

**Specifications:**

AWS A5.9  
AWS Class ER 2594  
ASME SFA 5.9  
UNS S32750

**Properties:**

**Tensile Strength:** 123,000 psi  
**Yield Strength:** 94,000 psi  
**Elongation:** 28%

**Description:**

ER 2594 is a stainless steel that was created to weld supermartensitic stainless steels. ER 2594 contains Ni which allows for a good ratio of ferrite/austenite in the finished product. This alloy has high resistance to stress corrosion cracking and pitting corrosion. ER 2594 is a super duplex stainless steel. It can be used to weld other super duplex stainless steels as well as welding low alloy steels to duplex stainless steels. ER 2594 is typically used in the petrochemical industry and in the manufacturing of pollution control equipment.

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

**Chemical Composition (Wt%):**

Si	Mn	Cu	Mo	S	Ni	Cr	P	C	N	W
1.0	2.5	1.5	2.5-4.5	0.02	8.0-10.5	24.0-27	0.03	0.03	0.20-0.30	1.0

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.