

Concrete trucks—Cleaning drums 1

Explain dangers

The mixing drum of a concrete truck must be cleaned regularly because concrete hardens and sticks to the drum.

During cleaning, workers may be exposed to these hazards:

- Start-up of the mixer unexpectedly
- Noise
- Vibration
- Respiratory hazards
- Skin hazards from wet concrete
- Heat stress

Identify controls

- Never enter the mixer drum unless you have followed the company's written procedures for proper lockout and tagging.
- Inspect the inside of the drum for loose concrete that shows cracks, movement, or other signs that it could become loose once inside. Rotate sections of unstable concrete to the lowest position and work on it first.
- Inform everyone who may be affected by the truck that it will be out of service and that workers will be inside.
- Park the concrete truck in a secure location. Apply the emergency brake and remove the ignition key.
- Chock/block the wheels and post an "out of service" sign on each door of the cab.
- Disconnect the truck battery. **NOTE:** This must be done by someone who meets the legal definition of a competent person.
- Apply a lock to the positive terminal of the battery to make sure it cannot be reconnected. Each person who enters the drum should have their own personal lock attached to a hasp.
- Apply a tag to the lock to indicate that it should not be connected.
- Verify that the truck has no energy by attempting to start the ignition.

- Remove the ignition key and lock all doors to the truck. The key should stay with the worker who enters the drum. If multiple keys have been issued for the truck, find a way to prevent access to the cab.
- Even if lockout has been verified, the truck's drum can still rotate due to shifting loads or because of work inside. The drum must be secured manually to prevent movement.
- To secure the drum, attach one end of a tie-down to the top of the lower entry port and extend it over the drum. Attach a second tie-down to the bottom of the port. Connect both tie-downs to the frame of the truck.
- Never enter the drum from the upper charge unless the lower ports have been opened. If the ports are blocked by hardened concrete, use a sledgehammer to remove it.
- Never chip concrete overhead. Rotate the upper portion of the drum to the lowest position and work on it. Repeat the lockout procedures after rotating the drum.
- Wear the following personal protective equipment (PPE):
 - A hard hat that meets CSA Class E standards
 - CSA-approved safety goggles or face shield
 - CSA-certified Grade 1 work boots
 - Double hearing protection (i.e., earplugs and earmuffs together)
 - A NIOSH-approved respirator suitable for the hazards
 - Anti-vibration gloves
 - A light, loose, long-sleeved shirt and long pants

Demonstrate

Identify the competent person who will be responsible for disconnecting the battery. Also identify the helper.

Demonstrate the proper procedure for inserting earplugs and review the manufacturer's instructions.

Show how to perform a negative-pressure and positive-pressure seal check on a respirator. For more info, see IHSA's **Respirators—Fit** safety talk.