

ABCs of Personal Fall Arrest Systems – Body Harnesses

Personal fall arrest systems provide a layer of security for employees working at heights. These systems are made up of three separate elements that combine to keep workers safe in the event of a fall. Remember the ABCs of fall protection systems: anchorages, body harnesses and connecting devices.

"B" Is for Body Harnesses

A body harness is a key part of any personal fall arrest system in that it is the primary piece of equipment that is physically worn by an employee. The harness is then tethered to an anchorage that is capable of catching and supporting the weight of an employee should they fall.

Harnesses include shoulder straps and leg straps, a sub-pelvic assembly, adjustable buckles or fasteners, and one or more D-rings to connect to other components of the fall arrest system.

It is important to understand that body harnesses are not the same thing as body belts. Body harnesses are safer than belts in the event of a fall. In fact, body belts are not allowed to be used as part of fall arrest systems and are only adequate to be used as positioning devices. Body harnesses are less likely to cause injury while breaking an employee's fall due to the impact of being caught being dispersed across a larger portion of the body, rather than concentrated around the waist.

Like all personal protective equipment, body harnesses can only be effective if they are used correctly. Make sure that your harness fits snugly. There should be no slack when standing up straight. You should be able to fit an open hand, but not a closed fist, between the strap and your body. Be sure to check that the D-ring is centered between your shoulder blades and that all straps are tucked in.

Body harnesses may be considered one-size-fits-all, but some manufacturers will provide more than one size. A poorly fitting harness can put you in danger and lead to serious injury. When selecting a harness, be certain that it can be adjusted to fit you properly.

Inspections of Harnesses and Service Life

A defective fall arrest system can be the difference between life and death. As such, it is important that all of the parts of your equipment, including the harness, be inspected regularly. When inspecting your body harness, be on the lookout for:

- Frayed, worn or cut webbing
- Damaged or misshapen hardware
- Missing parts
- Ripped stitching

In addition to checking for those issues, also pay attention to whether your harness has an impact indicator, which will have a special stitching pattern ripped out if the harness has previously stopped a fall or been subjected to a similar force.

There is not a specific timeline that can be followed 100% of the time regarding the lifespan of a body harness. However, it is important to pay close attention to the overall condition of the harness as well as the manufacture's recommendations for inspections and the lifespan of the harness you are using.

One key part of maximizing the durability and lifespan of a harness is storing it correctly. When not being used, harnesses should be hung up in a clean, dry and cool area. Keep them off the floor and away from other equipment. Chemicals, sunlight and welding slag can all cause damage to harnesses. The webbing of a body harness is particularly susceptible to damage.

Our Commitment to You

Your safety is our first priority. If you have any questions or concerns about body harnesses, personal fall arrest systems or fall protection in general, speak to your supervisor.

