

254 SMO

Austenitic Grade

DESCRIPTION:

Alloy 254 SMO is a high-end austenitic stainless steel with higher molybdenum and nitrogen with lower carbon content. This alloy combines strength nearly twice the level of the 300 series stainless and outstanding resistance to pitting, stress corrosion cracking, and crevice corrosion. In some instances, 254 SMO is a better and more cost effective solution than high nickel or titanium alloys. This alloy is frequently used in high chloride and marine environments.

APPLICATIONS:

- Chemical and Food Processing
- Petroleum production and Oil and Gas
- Saltwater and Marine applications
- Desalination processes

CHEMICAL COMPOSITION:

Carbon	0.02 max
Chromium	19.5 – 20.0
Nickel	17.5 – 18.5
Manganese	1.0 max
Silicon	0.80 max
Nitrogen	0.18 – 0.22
Phosphorus	0.03 max
Molybdenum	6.0 – 6.5

MECHANICAL PROPERTIES:

Yield Strength	45 KSI min
Tensile Strength	95 KSI min
Elongatin	35%
Hardness	96 Rockwell B

STAINLESS STRUCTURALS CAN PRODUCE THIS ALLOY IN BEAMS, CHANNELS, ANGLES, TEES AND CUSTOM SHAPES.

Disclaimer:

The information on the stainless alloy data sheets are accurate to the best of our knowledge, but are intended for general information only. Applications suggested for the different alloys are listed only to help our customers make their own decisions. These are neither guarantees nor warranties on material uses. Data referring to chemical composition and mechanical properties are industry norms at the typical state of the alloys tested. These properties can change in different environments, temperatures, applications and so forth. Stainless Structural assumes no responsibility or liability for the information given.

