

Specifications:

AWS A5.9
AWS Class ER312
ASME SFA 5.9
UNS S31380

Properties:

Tensile Strength: 109,500 psi
Yield Strength: 78,500 psi
Elongation: 25%

Description:

ER312 is a filler metal that has a microstructure that gives off a two-phase weld deposit, creating a weld metal that is highly resistant to cracks and fissures. ER312 is good to weld with metals of dissimilar composition and dissimilar metals, such as carbon steel, especially metals that have a high content of nickel. This alloy has a high content of chromium, thus providing good corrosion oxidation resistance at higher temperatures.

Available in multiple sizes and diameters in spool and wire rods.

Chemical Composition (Wt%)

Si	Mn	Cu	Mo	S	Ni	Cr	P	C
0.30-0.65	1.0-2.5	0.75	0.75	0.03	8.0-10.5	28.0-32.0	0.03	0.15

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.