

Tool Box Talk – Shaded Lenses

- Shaded lenses are vital to welders because they filter out harmful ultraviolet and infrared radiation as well as visible glare.
- Shaded lenses are provided for welding helmets and certain types of safety goggles.
- Choosing the appropriate shade of lens or lenses is as important as choosing the right type of safety eyewear.
- Failure to use the appropriate lenses can result in inflammation of the cornea (welder's flash) or damage to the eyes' lenses and/or retinas.
- The American National Standards Institute (ANSI) has established a numbering system to help us identify the different shades of lenses and select the shade that is most appropriate for each specific task.
 - For torch soldering, use safety goggles with #2 shaded lenses.
 - For torch brazing, use safety goggles with #3 or #4 shaded lenses.
 - For cutting with oxy-acetylene, use safety goggles with #5 shaded lenses.
 - For electric arc welding, the shade of lens you need to attach to your welding helmet depends on the size of the electrode and the amount of electrical current being generated. Check with your supervisor to find out whether you need a #10, #12, or #14 shaded lens for each specific electric arc welding application.
 - For gas metal arc welding, the shade of the lens you will need to attach to your welding helmet depends only on the amount of arc current being generated. Check with your supervisor to find out whether you need a #11, #12, or #14 shaded lens for each specific gas metal arc welding application.