

310 Stainless Steel (UNS S31000)

Description

High strength Ni-Cr stainless steel with excellent corrosion resistance.

Advantages

- ✓ Good resistance to:
 - Corrosion and oxidation
 - Heat scaling
 - Resistant to combination of high temperature and sulfur-containing gases.

Limitations

- ✓ Not suitable for strongly reducing environments (e.g., hydrochloric acid)

Maximum exposure temperature

2100°F (1150°C)

Thermal Conductivity

Low (14.2 W/mK at 100°C)

Typical applications

- ✓ Boiler tubes
- ✓ Waste heat boilers
- ✓ Paper pulp digesters

Chemical composition

Ni	19%-22%
Cr	24%-26%
Fe	Remainder
Si	1.5%*
Mn	2%*
P	0.045%*
C	0.25%*
S	0.030%*

*Maximum