

Compressed air is defined as air stored at greater pressure than the surrounding atmosphere. Air can be distributed through either the use of compressors or a building integrated system and can be used to power pneumatic tools such as nail guns, paint sprayers, impact wrenches, machinery, etc. Compressed air, if not used properly, can cause injury.

Potential Hazards from Improper Use

- Flying particles, chips, and debris can cause eye injury.
- High noise levels that can cause hearing loss.
- Loose, damaged, or clogged hoses, can detach and whip or strike operators or anyone close by.
- High pressure air can penetrate skin (even through clothing) and enter the bloodstream that can potentially cause embolisms.



Accident Prevention – Do's

When working with compressed air, follow these precautions:

- Wear proper PPE (eye, face, hearing, gloves, etc.) per manufacturers' guidelines.
- Examine connections to ensure they are secured and will not detach under pressure.
- Clear dirt and debris from hose openings, connections, and compressor output fittings before connections are made.
- Regularly inspect pneumatic tools and hoses for damage, excessive wear, or loose/damaged fittings.
- Regularly inspect and maintain air compressors per manufacturers' guidelines.
- Immediately remove any equipment that are damaged, worn, frayed, have bad connections, or show any other signs of failure outlined by manufacturers' guidelines.
- Keep aisles, exits, and paths of egress clear of hoses. They present trip hazards and can be damaged by foot/equipment traffic.
- Ensure all air compressor guards and shields are in place and in good working condition before use.
- Ensure air gun safety tips are OSHA compliant. If air hoses are dead-ended (i.e., tip is blocked), the pressure at the point of the blockage must not exceed 30 psi.



Accident Prevention – Don'ts

- **Never** horseplay with compressed air.
- **Never** use compressed air to clean/remove dust or debris from yourself or others.
- When cleaning surfaces and equipment with compressed air, the pressure must be 30 psi or below, the air gun must have safety tips, and chip guards and proper PPE **must** be used. Always consider an alternate method of cleaning if possible.
- Never purposefully kink hoses or block pneumatic tools to stop airflow; always turn air off at the control valve.
- Never interfere with, modify, or tamper with any safety devices.
- Never leave pneumatic tools or air guns unattended while still pressurized. Turn off and detach them before walking away.
- Never use homemade air nozzles or connections.
- The air compressor's motor oil should be checked before each use and should be drained and replaced per manufacturer guidelines.

