



ALLOY 600

UNS N06600



C	CR	CU	FE	MN	N	S	SI
MAX		MAX		MAX	MIN	MAX	MAX
0.15	14.0 - 17.0	0.50	6.0 - 10.0	1.0	72.0	0.015	0.50

CHEMICAL COMPOSITION %

DESCRIPTION

Alloy 600 is a nickel chromium iron alloy used for applications which require resistance to corrosion and heat. This alloy has excellent mechanical properties and presents the desirable combination of high strength and good workability under a wide range of temperatures.

DESIGN FEATURES

- High nickel content offers excellent resistance to corrosion by many organic and inorganic compounds.
- Virtually immune to chloride ion stress corrosion cracking.
- Chromium confers resistance to sulfur compounds and provides resistance to oxidizing conditions at high temperatures or in corrosive solutions.
- Alloy 600 is not precipitative hardenable, it is hardened and strengthened only by cold work.
- Good for a variety of applications involving temperatures from cryogenic to above 2000°F

AVAILABILITY

SPECS

FLANGES	1/2" - 8"	B160, B564, B16.5
FORGINGS		B564

TENSILE REQUIREMENTS

TENSILE STRENGTH	(KSI) 80 - 100
YIELD STRENGTH	(KSI) 30 - 50
ELONGATION	30% MIN

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

TYPICAL APPLICATIONS

- Steam generators
- Chemical processing
- Food processing
- Superheaters
- Jet engines
- Electronic parts