

## MAFES Dawg Tracks



Safety Tips: Handling Pressurized Gas Cylinders



Common sense is always a good trait to have in most any situation. Handling pressurized gas cylinders are no different. However, there is more to handling pressurized gas cylinders that just old fashioned "common horse sense."

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Special care must be taken in protecting the cylinders, protecting the property around the cylinders and protecting the people around them.

## As an example:

- If a neck of a pressurized cylinder should be accidently broken off, the energy released would be sufficient to propel the cylinder to over 3/4<sup>ths</sup> of a mile in height.
- A standard 250 cubic foot cylinder pressurized to 2,500 PSIG can become a rocket attaining a speed of 34 miles per hour in 1/10<sup>th</sup> of a seconder venting from the broken cylinder connection.

Following are some practice that should be practiced when you're working with pressurized cylinders:

## STORAGE-

- Secure empty and full cylinders to a wall or vertical support by using chains, belts, etc. in an upright position.
- Keep valve protective caps in place when the cylinder is not in use.
- Mark empty cylinders with "EMPTY" or "MT."
- Keep valves closed on empty containers.
- Keep empty and full containers segregated.
- Keep oxygen cylinders a minimum of 20 feet from flammable gases or combustible materials. If this isn't possible, separate them with a 5 foot high non-combustible barrier having a fire-rating of at least 30 minutes.
- The storage areas should be well ventilated.

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- Leaking cylinders should be taken outdoors away from sources of ignition. These leaking cylinders should be tagged plainly, and the supplier notified immediately.
- The pressurized cylinders should be kept away from heat sources.
- Cylinders should be kept away from electrical wiring where they may become part of the circuit.
- Leaking cylinders should be taken outdoors away from ignition sources. These cylinders should be tagged plainly, and the supplier notified immediately.
- Cylinders shall be kept away from heat sources.
- Cylinders should be kept away from electrical wiring where they become a part of the circuit.

## TRANSPORTING-

- ✓ Use a cylinder cart with a restraining chain to move cylinders.
- ✓ Don't use slings or magnets.
- ✓ Don't use cylinders as rollers for moving material or equipment.
- ✓ Don't use the valve protective caps for moving or lifting.
- ✓ Don't drop a cylinder or permit them to strike each other violently or handled roughly.
- ✓ Don't use bars to pry cylinders loose when they are frozen to the ground.
- ✓ A good practice is that employees have good foot protection when engaged in moving or transporting cylinders (steel-toe boots or shoes.)
- ✓ Unless cylinders are secured on a special truck, regulators shall be removed, valves closed, and valve protective covers in place before cylinders are moved.

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