



# Safety Tip of the Week

## Introduction to Arc Flash Safety

Arc Flash is a phenomenon in which a flashover of electric current leaves its intended path and travels through the air from one conductor to another or to ground. This often results in a very violent release of energy. When a person is unfortunate enough to be near this arc flash, very serious injuries will occur and possibly even death.

### Causes of Arc Flash:

Arc flash can be caused by many things, including unintentional contact between an energized conductor (i.e., a bus bar or wire, with another conductor or an earthed surface; equipment failure; using the wrong instruments; live work on damaged equipment such as cables; loose connections and exposed live parts; lack of awareness and training.



### Examples of Processes for Establishing and Verifying Safe Work Conditions Include:

- Determining all possible sources of electrical supply to the specific equipment.
- De-energize electrical equipment, properly interrupting the load current, opening the disconnecting device(s) for each source.
- Wherever possible, visually verify all blades of the disconnecting devices are fully open or that drawout-type circuit breakers are withdrawn to fully disconnected position.
- Release stored electrical energy.
- Release or block stored mechanical energy.
- Apply lockout/tagout devices in accordance with a documented and established procedure.
- Use an adequately rated portable test instrument to test each phase conductor or circuit part to verify it is de-energized.

***ARC FLASH IS DESTRUCTIVE...PROTECTION COMES FROM RECOGNITION!***