

Tool Box Talk

GLOVES - BASIC MEANS OF PROTECTION

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Workers require gloves that provide multiple degrees of protection. For example, a worker may need a glove that not only is heat resistant, but also is chemical resistant as well. Plus, workers demand that gloves not only protect their fingers and hands, but provide them with better performance. The right glove to fit the job is one that provides safety as well as performance.

Coated Gloves

Chemical- or liquid-proof gloves essentially are coated gloves. To be completely chemical or liquid proof versus just chemical and liquid resistant, the gloves must be fully coated.

Cut-Resistant Gloves

Cut-resistant gloves are used when workers are at risk to be sliced or cut by equipment or the products they are handling. For food processing, industrial or assembly applications, using gloves with Kevlar or Dyneema fibers are preferred because of their comfort level.

Disposable Gloves

Disposable gloves, often used in food processing or assembly as well as a multitude of other industries, are available in latex rubber, nitrile, polyethylene, PVC and vinyl. For industrial applications when there is the presence of oil or petroleum-based products, nitrile disposables must be worn because latex breaks down in oil.

Anti-Vibration Gloves

Are used for protection for highly specialized tasks such as operating chainsaws, grinders, nail guns, sanders and any machinery that produces high level of vibrations or where the individual is exposed to excess vibration. These gloves provide extra padding to help prevent hand-arm vibration syndrome that often occurs from repeat exposure to vibration.

Electrical Hazard Gloves

These gloves should be used at all times when working on general electric equipment, elevators, moving walkways, swimming pools, fountains, branch circuits and switches, carnival rides, emergency power systems and solar photovoltaic systems, etc. Electric hazard gloves are rated by section 70E of the NFPA and are classified based on amount of voltage that a worker might be exposed to if shocked by an electrical current. And, of course, OSHA — 29 CFR, part 1910.138 is very clear that these gloves are necessary.

General Purpose Gloves

These gloves are available in jersey, canvas or string knits, and are placed in two basic classifications: drivers' gloves and leather palm gloves.

Drivers' gloves (note: drivers is a generic term for this type of glove) are thin leather gloves for general-purpose use. They allow good dexterity, while providing protection at the same time. They protect the entire hand from abrasion and punctures, and are a dependable, comfortable glove for a wide variety of jobs.

Leather palm gloves provide maximum protection against abrasive and puncture hazards. They are made of durable cotton or canvas with leather palms and fingers. These gloves come with either knit wrist cuffs, reinforced 2½-inch safety cuffs or reinforced gauntlet cuffs and are available in a lined version for cold weather.

Heat-Resistant Gloves

There are heat-resistant gloves that are flame resistant, high heat resistant, convection heat resistant or all three. The low end of heat-resistant gloves are terry cloth gloves similar in feel to thick towels or kitchen pot holders. Kevlar blends, as well as other similar fibers, are cut resistant as well as heat resistant. And of course, there is a whole variety of high-heat gloves used in foundries, as well as welder's gloves and fire-fighter gloves, which all are made of high-duty leather with heat liners.

Welding Gloves

Welding gloves are made of leather with heat-resistant panels. There are MIG and TIG models, as well as thinner gloves for working with different types of welding or small piece welding. These thinner gloves allow for a higher level of dexterity that is required when working with intricate or small items.

High-Visibility Gloves

These gloves are available in safety orange or lime colors and come in day or nighttime versions. The difference is that nighttime versions have retro-reflective patches or elements to reflect back light beams.

As you can tell, gloves are not just a one-size-fits-all fix to hand protection. With gloves, ergonomics and fit are big issues. If the glove is not sized correctly, workers might over compensate by gripping harder, which could lead to other hand problems and injuries beyond the ones that the glove is being worn to protect against. So many times, gloves are removed because the fit is not right, making the risk of injury imminent.



Occupational Health and Safety Regulations State:

Hand and arm protection

97(1) An employer or contractor shall provide, and require a worker to use, suitable and properly fitted hand or arm protection to protect the worker from injury to the hand or arm, including:

- (a) injury arising from contact with chemical or biological substances;*
- (b) injury arising from exposure to work processes that result in extreme temperatures;*
- (c) injury arising from prolonged exposure to water; and*
- (d) puncture, abrasion or irritation of the skin.*

(2) Where a worker may contact an exposed energized high voltage electrical conductor, an employer or contractor shall provide, and require the worker to use, approved rubber insulating gloves and mitts and approved rubber insulating sleeves.

Adapted from: www.ehstoday.com, *A Practical Guide to Hand Protection* by: Joseph D. McGarry



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