

## GROUNDING & BONDING VIDEO

This awareness video outlines the danger of static electricity to frontline workers and how proper grounding and bonding can control this hazard. Review the video at your workplace and discuss how your work activities can produce static electricity, whether you have grounding and bonding safeguards in place, and if they can sufficiently keep you safe.

### DISCUSS THE FOLLOWING QUESTIONS:

**Static Electricity** - Where could static electricity build up in your workplace due to movement of gases, liquids or solids? When did you last experience an electrostatic spark (e.g., touching a door handle after walking on a carpeted floor)?

**Grounding** - How is the equipment you work with grounded? Have you traced the wires to the grounding rod to ensure it is adequate (i.e., the connection is secure and free from rust or paint; the grounding rod is securely in the ground)?

**Bonding** - What connections (e.g., clamps) are you using in your workplace? How do you ensure they are adequate? Have you confirmed the connections are free of rust, dirt or paint to maintain a good connection? Do you have engineered points you are bonding to?

**Electrical Continuity** - Electrical continuity is the presence of a complete path for current flow. Do you test for this before starting work? Does your company have a documented process?

**Best Practices** - Does your equipment have designated bonding points, including signage? Before starting work, do you examine the bonding cables for damage? Does your company use an Ohm meter or engineered system to validate proper grounding and bonding? Do you have a preventative maintenance program for this hazard? Did you notice any best practices missing from the video (e.g., chocked wheels, vent line hose, windsock on tanks)?

**Lessons Learned** - Have you experienced an electrostatic spark in your workplace when two objects touched or came close together? Share any incidents you are aware of and key learnings with the group.

**Life Saving Rules** - Which of the 10 Life Saving Rules apply to grounding and bonding?

**Reflection** - What can you do at your workplace now to confirm your grounding and bonding controls are adequate?

### ADDITIONAL ESC RESOURCES:



Life Saving Rules



Fire and Explosion Hazard Management Guideline



Energy Wheel Awareness Video



Human and Organizational Performance Video