

AVAILABILITY

Seamless Pipe 1/4" - 8"	Tubing 1/4" - 1"
Weld Pipe 1/2" - 24"	Valves 1/2" - 12"
Butt-Weld Fittings 1/2" - 24"	Bar 1/8" - 11"
Flanges 1/2" - 24"	Plate 1/8" - 3"
Pressure Fittings 1/4" - 2"	
150# Fittings 1/4" - 2"	

SPECIFICATIONS

ASTM B729, B464, B366,
B473, B462
ASME SB729, SB464, SB366,
SB473, SB462

CHEMICAL COMPOSITION %

C	Cb	Cr	Cu	Mn	Mo	Ni	P	S	Si	Ta
Max	8 times			Max			Max	Max	Max	8 times
0.07	Carbon-1.00	19.0-21.0	3.30-4.0	2.0	2.0-3.0	32.0-38.0	0.045	0.035	1.0	Carbon-1.00

DESCRIPTION

Alloy 20 is one of the so-called "Super" stainless steels that was designed for maximum resistance to acid attack. It's 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. It has good mechanical properties and can be fabricated with comparative ease.

Although the alloy was designed for use in sulfuric acid related industries, it finds wide usage throughout the chemical processing industry. It also is used for processing pharmaceuticals, food, gasoline, solvents, plastics, explosives, synthetic fibers and many other products.

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

TENSILE REQUIREMENTS

Tensile Strength	Yield Strength
(KSI)	(KSI)
80	35

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