

Appendix F – Bonding Procedures

- Static Electricity Precautions for Batch Mixers / Batch Truck
- Static Electricity Precautions Mix Transfer Systems
- Static Electricity Precautions While Fueling Helitorch with Vapor Recovery Hose Connected to Batch Mixer or Mix Transfer System
- Static Electricity Precautions While Fueling the Helitorch with Vapor Removal Hose (Vapor Hose Not Connected to Batch Mixer or Mix Transfer System)

Static Electricity Precautions for Batch Mixers / Batch Truck

A. Check System Continuity

1. Verify that the hose connecting the suction side of the pump to the tank has continuity.
2. Verify that the hose connecting the discharge side of the pump to the tank has continuity.
3. Verify that the hose from the discharge side of the pump to the hose reel has continuity.
4. Verify that the helitorch fill hose has continuity from the hose reel to the dry break at the opposite end of the hose.
5. Verify vapor recovery/removal hose has continuity between the end fittings.

B. Attaching Vapor Removal/Recovery Hose to Camlok Fitting

1. Bond hose end fitting to tank prior to connecting hose to camlok fitting. Bonding shall be performed before the camlok cap on the tank is removed.

C. Fueling from Bulk Fueler

1. Bond the batch mixer to fuel truck using either electrically conductive hose or a bonding cable.

D. Placing Powder Dispenser on Batch Mixer Tank

1. Powder dispenser shall be made from electrically conductive material. Bond the powder dispenser to tank prior to opening manhole and placing powder dispenser over the manhole opening.

E. Powder Dispensing

1. Use only a metal can or bucket (no plastic) to pour powder into dispenser. Prior to pouring powder into dispenser, bond metal can or bucket to batch mixer.

Static Electricity Precautions for Mix Transfer Systems

A. Setting up the Drums

1. Bond all drums to each other.

B. Check Continuity of Hoses

1. Verify that the suction hose between the pump and the drum has continuity.
2. Verify that the helitorch fill/recirculation hose connecting the discharge side of the pump to the drum or the helitorch has continuity.
3. Verify vapor recovery/removal hose has continuity between the end fittings.

C. Attaching Vapor Removal/Recovery Hose to Camlok Fitting

1. Bond vapor hose end fitting to drum prior to connecting hose to camlok fitting.
2. Bonding shall be performed before the camlok cap on the drum is removed.

D. Fueling from Bulk Fueler

1. Bond batch mixer to fuel truck using either electrically conductive hose or a bonding cable.

E. Placing Powder Dispenser on Mix Transfer System Drum

1. Powder dispenser shall be made from electrically conductive material (not plastic).
2. Bond powder dispenser to drum prior to removing camlok cap and attaching dispenser to camlok on drum.

F. Powder Dispensing

1. Use only a metal can or bucket (no plastic) to pour powder into dispenser.
2. Prior to pouring powder into dispenser, bond metal can or bucket to drum

Fueling the Helitorch with Vapor Recovery Hose Connected to Batch Mixer /Batch Truck or Mix Transfer System

- A. Hose Continuity Checks (These shall have been performed during setup of the batch mixer or mix transfer system.)**
1. Verify continuity of the helitorch fill hose.
 2. Verify continuity of vapor hose.
- B. Hose Installation Sequence during Refueling**
1. Connect helitorch fill hose to fill connection on helitorch drum.
 2. Connect vapor recovery hose to camlok fitting on helitorch drum.

**Fueling the Helitorch with Vapor Removal Hose
(Vapor Hose Not Connected to Batch Mixer / Batch Truck or Mix Transfer
System)**

A. Hose Continuity Checks (These shall have been performed during setup of the batch mixer or mix transfer system.)

1. Verify continuity of the helitorch fill hose.

B. Hose Installation Sequence during Refueling

1. Connect helitorch fill hose to fill connection on helitorch drum.
2. Bond vapor recovery hose to helitorch drum prior to removal of camlok cap or camlok relief valve fitting.
3. Connect vapor recovery hose to camlok fitting on helitorch drum.