

**Specifications:**

AWS A5.9 ER219  
AMS 5818  
UNS S21904  
USWC 5656 (A)

**Properties:**

**Yield Strength:** 112,000 psi  
**Tensile Strength:** 68,000 psi  
**Elongation:** 44%

**Description:**

Nitronic® 40, 21-6-9, alloy is austenitic that is strengthened with nitrogen which gives it a higher strength and toughness over a wide range of temperatures. This alloy has a good resistance to corrosion, and can retain its strength at sub-zero temperatures. Nitronic® 40, 21-6-9, has been used in aerospace engine components, chemical processing, etc.

Available in multiple sizes and diameters

**Chemical Composition (Wt%)**

Si	Mn	Cu	Mo	S	Ni	Cr	P	C	N	Fe
1.0	8.0-10.0	0.75	0.75	0.03	5.5-7.0	19.0-21.5	0.03	0.05	0.10-0.30	BAL

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 CFR 1910 is available from the U.S. Department of Labor, Washington, D.C. 20210.

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