

Nitronic® 30 Superalloy

Smiths High Performance



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Abrasion Resistant Nickel Alloy

Nitronic® 30 offers a combination of strength plus wet abrasion and corrosion resistance.

Nitronic® 30 is a nitrogen-strengthened stainless steel alloy developed initially to offer superior corrosion resistance in aqueous and atmospheric atmospheres.

It is known as abrasion-resistant steel and is still used today in high-wear applications such as coal buckets, hoppers and magnetic ore separator screens. Combined with good overall toughness, the alloy provides an economical solution for various applications. Nitronic® 30 offers numerous benefits - the material is significantly stronger than 304 stainless steel (up to 50% higher yield).

Motorsport Applications:

Application uses include fasteners, hose clamps, bumpers and structural framework. The material is easily welded and will withstand substantial impact without cracking. The strength-to-weight ratio alone is up to three times greater than carbon steel.

Machinability:

Good machinability using conventional machining techniques when using resulphurised lubricant at slow speeds.

Availability:

Nitronic® 30 is available in round bar and plate.

About Smiths High Performance

Smiths High Performance is a leading stockholder and supplier of high-performance engineering materials. We are material supply chain partners supporting high-technology market sectors.



Benefits:

- Superior fatigue resistance
- Good overall toughness
- High impact resistance
- Economical
- Superior corrosion resistance
- Readily weldable
- Excellent resistance to sulphide stress cracking
- Superior ductility

Further technical data available on the reverse of this Datasheet



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Chemical Composition (weight, %)

	Mn	Cr	Ni	Si	N	C	S	Fe	
Min:	15.00	15.00	1.50		0.15			Bal	
Max:	17.00	17.00	3.00	1.00	0.30	0.03	0.03	Bal	

Mechanical Properties

Tensile Strength	Yield Strength	Elongation	Hardness (Brinell)	Hardness (Rockwell B)
655 MPa (95 ksi)	330 MPa (48 ksi)	35%	241	100

Applications in Motorsport:

- Fasteners and fixings
- Hose clamps
- Bumpers
- Structural framework

Other Designations:

Equivalents include ASTM A240 and ASTM A666

...where performance matters...

When you purchase high-performance materials from **Smiths High Performance**, you will join some of the biggest and best global engineering companies. We are a Tier 1 supply chain partner to the world's leading motorsport companies. Our unique business structure and ethos allow us to offer services otherwise unavailable in this market sector.

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