254SMO®

(UNS S31254)

Availability:

Weld Pipe: 1/2” - 12”
Seamless Pipe: 1/2” - 8”
Butt-Weld Fittings: 3/4” - 12”
Flanges: 3/4” - 12”
Bar: 1” - 8”

Specifications:

ASTM A312, A403, A182,
ASME SA312, SA403, SA182

Description:

254SMO is an austenitic steel designed for maximum resistance to pitting and crevice corrosion. With high levels of chromium, molybdenum and nitrogen, 254SMO is especially suited for high chloride environments such as brackish water, seawater, pulp mill bleach plants and other high-chloride process streams. In new construction, 254SMO has been found in many cases to be technically adequate and much less costly substitute for nickel-based alloys and titanium. 254SMO is readily fabricated and welded.

Typical 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	Yield Strength
(KSI) = 94	(KSI) = 44

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

Chemical Composition %

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