

**Specifications:**

AWS A5.9  
 AWS Class ER420  
 ASME SFA 5.9  
 UNS S42080

**Properties:**

**Tensile Strength:** 145,000 psi  
**Yield Strength:** 120,000 psi  
**Elongation:** 45%

**Description:**

ER420 is similar to ER410 except it contains a higher carbon content and a semi higher hardness of weld deposits, which increases wear resistance. ER420 is often used for surfacing applications that require a resistance to corrosion and abrasion. This alloy requires preheat and interpass temperatures no lower than 400°F followed by slow cooling.

Available in multiple sizes and diameters

**Chemical Composition (Wt%)**

Si	Mn	Cu	Mo	S	Ni	Cr	P	C
0.5	0.6	0.75	0.75	0.03	0.6	12.0-14.0	0.03	0.25-0.40

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.