

OSHA Training Toolbox Talk: Cutting, Welding, & Compressed Gas Safety – Cylinder Storage

[Reference: 1910.253 / 1926.350]

Here are a few tips to ensure safe storage of compressed gas cylinders. Keep in mind that most of these rules apply even if the cylinder is empty:

- Compressed gas cylinders should only be stored in designated areas that are dry, well ventilated, and located away from moving vehicles and equipment, as well as away from high traffic areas such as elevators, stairs, or gangways.
- Cylinders must always be stored in an upright position; this is especially critical for acetylene cylinders as the liquid inside the cylinder can degrade the cylinder seal.
- Cylinders in storage must always be secured to prevent their being knocked over, or falling over due to a gust of wind or other external forces.
- Compressed gas cylinders shall have their valve protection caps in place and secured at all times when not in use, and their valves must be closed when not in use.
- Oxygen cylinders must be stored at least 20 feet away from acetylene gas cylinders and other flammable gases or materials such as oil or excelsior. Oxygen cylinders could rupture when exposed to high heat if these items were to burn, and add fuel to the fire. In the alternative, oxygen cylinders can be stored separated from such flammables by a noncombustible barrier at least 5 feet high having a fire-resistance rating of at least one-half hour. Dry grass and other materials shall be removed from the storage area.
- Gas cylinders should not be stored or taken inside of tanks or similar confined or enclosed spaces, as their contents could create a hazardous atmosphere if they were to leak.
- Cylinders shall be positioned far enough away from the actual welding or cutting operation so that sparks, hot slag, or flame will not reach them, or in the alternative, fire-resistant shields shall be provided.
- Cylinders shall not be placed where they might become part of an electric circuit. Contact with third rails, trolley wires, etc., shall be avoided.
- Adhere to all warnings and instructions on signs posted near gas cylinder storage areas.

By adhering to these simple precautions when storing compressed gas cylinders, we can help prevent accidents with the potential for devastating fires and explosions that could lead to catastrophic injuries and death.

Are there any other ideas for increasing safety at gas cylinder storage areas? Thank you for participating in this toolbox talk. Please be sure to sign the training certification form to get credit for attending today's training session.

