

# TECHNICAL DATA

## Alloy 330

Alloy 330 fasteners are renowned for their incredible resistance to high temperature thermal cycling as they can handle extreme cyclic fluctuations between heating and cooling processes, as well as in alternate carburizing and oxidizing atmospheres. Alloy 330 bolts also offer good resistance to thermal shock and quenching. Usable to 2100°F, alloy 330 is very resistant to both oxidation and carburization. Alloy 330 bolts are ideal for high temperature furnaces, thermal processing and heat treating.

### Properties

Ultimate Tensile Strength	85 ksi
Yield Strength at 0.2%	39 ksi
Elongation %	47
Usable Temperature Limit	2100°F / 1148°C

### Chemistry & Specifications

Alloy 330	Cr	Ni	Mn	Si	Cu	P	S	C	Fe
Min %	18.0	34.0	-	1.0	-	-	-	0.04	-
Max %	20.0	37.0	2.00	1.5	1.0	0.03	0.03	0.08	balance

SPECIFICATIONS: UNS N08330, AMS 5592, AMS 5716, ASME SB 511, ASME SB 536, ASTM B 511, ASTM B 512, ASTM B 535, ASTM B 536, ASTM B 546, ASTM B 710, ASTM B 739, EN 10095, WERKSTOFF 1.4886

### Key Benefits

- Excellent ability to perform under cyclic temperature conditions of extreme heating and cooling
- Excellent high temperature stability
- Very good oxidation and carburization resistance to 2100°F
- Low coefficient of expansion and excellent ductility
- Good resistance to scale formation

### Material Data

