

Potential Energy , The Hidden Hazard



HIDDEN HAZARD

There is a kind of stored energy related to the sheer weight of things in our workplaces, such as loaded pallets, heavy equipment, and bulk material.

This type of stored energy is also called potential energy.

Another type of stored energy is called “elastic stored energy” which can be found in ropes and cables used to move heavy objects or equipment.

Potential energy and elastic stored energy hazards are a source of a variety of serious injuries and fatalities.

Electrical and Mechanical Stored Energy

Equipment such as motors, control panels, conveyors and hydraulic systems contain electrical and mechanical stored energy.



Weight = Stored Energy

The sheer weight of things in our workplaces, such as loaded pallets, heavy equipment, and bulk material or if a piece of gear gets stuck when it gets pulled or dropped.

That weight is a type of stored energy, also called potential energy. The higher the object is from the ground, the greater its' stored energy. When an object gets wedged or stuck the stored energy is still there and can become 'active' as soon as the weight of the objects sets it free to fall or if it gets pulled upwards.



Elastic Stored Energy

Another kind of stored energy to be aware of is called “elastic stored energy.” For example, when a bungee cord is slack it contains no stored energy.

But when it gets stretched out, the energy needed to stretch it is stored there until it’s released.

In the workplace, the same kind of energy – in much greater quantities – can be found in ropes and cables that are used to move heavy objects and equipment.

Unfortunately, potential energy and elastic stored energy can be a source of serious injuries and fatalities at some facilities.



Awareness and Observation

To protect ourselves we must increase our awareness of stored energy hazards and we must become more observant for them in our surroundings.

Steel or timber that is fixed on both sides is a major source of potential energy when one of the sides is let go.

Awareness of stored energy hazards goes beyond the workplace. In fact, our homes often contain stored energy hazards that we can easily overlook.

Things such as bookshelves, heavy furniture and large TV's can become serious hazards.

Whether we're at work or at home, the variety of stored energy hazards we can encounter is nearly endless, and the hazards can change from day to day.

The key to our safety is awareness of stored energy – awareness of the hazards we could encounter and awareness of our surroundings.

This awareness will help us to either eliminate stored energy hazards or stay out of their line of fire.

We'll not only protect ourselves, but we'll also protect the well-beings of our co-workers.