"	(KSI) 12 MIN. (KSI) 10 MIN.
ELONGATION 5" AND UNDER OVER 5"	35% MIN. 40% MIN.

KSI can be converted to MPA (Megapascals) by multiplying by 6.895.

Stocks of Alloy 200 are dual certified to Alloy 201 with reduced carbon content (0.02% MAX) for better corrosion resistance at temperatures above 570F by avoiding graphite precipitation.

virtual immunity to intergranular attack above 600°F

- Production of hydrochloride and chlorination of hydrocarbons such as benzene, methane and ethane