By the Numbers – Hot Work



DID YOU KNOW?

Industrial Safety & Hygiene News, using figures from OSHA studies, reports that 1 in 250 construction workers will die from a welding injury. With over half a million American welders working today, we can conservatively expect 2,000 welding fatalities in our lifetime. That's not even mentioning the many more permanent injuries that welders will incur.

- From 2001-2018, five firefighters were fatally injured in four unintentional fires started by torches.

The U.S. Chemical Safety and Hazard Investigation Board (CSB) has found that hot work is one of the most common causes of worker deaths among incidents investigated by the agency. The CSB continues to see hot work incidents and has found a significant subset of occurrences—those involving piping, tanks, or containers where flammables are present—to be particularly dangerous. In addition, the CSB repeatedly observes hot work incidents involving tanks or containers at high-hazard facilities such as refineries and chemical plants that typically result in injuries and fatalities and have the potential to result in major catastrophic accidents.

Since 2001, the CSB has deployed to and investigated 14 hot work–related incidents that have resulted in 25 fatalities and 21 injuries to employees and members of the public. The CSB continues to monitor hot work incidents where continuous monitoring could have alerted workers to the changing conditions in areas where hot work activity was conducted.

Between 2010 and 2013, the CSB reviewed 187 hot work incidents, 85 of which resulted in a fire or explosion while hot work was being conducted on or near a tank or container. These incidents resulted in 48 fatalities and 104 significant injuries. Twenty-three percent of injuries and 42 percent of fatalities involved contractor workers.

The CSB continues to see catastrophic incidents involving hot work on tanks and containers containing flammable vapors. Past investigations into these incidents demonstrate a…