



Fabrication & Welding Shops

A list of best practices for loss prevention to help Ohio Mutual agent partners and members identify the most common hazards that Welders and Fabricators face every day.

Best Practices

FM Global Data Sheets recommend a thirty-five foot “welding” circle observing the following rules:



1. Construction in that area needs to be noncombustible, including any insulation.
2. Remove combustible materials from that circle or use FM-listed fire blankets.
3. Sweep floors and if floors are combustible, wet them before welding or cutting commences.
4. Remove any ignitable liquids, dusts or vapors before considering welding operations.
5. Observe a four hour fire watch after welding or cutting is completed, or discontinue those operations at least an hour before the close of business.

- Ensure that appropriate fire suppression systems and portable private protection devices (fire extinguishers, etc.) are operational.



- Train employees regarding all hazards associated with welding/cutting, including the exposures associated with the metal substrates being worked on and the harmful fumes they generate. Make sure appropriate ventilation and exhaust is provided, including downdraft tables, exhaust hoods, etc.



- The use of welding curtains are recommended.

Develop a pre-job inspection checklist before commencing welding, cutting or brazing operations, or use the attached checklist.



- Single compressed gas cylinders need to be secured with a chain or cable to a stable surface (wall, column) (See image 4), while full empty cylinders need to be segregated; flammable gases and oxidizers require separation (oxygen cylinders should be stored twenty feet or more from fuel gas cylinders or separated by a noncombustible barrier at least five feet high with a one-half hour fire resistance rating).

Reference OSHA standards 29 CFR 1910.252 General Requirements for all Welding; 29 CFR 1910.253 Oxygen-fuel gas Welding and Cutting; 29 CFR 1910.254 Arc Welding and Cutting & 29 CFR 1910.255 Resistance Welding for further information.

