



# Weekly Safety Meeting

Your Safety Is Our Business®

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## Working with an Air Compressor

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Compressed air is present across just about every industry. Companies use compressed air for many functions, from running huge equipment to powering simple air tools. Compressed air is a valuable utility and is a safe power source when used properly. As with any other energy-carrying power source, compressed air should be regarded with caution and handled with care to avoid accidents and user injury.

There are two main external safety features associated with a pressure vessel. These are the pressure cut out switch and the pressure relief valve. The pressure cut off switch is a pressure sensitive device. When the pressure drops below a pre-set level, it closes and the compressor starts. When the pressure reaches a pre-set upper limit, the switch opens and the pump stops. It is simple to check this switch. Watch the pressure gauge on the tank. The pump should shut off before or at the working pressure or the pressure shown on the Permit to Operate. If it does, fine. If not, tell your supervisor.

Compressed air mishaps usually involve abuse, misuse, or inattention to hoses or nozzles. Lack of attention to safety or not knowing the proper procedures when handling compressed air have led to many accidents and deaths. Compressed air can strike you blind, deaf, or dead at very low pressures. These may sound like harsh words, but they are not. Compressed air is something we use in so many different ways, almost without thinking. We have to remind ourselves to handle this power source with care and attention.

### General safety requirements for compressed air:

- All pipes, hoses, and fittings must have a rating of the maximum pressure of the compressor. Compressed air pipelines should be identified (psi) as to maximum working pressure.
- Air supply shutoff valves should be located (as near as possible) at the point-of-operation.
- Air hoses should be kept free of grease and oil to reduce the possibility of deterioration.
- Hoses should not be strung across floors or aisles where they are liable to cause personnel to trip and fall. When possible, air supply hoses should be suspended overhead, or otherwise located to afford efficient access and protection against damage.
- Hose ends must be secured to prevent whipping if an accidental cut or break occurs.
- Pneumatic impact tools, such as riveting guns, should never be pointed at a person.
- Before a pneumatic tool is disconnected (unless it has quick disconnect plugs), the air supply must be turned off at the control valve and the tool bled.
- Compressed air must not be used under any circumstances to clean dirt and dust from clothing or off a person's skin. Shop air used for cleaning should be regulated to 15 psi unless equipped with diffuser nozzles to provide lesser pressure.
- Goggles, face shields, or other eye protection must be worn by personnel using compressed air for cleaning equipment.



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- Static electricity can be generated through the use of pneumatic tools. This type of equipment must be grounded or bonded if it is used where fuel, flammable vapors, or explosive atmospheres are present.

## Air Compressor Operation:

- Only authorized and trained personnel should operate air compressor equipment.
- The air intake should be from a clean, outside, fresh air source. Screens or filters can be used to clean the air.
- Air compressors should **NEVER** be operated at speeds faster than the manufacturer's recommendation.
- Equipment should not become overheated.
- Moving parts, such as compressor flywheels, pulleys, and belts that could be hazardous, should be effectively guarded.

## Remember:

Compressed air is useful in the workplace. It is also extremely dangerous. Be aware of the dangers. Know that compressed air can kill you or others if not handled properly.

**Follow the procedures...keep safety in mind!!**

