

COMPRESSED AIR SAFETY

Compressed air is put under pressure in order to do work. Compressed air can be used for powering pneumatic tools, transferring nonflammable liquids and under strict controlled conditions can be used for cleaning machinery and equipment.

HOW CAN COMPRESSED AIR HARM YOU?

Compressed air used for cleaning can drive chips and scale into your face and eyes with the force of shrapnel. Compressed air directed against the skin can cause internal hemorrhage and intense pain. Air directed at body openings can burst internal organs, rupture eardrums, or blow an eye from its socket. Certainly, no one would intentionally cause such injuries. Yet, every so often someone does, either accidentally or through horseplay.

HOW CAN YOU WORK SAFETY WITH COMPRESSED AIR?

Before grabbing an air hose and going into action, there are a number of safety guidelines that should be followed. First, be sure that's it's an air line you have, not gas or water. Fittings and valves look different, but sometimes hose lines cross and you could be fooled. Next, check to be sure the air hose is in good condition. The air hose is designed to withstand pressure, but it becomes weakened at the places where it's bent, attached to shut off valves or nozzles and wherever it has been kinked. Weak points may swell like a balloon and burst, throwing pieces of hose in every direction. This may also cause the host to thrash about dangerously striking and injuring anyone unlucky enough to be in the harms way.

The following precautions will help prevent damage to air hose and injury to you and your fellow employees:

- Keep the air hose off the floor where it is a trip hazard and subject to damage by trucks, doors, and dropped tools.
- Prevent sharp objects from rubbing against the hose.
- Always coil the hose and hang it over a broad support, not over a hook, nail or angle iron, when not in use. It should always be hung up when not in use. Retractable (spring loaded) reels should be installed when administrative controls are not successful in keeping air hoses off the floor.

HOW CAN I USE COMPRESSED AIR FOR CLEANING?

The OSHA regulations permit the use of compressed air for cleaning machinery and equipment under certain conditions. Never use compressed air for cleaning purposes unless the nozzle has a 30 PSI restriction valve and is dead ended to allow air to escape in the nozzle contacts your skin. Even at 30 PSI the nozzle of a compressed air hose can be dangerous. Pointing a compressed air nozzle at someone or using compressed air to clean yourself off is strictly prohibited. Cleaning machinery and equipment with compressed air should be done only when safety procedures are set up for trained employees using the proper equipment. Safe practices must include the use of 30 PSI restriction valves, chip guarding, personal protective equipment and protection of passersby from being struck by dust or particles through shields or barriers. Safety nozzles used to restrict or reduce air pressure to 30 PSI can be purchased through most industrial equipment suppliers.

SUMMARY

Compressed air is a useful tool if it's treated with respect and in a safe manner. If it's treated as a toy or without proper precautions, compressed air can injure or even kill.