Nitronic® 60

Smiths Advanced Metals

Austenitic Stainless Steel Bar

Excellent corrosion & galling resistance.

Nitronic® 60 combines superior corrosion resistance with good mechanical strength. The strength of the alloy is twice as much as 316 stainless steel.

The product offers improved corrosion resistance compared to 304 stainless steel and resistance to crevice corrosion, and pitting is superior to 316 stainless steel.

In both ambient and elevated temperatures, the galling resistance of the alloy is outstanding and, therefore, is highly suitable for applications where seizing or galling is a consideration. In the annealed state, Nitronic® 60 offers excellent hardness, and similar materials would require heat-treatment to boast such superior hardness levels. The material represents a highly cost-effective engineering material solution for wear resistance compared to alloys such as nickel and cobalt. The alloy finds use on valve systems, fasteners and sanitary equipment. Unlike many austenitic grades, Nitronic® 60 is characterized by low magnetic properties when cold worked or cooled to sub-zero temperatures.

We stock Nitronic® 60 stainless steel bars in various sizes and we process your stainless steel bars in-house.

Grades / Specifications

- AMS5848
- ASTM A193
- ASTM A276
- ASTM A479
- UNS S21800

Benefits

- Excellent low-temperature impact resistance
- High strength
- Outstanding galling resistance
- Superior corrosion resistance

* Chemical Composition (weight %)

	Ni	Cr	Mn	Si	C	N	S	P	Fe
min.	8.00	16.00	7.00	3.50		0.08			
max.	9.00	18.00	9.00	4.50	0.10	0.18	0.03	0.06	Bal

* As per ASTM A276

* Mechanical Properties (minimum values unless stated)

Ultimate Tensile Strength	655 MPa
Yield Strength (0.2% OS)	345 MPa
Elongation	35%
Reduction in Area	55%
Hardness	241 HBW max

* Properties as per ASTM A276

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