

OSHA Training Toolbox Talk:

Controlling Hazards Associated with Compressed Air Blowers

Using a compressed air blower to clean off parts and work surfaces presents potential hazards that can do serious harm to the user, as well as to other people working in close proximity. Flying chips, dust, and particles can be sent flying through the air at a high rate of speed and strike someone, causing cuts and abrasions to their skin or an eye. And if a compressed air blower is activated when placed directly against or near the skin or other body parts of a person, the high-pressure stream of air can actually pierce the person's skin, inject air or chemicals into their bloodstream, rupture an eardrum, or permanently damage an eyeball!

It is for these reasons that you should never use compressed air to blow off your clothing or skin. Nor should you ever fall to the temptation to engage in horseplay or experimentation by "shooting" yourself or another person with a blast of compressed air; the chances of a serious injury are just too high.

One way to protect others working nearby from flying particles is to place a barrier or shield between your work area and the other person so it can block or deflect the flying particles. Of course, both the operator as well as other people exposed to flying particles should also be provided with, and use, appropriate personal protective equipment, such as safety glasses, face- shields, gloves, and other PPE that may be needed for their exposures.

Furthermore, OSHA requires that compressed air used for cleaning purposes be reduced to no more than 30 psi "static" pressure. That does not mean we have to reduce the pressure to less than 30 psi with a regulator to be in compliance with this rule (although you could). We can also use high-pressure compressed air blowers that are equipped with "safety tips" (reference the examples on handout accompanying this toolbox talk). You can still blow compressed air at high velocities with these blowers, but if the tip of the nozzle is accidentally dead-ended against your skin or another object, the air is diverted through the relief ports on the sides or back of the nozzle tip. Of course, this safety feature will be rendered useless if you remove the safety tip or make any alterations that could affect its performance, such as soldering on an extension.

So in review, when using a compressed air blower, always wear appropriate PPE, only use compressed air blowers equipped with safety tips or similar safety features that reduce pressure to no more than 30 psi when dead-ended, and, install barriers or shields where needed to protect others working nearby. And never, under any circumstances, use compressed air to blow off your clothing, skin, or other body parts.

