

Aluminum & Copper Welding Wire & Electrodes

Alloy: WW5554

Conforms to Certification: AWS A5.10

Class: ER5554

ASME SFA A5.10

Alloy: ER5554

Weld Process: Mig, Tig, Electron bead, Oxyfuel gas

AWS Chemical Composition Requirements

Si = 0.25 max	Cr = 0.05 - 0.20
Fe = 0.40 max	Zn = 0.25 max
Cu = 0.10 max	Ti = 0.05 - 0.20 max
Mn = 0.50 – 1.0	Al = Remainder
Mg = 2.4 - 3.0	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

This material can be used to weld base material types 5454 and 5456. All inert gas processes, electron beam and oxyfuel gas welding processes can be used.

- 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 recorded.

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

