

410S

Ferritic Grade

DESCRIPTION:

Grade 410S is a ferritic stainless steel that is a low carbon variation of type 410 stainless steel.

Due to the lower carbon and the addition of titanium and/or columbium, this alloy minimizes austenite formation at higher temperatures, which prevents hardening.

This helps prevent cracking when welding. 410S cannot be hardened by heat treatment but it can be welded.

This alloy has good oxidation resistance as well.

APPLICATIONS:

- Automotive exhaust components
- Oil and Gas
- Petrochemical processing
- Thermal Processing
- Mining machinery
- Quenching racks

CHEMICAL COMPOSITION:

Carbon	0.08 max
Chromium	11.5 – 13.5
Nickel	0.60 max
Manganese	1.0 max
Silicon	1.0 max
Phosphorus	0.04 max

MECHANICAL PROPERTIES:

Yield Strength	30 KSI min
Tensile Strength	60 KSI min
Elongation	22%
Hardness	75 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.

