A Safety Tip from the Firing Line
Safety glasses aren’t enough (even if they’re shaded)

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Working on a pipeline project during the construction phase requires constant vigilance. Employees are surrounded by safety hazards ranging from open ditches and overhead powerline contacts to being aware of the movement of heavy equipment on the line. There are crush hazards, trip hazards, fall hazards and even venomous snake hazards just to name a few. The requirement for personal protective equipment (PPE) and daily safety reminders is not only practical it is lifesaving.

A commonly overlooked component on both sides of the operation is the hazard associated with staring at a welding arc. Welders wear visual protection (built into their helmets) designed to protect their eyes from damage that can be caused by even momentary exposure to the intense light generated by a welding arc. Polarized lenses on their helmets protect them from both UV and IR light impacts while allowing them to stare into the arc to complete a successful weld. What is often missing is from the safety equation is the welder’s screen.

The crackle of the welder and the bright arc generated is a natural attraction for spectators. We are drawn to it like a moth to the flame. That attraction is the problem. Staring at a welder’s arc, even from a good distance away and even with your shaded safety glasses can cause eye damage. Like staring at the sun during an eclipse, staring at a welder’s arc can cause the cornea in the eye to become inflamed. The condition, sometimes called “arc eye” is painful and can require days to recover. Even worse, you won’t know you have the condition until sometime later when you notice an irritation which feels like you have sand in your eyes. You can’t flush it out and only time will heal the damage. Prolonged exposure can result in permanent, irreparable damage to both the cornea and retina of the eye.

Welders are required by OSHA standards to screen welding operations to protect onlookers from this hazard but there is often no screening provided. In this case knowledge is your best PPE. Don’t stare at a welder’s arc. Turn away to avoid eye damage. On most projects, every employee is a safety officer. Notify your chief inspector when you see unsafe operations or safety shortcuts. Safety is everyone’s responsibility!

Standard 29 CFR 1910.252(e)(2)(iii) states: Protection from arc welding rays. ... Workers or other persons adjacent to the welding areas shall be protected from the rays by noncombustible or flameproof screens or shield or shall be required to wear appropriate goggles.