

### Moving Cylinders and Containers

Cylinders and containers must always be moved carefully. Mishandling that results in a damaged valve or ruptured cylinder can expose personnel to the hazards associated with these gases.

In addition, most gas cylinders are heavy and bulky. A cylinder striking someone or pinching a finger, toe, or other extremity is a common cause of injury. For these reasons, all cylinder handlers must always wear certain minimum personal protective equipment prescribed by OSHA:

- Gloves to protect the hands against common pinching injuries.

- Safety glasses to protect the eyes against injuries associated with pressure release.
- Safety shoes with metatarsal supports to protect against foot injuries from falling cylinders.

Before moving a cylinder to the storage area or point of use or before returning the cylinder to the supplier, ensure the following:

- The outlet valve is fully closed.
- The outlet valve dust plug or pressure cap is on tight for cylinders equipped with these protection devices.
- The valve protection cap is properly secured in place on cylinders with neck threads.

**Note:** Valve caps must always be in place while moving or transporting cylinders or when they are in storage.

While moving full or empty cylinders:

- Always use carts or hand trucks designed for this purpose.
- Never drop cylinders or allow them to strike each other violently.
- Never lift cylinders by the cap or with a lifting magnet.

After moving a cylinder to its point of use, secure the cylinder in place. Use cylinder stands, clamps, or other securing devices recommended by your supplier.

### Storing Cylinders and Containers

Storage of compressed gas cylinders and cryogenic liquid containers is governed by codes of the National Fire Protection Association (NFPA). Local codes may also apply. Know and obey codes governing storage at your location.

#### Safe Practices

In general, store cylinders so they can't be easily toppled over. Remember, danger exists not only from accidental release of gas by cylinders damaged in a fall but also from their striking someone and causing injury. Store cylinders upright in compact groups, interlocking them so that each cylinder physically contacts those around it. Do not stand cylinders loosely or in a haphazard manner. A single cylinder that topples

over can create a domino effect causing other cylinders to fall. Single cylinders should be secured in place or on a cylinder cart so they can't be readily knocked over.

Keep stored cylinders out of high traffic areas. Do not store them near the edges of platforms. Avoid storage in areas where there are activities that could damage or contaminate the cylinders. Electric arc welding can destroy the integrity of cylinder metal if a welder carelessly strikes an arc on a cylinder. Overhead hoists can drip oil or grease on cylinders, contaminating them. Never store cylinders with flammable materials.

Refer to Section F for our full line of safety apparatus and gas detection systems.

