Air Under Pressure is Hazardous



Tools using compressed air can be worth their weight in gold. Handled properly, they save a lot of sweating, grunting and possibly swearing. Misused, however, they have been the cause of many injuries and deaths.

For example, a number of careless errors led to the tragic death of a supply boat crewman (at a remote worksite) who was hit in the head by an inadequately secured hose. After the hose had been used to transfer chemicals, a sudden release of compressed air shot it onto the boat deck, with fatal results.

Other contributing factors included the vent valves in the engine room being opened in the wrong sequence. That error led to the uncontrolled pressure release. The crewman, too, had reportedly ignored a warning to clear the area while the venting was taking place.

Though it may be hard to imagine, compressed air has also killed workers who simply used it to blow dust off their clothes, or to startle a co-worker as a prank. Death can easily occur when air is shot into the bloodstream through broken skin or a body opening, resulting in an air bubble blocking a blood vessel.

Other materials under high pressure, such as steam, water, paint, grease or chemicals, may cause terrible injuries if they penetrate the skin. Boots, gloves and coveralls often do not provide much protection against the damage that can be caused by a moment of inattention.
Excessive air pressure can also cause a pressurized vessel to burst, something that has already resulted in a number of fatalities.

To stay safe when using compressed air, make sure you:

- have received appropriate training for the task at hand.
- check that air lines and equipment are connected properly and are fully operational before starting to use them.
- repair any leaks in air lines or joints promptly.
- keep hoses, nozzles and associated equipment in good operating condition.
- use only the amount of pressure required for the job.
- never direct compressed air at yourself or others.
- always disconnect a tool from the compressed air before making adjustments or changing attachments.

When you have finished using a tool, always turn off the air supply and bleed off the trap line pressure. Return it to its proper place, and ensure that all equipment is being maintained regularly by qualified personnel.

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