

OSHA Training Toolbox Talk: Controlling Hazards Associated with Compressed Air Hoses

[Reference 1910.242 / 1926.302]

Many tools we use that are powered by compressed air can be hazardous if we don't utilize them properly. But most of us never give a second thought to the potential hazards associated with the hose that supplies the compressed air to those tools! So this toolbox talk delves into avoiding some of the hazards present when we work with compressed air hoses.

- Only use hoses that are designed and rated for transporting compressed air when connecting to air compressors or supply pipes. A hose or tubing that is not meant for use with high-pressure compressed air (such as a plastic water hose) can easily burst or break in two, causing one end of the hose or tube to whip around and strike you or a co-worker.
- It is also of utmost importance that the clamps and similar fittings we use to connect compressed air hoses to couplers, valves, and other devices are of the proper type and size. A common mistake found at many job sites is the use of water hose clamps to connect couplers on compressed air hoses (*refer to photos on handout accompanying this toolbox talk*). Water hose clamps can cut into the hose and cause it to break. Also, they are not rated for the higher pressures associated with compressed air hoses, and can break or come loose much easier than the clamps rated for use on air hoses. In other cases, we see the proper type of clamp used, but it is not of the size designed for the size of hose in use. So always make sure to use the proper size clamp, as one that is too big can come loose easily, while one that is too small can cause the hose to crack and break.
- When using a “crows-foot” style hose coupler, make sure you always install the proper type of retaining pin to lock both pieces of the coupler together (see handout). Failure to do so will allow the couplers to rotate and come loose.
- Inspect your compressed air hoses before use to make sure there are no cuts or abrasions that could cause the hose to break or come apart. Also look for loose clamps, malfunctioning couplers, and any other problems that could cause the hose to break or separate.
- If your compressed air hose is greater than one-half inch inside diameter, the compressor or supply branch line to which the hose is attached to must be equipped with a safety device that drops the air pressure in the event the hose breaks or otherwise separates.

Does anybody have a question or comment about avoiding some of the hazards associated with using a compressed air hose? Please be sure to sign your name to the training certification form so you get credit for attending today's training session.

Compressed Air Hose Safety



**Water Hose Clamps Used on Compressed Air Hose
NOT Approved for Use**



**Crimping Type Compressed Air Clamps
Approved for Use**



Compressed Air Hose with Crows-foot Connectors (see retainer pin)

