

Description

An austenitic steel engineered for maximum resistance to pitting and crevice corrosion. Fortified with high levels of chromium, molybdenum, and nitrogen, it excels in severe, high-chloride environments like seawater, brackish water, and pulp mill bleach plants. Readily fabricated and welded, 254 SMO is a proven, cost-effective alternative to titanium and nickel-based alloys in new construction.

Product Capabilities

Form Name	Size Range	Schedules	Specifications
Welded Pipe	1/2"-36"	10S, 40S, 80S	ASTM A312 / ASME SA312
Seamless Pipe	1/2"-36"	10S, 40S, 80S	ASTM A312 / ASME SA312
Buttweld Fittings	1/2"-36"	10S, 40S, 80S	ASTM A403 / ASME SA403
Flanges	1/2"-36"	10S, 40S, 80S	ASTM A182 F44 / ASME SA182 F44
Pressure Fittings	1/2"-2"	300#/6000#/9000# THRD/SW	ASTM A182 F44 / ASME SA182 F44

Limiting Chemical Composition %

Cr	Ni	C	Si	Mn	P	S	Mo	Cu	Fe
MAX 0.02	19.5-20.5	0.5-1.0	MAX 1.0	6.0-6.5	0.18-0.22	17.5-18.5	MAX 0.03	MAX 0.80	MAX 0.010

Typical Industrial Applications

- Seawater handling equipment
- Pulp mill bleach systems
- Tall oil distillation columns and equipment
- Chemical processing equipment
- Food processing equipment
- Desalination equipment
- Flue gas desulfurization scrubbers

Tensile Requirements

Tensile Strength ksi (min.)	Yield Strength ksi (min.)
94	44