# WELDWIRE COMPANY, INC.

# **Technical Information**

## Aluminum Welding Wire & Electrodes

Alloy: WW4043 CTD Conforms to Certification: AWS A5.3

Class: E4043 ASME SFA A5.3

Alloy: E4043 CTD Weld Process: Manual Metal Arc

## **AWS Chemical Composition Requirements**

Si = 4.5 - 6.0 Zn = 0.10 max Fe = 0.80 max Ti = 0.20 max Cu = 0.30 max Be = 0.0008 maxMn = 0.05 max Al = Remainder

Mg = 0.05 max Other = 0.05 each - 0.15 max total

### Deposited Chemical Composition % (Typical)

 $\begin{aligned} \text{Si} &= 5.00 & \text{Cu} &= 0.20 \\ \text{Ti} &= 0.11 & \text{Al} &= \text{Balance} \end{aligned}$ 

#### Recommended Operation of Welding Rods

Weld parameters are dependent on diameter, of weld material and position of welding including base plate thickness.

## **Application**

E4043 CTD is a coated electrode designed for maintenance welding of aluminums and aluminum alloys, such as 5454, 5154, 6052, 6063, 700 series.

- 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 then the base metal.

