

Nitronic® 40 (UNS S21900)

Product Datasheet



Stainless Steel

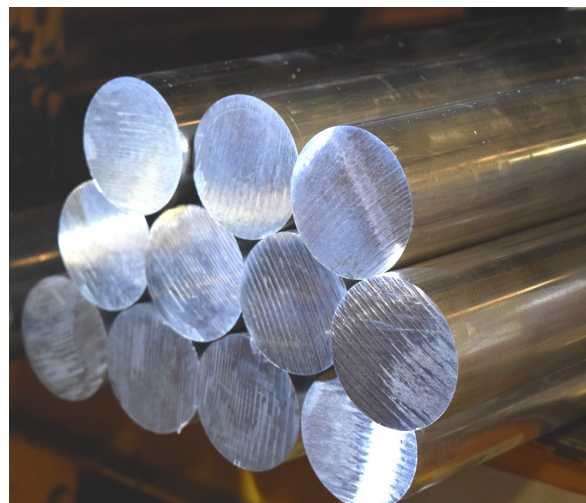
Service. Quality. Value.

High yield strength stainless steel

Outstanding performance in both elevated and cryogenic temperatures.

Offering a combination of good corrosion resistance with high yield strength, Nitronic® 40 is a high-manganese austenitic stainless steel. The alloy provides outstanding performance in both elevated and cryogenic temperature environments where the materials high strength and toughness is maintained. The room temperature yield strength of the alloy is approximately double when compared to type 304, 321 and 347 stainless steel. The product is readily weldable and can be fabricated.

Nitronic® 40 will resist stress corrosion cracking in marine environments and offers good high temperature oxidation resistance. The alloy continues to be non-magnetic even at cryogenic temperatures.



Key Features

- High strength
- Outstanding cryogenic temperature performance
- Good elevated temperature properties
- Good corrosion resistance

Applications

- Ducting and bellows
- Aircraft engine component
- Cryogenic service
- Chemical processing

Chemical Composition (weight %)

	C	Si	Mn	Cr	P	Ni	S	N	
Min			8.0	19.0		5.5		0.2	
Max	0.04	1.00	10.0	21.5	0.04	7.5	0.01	0.4	

Mechanical Properties (minium)

Ultimate Tensile Strength	Yield Strength	Elongation 50mm %	Brinell Hardness
655 MPa	330 MPa	35	241

We stock Nitronic® 40 in round bar and tube.

UK Service Centres:

Smiths Belfast **02895 908 897**
Smiths Biggleswade **01767 604 704**
Smiths Birmingham **0121 728 4940**
Smiths Bristol **0117 971 2800**
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Quality & Testing:



1930

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