

Tool Box Talk – Welding Radiation

- Electric arcs and gas flames from welding and cutting produce ultraviolet and infrared radiation. With repeated exposure, mechanical workers can become overexposed and suffer damage to their eyes and skin.
 - Ultraviolet radiation can cause the equivalent of a sunburn to the surface of the eye. The injury is painful and disabling, but it is usually temporary.
 - Ultraviolet radiation also can cause the equivalent of severe sunburn to exposed skin.
 - Infrared radiation heats exposed skin tissue, but isn't harmful unless it's hot enough to cause a thermal burn.
 - However, infrared radiation can cause permanent eye damage if the welder or others nearby stare directly into the arc without eye protection.
 - Protect your skin by wearing long sleeve shirts and full-length pants made from a flame resistant material (no synthetic fabrics). Be sure that there are no pockets in the shirt or cuffs in the pants.
 - Always use a welding hood with the appropriate shaded lens. You will need a #10, #12, or #14 shaded lens for electric arc welding depending on the size of the electrode and the amount of current being generated.
 - For gas metal arc welding you will need a #11, #12, or #14 shaded lens depending on the amount of current being generated.
 - Check with your supervisor before you start to weld to ensure that you have the appropriate shaded lens.
 - Be sure to wear a pair of safety glasses or safety goggles under your welding hood.
 - Never look at a welding arc, even for an instant, without proper eye protection.
- Use welding screens around your welding area to protect others who may look at the arc without protection.