Compressed Air is Dangerous

You’re struggling to loosen over-tightened lug nuts while fixing a flat tire on a hot, dusty highway. At this moment, you would give anything to hear the high-pitched zing of an air wrench doing the job in seconds at the local tire shop.

But like practically anything else, compressed air can be misused, with painful and sometimes fatal results.

Take the case of a supply boat crewman who was fatally struck on the head by a flexible hose that shot onto the boat deck, propelled by a sudden release of compressed air. The accident happened following the transfer of bulk drilling chemicals. Not only had the hose been inadequately secured to prevent it from moving around, but the vent valves in the engine room had been opened in the wrong sequence, leading to the uncontrolled release of pressure.

Also contributing to the fatality was the fact that the crewman had reportedly ignored a warning to clear the area while venting was occurring.

Compressed air has also killed workers who have used it to blow dust from their clothing. Startling coworkers with compressed air in horseplay incidents has proved fatal. Death can easily occur when compressed air enters the bloodstream through broken skin or a body opening, causing an air bubble to block a blood vessel.

Workers have also been killed by excessive air pressure that causes pressurized containers to burst.

To prevent incidents such as those mentioned here, it’s important to check that air lines and equipment are connected properly and are fully operational before starting to use them.

Any leaks in air lines or joints should be repaired without delay and all hoses, nozzles and associated equipment must be kept in good operating condition.

No one should be using compressed air and air tools unless they have received appropriate training.

Here are four safety tips to remember about compressed air:

- Never use any more pressure than you need to perform a job.
- Never direct compressed air at yourself or any other worker, for any reason.
- Always disconnect a tool from compressed air when making adjustments or changing attachments.
- After you have finished using a tool, always turn off the air supply and bleed off the trap line pressure. Return the tool to its proper place.

Regular maintenance of compressors, receiving tanks, pipeline and valves by qualified personnel is very important for your safety.