

Nitronic® 50W Data Sheet

Specifications:

AWS A5.9 AWS Class ER209 ASME SFA 5.9 UNS S20980

Properties:

Yield Strength: 62,900 psi Tensile Strength: 101,500 psi Elongation: 36%

Description:

This alloy is an austenitic stainless steel that is strengthened with nitrogen which gives it a higher strength over a range of temperatures. The nitrogen in this alloy also reduces the likelihood of carbon diffusion, therefore increasing resistance to intergranular corrosion. This alloy is used to weld base metals of similar composition such as Nitronic® 30. However, it can also be used with welding alloys of dissimilar composition, mild steel and other stainless steels.

Available in multiple sizes and diameters

Chemical Composition (Wt%)

Si	Mn	Cu	Mo	S	Ni	Cr	P	С	N	V
0.90	4.0- 7.0			0.03		20.5- 24.0	0.03	0.05	0.10- 0.30	

Note: Single values are maximum unless otherwise noted.

Maintaining a proper welding procedure, including pre-heat and interpass temperatures, may be critical depending on the type and thickness of material being welded.

CAUTION: Consumers should be thoroughly familiar with the safety precautions on the warning label posted in each shipment and in the American National Standards A49.1, "Safety in Welding and Cutting," published by the American Welding Society, 8669 NW 36 Street, #130, Miami, FL 33126: OSHA Safety and Health Standards 29 CRF 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.

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