

316 Stainless Steel (UNS S31600)

Description

The addition of molybdenum provides this stainless with increased resistance to pitting from chloride ion solutions and increased strength at elevated temperatures.

Advantages

- ✓ Improved corrosion resistance vs. 304 stainless steel
- ✓ Good oxidation resistance

Limitations

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

Maximum exposure temperature

Continuous service to 1700°F (930°C)

Thermal Conductivity

Low (16.3 W/mK at 100°C)

Typical applications

- ✓ A wide variety, including food, pharmaceuticals, petrochemical and semiconductor

Chemical composition

Ni	10%-14%
Cr	16%-18%
Fe	Remainder
Si	0.75%*
Mo	2%-3%
Mn	2%*
P	0.045%*
C	0.08%*
S	0.030%*

*Maximum