

**Toolbox Talk Details**

Title	C07 - Compressed gases
Reason	Compressed gases, if used safely, are a convenient and useful source of energy. If you know how to use them safely you can prevent serious accidents and injury.
Outline	This talk covers the hazards, use, storage and transportation of compressed gases.

**Hazards**

1. Treat every cylinder as being full and handle it carefully.
2. Keep cylinders away from sun, artificial heat, flammable materials, corrosive chemicals and fumes.
3. Avoid damage to valves and fittings. Do not pick cylinders up using the valves or fittings as handholds.
4. When using mixed gases (such as in welding activities), flashback arrestors must be fitted.
5. Do not smoke when using compressed gases.
6. Do not use cylinders as rollers for moving equipment.
7. If there is a fire on site and gas cylinders are in the area, inform the emergency services so that they can react accordingly and evacuate the area.

**Safe use**

1. Regular inspection of hoses, cylinders and valves should be undertaken before use.
2. Open cylinder valves slowly and close sufficiently to shut off gas – never use force.
3. Keep valves and fittings of oxygen cylinders free from oil and grease, as this can create an explosive atmosphere.
4. Ensure that gloves (if worn) are free from oil and grease.
5. Keep gas hoses clear of traffic and sharp surfaces to prevent them being damaged.
6. Know what to do in an emergency.
7. Ensure a fire extinguisher is always available for hot work but only try to fight small fires (no bigger than a wastepaper bin).
8. If there is a hot-work permit or procedure, follow it.

## Storage and transportation

1. Always secure acetylene cylinders in an upright position.
2. Store all cylinders so that they cannot fall or roll (such as in a secure, lockable cage with a flat surface).
3. Always lift cylinders from trucks – do not drop or slide them.
4. Move full-sized cylinders using a trolley. If one is not available, get assistance.
5. Transport cylinders in vehicles with secure storage and good ventilation.
6. Do not store liquefied petroleum gas (LPG) cylinders in basements. LPG is heavier than air and will sink to the lowest point available.

Revision Date	Assessed By	Signature
January 2021	Michael Reddan	