Hand Protection – It’s in Your Hands

If you aren’t wearing the right protection your hands could be burned, frozen, cut, scraped or burned by chemicals. You could lose fingers, a thumb, or even your life. That’s why you wear gloves.

To protect your hands your gloves need to fit properly: Too tight, and you’ll fight to get your fingers to work. Too loose, you won’t be able to grip and you’ll risk getting trapped in a pinch point.

Different materials offer different protection, and of course they should be replaced when worn or damaged.

Cotton: is cheap, reusable and absorbs sweat. It’s not long-lasting though, and offers little protection from severe hazards.

Leather: resists punctures, abrasion, sparks and impact, but has limited dexterity and cut resistance.

Rubber: natural rubber, nitrile and PVC gloves are best for chemical resistance but offer limited heat and cut defense.

Metal: metal-reinforced gloves and newer fibers such as Kevlar are lightweight and resist cuts well. Some fibers also resist heat.

Many tasks require specific hand protection: Welding and chemical hazards require long gloves, for example. But the material should be matched to the activity and hazards.

Abrasives
Severe hazard – reinforced heavy rubber, staple-reinforced leather
Less severe – rubber, plastic, leather, nylon, cotton

Sharp Edges
Severe hazard – metal mesh, staple-reinforced leather, Kevlar or steel mesh Less severe – leather, terry cloth

Temperature:
Severe cold: Rubber or fiber insulated gloves

Mild cold: Wool or cotton
Mild heat: Rubber, leather, heavy cotton
High heat: Leather, metal, or fiber gloves

Chemicals and Fluids
No material keeps out all chemicals. Choices include natural rubber, neoprene, nitrile rubber and many others. Ask your glove vendor for a chemical resistivity chart. The best information may be the material safety data sheet (MSDS) accompanying each chemical.

Check for defects every time you use hand protection. Find holes in rubber gloves by filling the glove with air or water.

Barrier creams provide limited protection against alkalis and acids, but are sometimes used with gloves.

Your hands also need to be kept clean to prevent infection. A pre-moistened, heavy-duty hand towel can remove heavy grease and grime at your workstation or jobsite. Wash your hands before applying gloves or barrier cream, and at the end of the workday.

Your hands are your most important tools. Keep them clean and well-maintained.