

# PRODUCT DATA SHEET

# Aluminum Welding Wire & Electrodes

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

Alloy: 5556 Class: ER5556

Conforms to Certification: AWS A5.10 ASME SFA 5.10

Alloy: DM5556

#### **AWS Chemical Composition Requirements**

$$\begin{split} \text{Si} &= 0.25 \text{ max} & \text{Cr} &= 0.05 \text{ - } 0.20 \\ \text{Fe} &= 0.40 \text{ max} & \text{Zn} &= 0.25 \text{ max} \\ \text{Cu} &= 0.10 \text{ max} & \text{Ti} &= 0.05 \text{ - } 0.20 \text{ max} \\ \text{Mn} &= 0.50 - 1.0 & \text{Al} &= \text{Remainder} \\ \text{Mg} &= 4.7 \text{ - } 5.5 & \text{Be} &= 0.0003 \end{split}$$

Other = 0.05 each - 0.15 max total

#### Deposited Chemical Composition % (Typical)

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

## <u>Deposited All Weld Metal Properties %</u> 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

## 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 5554 and 5556. All inert gas processes, electron beam and oxyfuel gas welding processed 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 then the base metal.