

Aluminum & Copper Welding Wire & Electrodes

Alloy: WW5183

Conforms to Certification: AWS A5.10

Class: ER5183

ASME SFA A5.10

Alloy: ER5183

Weld Process: Mig, Tig, Electron bead, Oxyfuel Gas welding

AWS Chemical Composition Requirements

Si = 0.40 max	Cr = 0.05 - 0.25
Fe = 0.40 max	Zn = 0.25 max
Cu = 0.10 max	Ti = 0.15 max
Mn = 0.50 - 1.0	Al = Remainder
Mg = 4.3 - 5.2	Be = 0.0003
Other = 0.05 each - 0.15 max total	

Recommended Operation of Welding Rods

Weld parameters are dependent upon the actual weld process being utilized.

Application

ER5183 can be used on type base materials 5083 and 5456. Not recommended for sustained elevated temperature service. Assure proper storage to avoid contamination.

- The proper choice of aluminum filler metal mainly depends on the base metal properties to be achieved and Welding technique. Post weld cracking, corrosion resistance and behavior under elevated temperature also need to be taken into consideration.

- Cracking usually can be minimized by choosing a filler metal alloy of higher alloy content than the base metal.

Deposited Chemical Composition % (Typical)

Deposited chemistry is influenced by many factors so no typical analysis can be reported.

Deposited All Weld Metal Properties %

As-Welded

Deposited all weld metal properties are influenced by many factors such as weld process used, so no typical weld metal properties can be reported.

Deposited Charpy-V-Notch Impact Properties %

Not applicable

