ERAZ92A magnesium welding alloy is a good choice when welding magnesium base metals of similar chemical composition. It produces superior joints with the maximum tensile strengths offered by these alloys. Cleanliness of both the filler metal and base metal is extremely important when welding with magnesium. Flux is NOT required for TIG or MIG welding processes of ERAZ92A magnesium alloy. Although Oxy-acetylene welding of this alloy is uncommon it can be done and should be limited to single-pass welding on thin gauge magnesium materials.

AWS Specification

ANSi/AWS A5.19-92 (R2006) AWS Classification ERAZ92A

Welding Current

GTAW - AC/DCEP GMAW - DCEP

Typical Wire Chemistry

A1 8.3 - 9.7
Be 0.0002 - 0.0008
Mn 0.15 - 0.5
Zn 1.7 - 2.3
Cu 0.05
Fe 0.005
Ni 0.005
Si 0.05
Mg REM
OTHER 0.30

Typical Mechanical Properties

(As Welded) Yield Strength, ksi 14 Tensile Strength, ksi 25 Elongation%, min 2 Brinell Hardness 65 Melting Point °F 1110

Available diameters MIG and suggested Operating Range in Amps

.040" 25 - 50 1/16" 70 - 175 3/32" 115 - 210

Available Diameters TIG and suggested Operating Range in Amps

3/32" 35 - 125 1/8" 160 5/32" 175