

Alloy 20 is a good mid-range corrosion resistant alloy – offering better protection than stainless steel alloys but not to the level of Hastelloy. Known for their resistance to sulfuric acid corrosion, Alloy 20 fasteners offer good resistance to boiling sulfuric acid at a specific range of 20% to 40% concentration. In addition, Alloy 20 bolts can provide basic protection from phosphoric and nitric acid. Alloy 20 is most widely used in flue-gas desulfurization as well as chemical processes involving sulfuric acid.

### Properties

Ultimate Tensile Strength	80 ksi
Yield Strength at 0.2%	35 ksi
Elongation %	30
Usable Temperature Limit	1000°F / 538°C

### Chemistry & Specifications

AL6XN	Ni	Cr	Mo	Mn	Cu	Si	C	S	P	Cb+Ta	Fe
Min %	32.5	19.0	2.0	-	3.0	-	-	-	-	8.0 x C 1.0	-
Max %	35.0	21.0	3.0	2.0	4.0	1.0	0.1	0.0	0.0	-	Balance

SPECIFICATIONS: UNS N08020, ASME SA240, , ASME SB366, ASME SB462, ASME SB463, ASME SB464, ASME SB473, ASME SB729, ASTM A240, ASTM B366, ASTM B463, ASTM B464, ASTM B473, ASTM B729, ASTM BB462, ANSI/ASTM A555-79, EN 2.4660, , Werkstoff 2.4660, CN7M, DIN 2.4660

### Key Benefits

- Good mid-range corrosion protection
- Designed to withstand the harsh environment of hot sulfuric acid
- Resists boiling sulfuric acid in 20% to 40% concentration
- Decent resistance to chlorides, as well as phosphoric and nitric acid
- Moderate strength to 1000°F

### Material Data