Compressed gas cylinders contain gases varying from flammable (acetylene) to inert (helium) under high pressure. Cylinders are available in a wide range of colors that often, but not always, identify material(s) within. Compressed gas cylinders must meet DOT requirements and be properly labeled to avoid potential mistakes. Gas cylinders are made of steel, aluminum or fiberglass. The contents determine the material because the potential for corrosion and reactivity exists; especially if the cylinder is used to store a gas for a significant length of time. When using gas cylinders, make sure the gas inside is known, and proper safety protocols are followed – use the material safety data sheet (MSDS) for the stored material and follow specific regulations for flammables such as oxygen, acetylene, corrosives, etc. in addition to general safety procedures. Do not open cylinders when the contents are not known.

Great care and specific precautions must be used when storing, handling, and/or using compressed gas cylinders to keep hazards to a minimum. The uncontrolled release of a compressed gas can result in serious consequences due to toxicity, flammability, or high-pressure. The cylinder can launch like a missile, destroying everything in its path and have been known to penetrate concrete-block walls.

Other important safety considerations when storing gas cylinders include keeping them secured upright in well-ventilated areas away from heat sources, and making sure that all cylinders are clearly labeled with secured, undamaged valves.

Moving or transporting cylinders, whether for a short distance, or cross-country, provides its own set of precautions. Any movement must be planned and executed carefully. Dropping a cylinder can result in damage to the cylinder, retaining rings or release valves, or catastrophic incidents such as uncontrolled release of its contents or an explosion. During transport, gas cylinders should be kept out of direct sunlight and protected from adverse weather conditions such as rain or snow.

Some compressed gases that are used at OFD:

- **LP Gas (Propane)** for industrial lift trucks and portable heating,
- **Oxygen** and **Acetylene** for welding & cutting,
- **Nitrogen** & **Helium** for the freeze-dry process.

Compressed Gas Cylinders may be transported when:

1. The cylinder has been inspected and is leak-free;
2. The cylinder is outside of the drivers compartment;
3. The cylinder is adequately fastened in an upright position to minimize movement, tipping or physical damage;
4. There is no ignition source or smoking within 50 feet of the Cylinder;
5. The cylinder is not exposed to extreme heat;
6. Less than 25 Cylinders or 1000 lbs. of gases are transported at one time.