

Jason Mechanical Corp

Tool Box Safety Talk

RESPIRATORY PROTECTION

The primary purpose of respiratory protection is ensuring that the air you breath contains enough oxygen for life support and that it is free from harmful contaminants.

If, after a hazard assessment, it is determined that a clean, breathable atmosphere cannot be maintained by engineering controls such as containment or forced ventilation, then respirator use will be required.

The type of respirator selected will depend on the atmospheric hazard, the type of work to be done, and the conditions in which the work will be done.

The most common respirator is a negative pressure respirator. These respirators draw contaminated air through by the negative pressure created when one inhales. Types of negative pressure respirators include ½ face, full face, and even disposable face masks. In the case of the disposable mask, the mask, itself, is the filter. There are specific filters for specific contaminants such as dust, asbestos, ammonia, etc...

Negative pressure respirators require a fit test to ensure a proper seal between the face and the seal of the respirator. Prior to fit testing, medical approval for respiratory wear must be obtained from a licensed health care professional.

Contaminants may also be filtered from the air using a battery operated powered air purifying respirator (PAPR) in which positive pressure forces contaminated air through a filter.

The above air purifying respirators DO NOT supply oxygen and may never be used in oxygen deficient atmospheres or atmospheres that are immediately dangerous to life or health (IDLH).

Atmosphere supplying respirators are always positive pressure devices as they supply breathable air from an uncontaminated outside source. The outside source may be a tank carried on one's back - a self-contained breathing apparatus SCBA or a Type "C" system where a compressor forces breathable air through hoses to a face mask. Because clean air is supplied by atmosphere supplying respirators, filters for particular contaminants are not required.

Persons who use respirators will fall under a Respiratory Protection Program which includes training; fit testing; medical surveillance; respirator selection; storage, cleaning, inspection & maintenance; work area surveillance; air monitoring procedures; and an understanding of the posted results of the air monitoring.

A brief note about dust masks. Under no circumstances are dust masks appropriate for true respiratory protection and they will never be used in that capacity. However, personnel may use dust masks, at their discretion, to reduce annoying particles in the air that are not a true health hazard.

Safety Concerns:
