



ENVIRONMENTAL HEALTH AND SAFETY

Handling and Storage of Cylinders

- Verify that cylinder contents are identified on the tag found in the cylinder valve.
- Store cylinders away from exits, stairways, elevators and other high traffic areas.
- Secure empty and full cylinders to prevent knocking them over.
- Keep cylinder capped when not in use.
- Refer to safety data sheet for hazards associated with each specific gas.
- Consider detectors with remote or local alarms for areas where toxic gases will be used.
- Perform leak tests of compressed gas systems prior to full operation.
- Take an inventory and reduce quantities of cylinders to the necessary quantities.
- Do not handle cylinders with oily gloves or hands. This is particularly important with oxygen and other oxidizers.
- Cylinders should only be moved with a hand truck specifically designed for transporting cylinders.
- Keep empty cylinders separate from full gas cylinders.
- Clearly mark empty cylinders with the letters "MT" to reduce the likelihood of connecting an empty cylinder to a pressurized system, which will result with a flow of foreign material into the cylinder.
- Flammable gas cylinders should always be stored at least 20 feet away from oxygen and other oxidizers or separated by an approved fire barrier. This does not apply to individual welding carts.
- Record the date cylinders are received and use the oldest stock first.

SPECIAL SITUATIONS

- Hydrogen has a wide flammable range and presents an extreme fire hazard. Consult with Environmental Health and Safety when planning work using hydrogen gas.
- Under certain conditions, acetylene forms readily explosive compounds with the following metals: copper, silver, or mercury and their salts.
- Always use acetylene with an appropriate regulator set at 15 psig or less. Above 15 psig, acetylene is extremely sensitive to physical shock and may detonate.