

2205

Duplex Grade

DESCRIPTION:

2205 duplex is the most commonly used duplex stainless steel. This grade of duplex provides a solution to chloride stress corrosion cracking issues with 304/L and 316/L stainless. With its higher chromium, molybdenum, and nitrogen this duplex provides improved corrosion resistance over 316/L and 317/L. 2205 duplex should not be used in temperatures over 300°C.

Some of the beneficial characteristics of 2205 include high yield strength, resistance to stress corrosion cracking, resistance to pitting, and good corrosion resistance in harsh environments.

APPLICATIONS:

- Food and Chemical Processing
- Pulp and Paper
- Oil and Gas
- Marine and High Chloride environments

CHEMICAL COMPOSITION:

Carbon	0.03 max
Chromium	22.0 – 23.0
Nickel	4.5 – 6.5
Manganese	2.0 max
Silicon	1.0 max
Phosphorus	0.03 max
Molybdenum	3.0 – 3.5

MECHANICAL PROPERTIES:

Yield Strength	65 KSI min
Tensile Strength	95 KSI min
Elongation	25%
Hardness	290 Brinell Max

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.

