

Tool Box Talk – Grounding Welding Machines

- The use of welding machines and portable generators can be hazardous when they are not properly grounded.
- These machines, which are powered by gasoline or propane, generate a tremendous amount of electricity.
- The amount of current generated is much more than what's necessary to kill a human.
- Electricity always follows the path of least resistance to ground (earth).
- That path can be right through a human body, which can result in death or severe injuries including 3rd degree burns.
- When using welding machines or portable generators, be sure that they are properly grounded before you start the machine.
- Grounding involves running a ground wire from the machine to an appropriate grounded source, such as a grounding rod driven several feet into the ground.
- The ground wire can also be attached from the machine to the main steel structure of a building or a building's established electrical ground system.
- Become familiar with the manufacturer's recommendations for grounding each type of machine that you will use. Follow the manufacturer's recommendations carefully.
- If you're not sure what to do, check with your supervisor before you start work.
- Take the time to learn how to properly ground welding machines and portable generators.

Implementing what you learn before you start the machine will help keep you from becoming electricity's easiest path to ground.