



High Pressure Air

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TOPIC: High Pressure Air

General Information

There are several safety concerns related to using high-pressure air without adequate safety controls and/or precautions, severe accidents can occur. Foreign objects in the eye and lacerations due to whipping hoses are common air pressure related concerns. High-pressure air can also produce sustained high noise levels, which may require proper hearing protection to be worn. A less common hazard may occur when air is injected into an open wound or sore, which could cause an air embolism and obstruct blood flow to the heart. This condition could be fatal in extreme cases.

Observe these safety tips while working with high-pressure air:

1. Wear the proper PPE. Eye protection should always be worn because there is a risk that particles or debris can be blown into the eye. Hearing protection is also used if there is a consistent hissing or whistling of air leaks.
2. Use regulated air wands (commonly known as air guns). The Occupational Safety and Health Administration requires air wands to release no more than 30 pounds per square inch. Compressed air should not be used to blow dirt and debris from oneself or a dirty surface. Brushing and sweeping is always the safest option. The air wand must be equipped with a safety nozzle to divert air from the tip when the tip is blocked. This prevents air injection injuries.
3. Fix or repair faulty hoses, air lines and junction points. A good tip is to shut down all surrounding equipment in the work area and listen for the 'hissing' of the air. This will identify where the air leak is so the leak can be repaired.
4. Do not engage in any type of horseplay with high-pressure air.
5. Frequently audit the condition of the pump, pressure gauges and oil regulators. Erroneous readings on gauges and substandard condition of the pump can create significant safety hazards.
6. Always de-energize the equipment before working on any high-pressure air systems. Make sure all pressure has dissipated before starting any work.

Questions to Generate Discussion:

- What is the first thing you should do before working on a high-pressure air line?
- What are some of the common causes for deteriorating air lines and hoses? What can be done to reduce air line leaks?
- Why is it dangerous to blow air directly into the skin?

Discussion Date: _____

Employee Participants:

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