254 SMO fasteners offer good general and localized corrosion protection from saltwater and harsh chloride environments. A high-end stainless steel alloy, 254 SMO is almost 2x's stronger than 300 series stainless. For brackish water, marine, pulp & paper bleaching and other chloride applications, 254 SMO bolts can provide an effective, economical substitute to nickel alloys. 254 SMO offers slightly less strength and high temperature stability to sister alloy AL6XN.

Properties

| Ultimate Tensile Strength | 98 ksi |
|---------------------------|---------------|
| Yield Strength at 0.2% | 43 ksi |
| Elongation % | 50 |
| Usable Temperature Limit | 700°F / 371°C |

Key Benefits

- Good general and localized corrosion resistance to high chloride and saltwater environments
- Strength nearly twice that of 300 series steels
- High ductility and impact strength

Chemistry & Specifications

| 254 SMO | Fe | Cr | Ni | Мо | Cu | Mn | Si | N | Р | C | S |
|---------|-----|------|------|-----|-----|-----|-----|------|------|------|------|
| Min % | - | 19.5 | 17.5 | 6.0 | 0.5 | - | - | 0.18 | - | - | - |
| Max % | Bal | 20.5 | 18.5 | 6.5 | 1.0 | 1.0 | 0.8 | 0.20 | 0.03 | 0.02 | 0.01 |

SPECIFICATIONS: UNS S31254, EN Number 1.4547

Material Data