



ALLOY 20

UNS N08020



C	NB + TA	CR	CU	FE	MN	MO	NI	P	S	SI
MAX	8X Carbon				MAX			MAX	MAX	MAX
0.07	1.0	19.0-21.0	3.0-4.0	BAL	2.0	2.0-3.0	32.0-38.0	0.045	0.035	1.0

CHEMICAL COMPOSITION %

DESCRIPTION

Alloy 20 is one of the so-called “Super” stainless steels that was designed for maximum resistance to acid attack. Its nickel, chromium, molybdenum and copper content contribute to its overall resistance to chloride stress corrosion cracking and general pitting attack. The alloy is stabilized with columbium to minimize carbide precipitation during welding.

DESIGN FEATURES

- Superior resistance to stress-corrosion cracking in boiling 20 to 40% sulfuric acid
- Excellent general corrosion resistance to sulfuric acid
- Excellent resistance to chloride stress corrosion cracking
- Excellent mechanical properties and fabricability
- Minimal carbide precipitation during welding

TYPICAL APPLICATIONS

- Chemical and allied industries
- Food and dye production
- Heat exchangers
- SO2 scrubbers and other severe environments
- Tanks
- Pickling Racks
- Valves

AVAILABILITY		SPECS
150# FITTINGS	1/4" - 2"	B366
FORGINGS		B462

TENSILE REQUIREMENTS	
TENSILE STRENGTH	(KSI) 80
YIELD STRENGTH	(KSI) 35
ELONGATION	30% MIN.

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