

Keep Employees Safe with Proper Packaging and Transit Solutions

Choosing the right packaging and transit protection and using them correctly, will not only protect your products but can also reduce the risk of employee injuries.

When you think of employee safety, you may not think of packaging and logistics, but every year employees are injured. And many are preventable. Here, we discussed the dangers surrounding bulk bags, palletized loads, and cargo transit.

Bulk Bags

<u>Bulk bags</u>, also known as flexible intermediate bulk containers, are used by various industries to transport bulk products, such as flour, chemicals, or pharmaceutical ingredients. Employee injuries from the use of bulk bags happen during filling, unloading, lifting, and storage. Choosing the right bag for your bulk material and using it correctly is critical for keeping employees safe.

Filling and unloading bags can generate static. Because of this, some bags have conductive and antistatic properties to prevent fires and explosion in areas with combustible dust or for use with flammable and combustible materials. Using the wrong bag for these types of bulk products can have deadly results. The bags come in different safety grades from B to D.

- Type B is made from a static absorbing fabric but is not considered antistatic because they do not dispel electrostatic charges.
- Type C has conductive threads woven throughout that prevents
 electrostatic build up from sparking by creating a path to the ground for
 the charge. These bags must have a ground connection during use.
- Type D is also known as dissipative bags. These conductive bulk bags are
 constructed from fabrics with static dissipative threads and properties to
 control discharge incendivity without the need for a connection from the
 bulk bag to the ground. These bags help avoid operator grounding errors
 that can happen with Type C.

There are special bulk bags for hazardous materials, as well. The transportation of hazardous material is regulated, so any bag used for hazardous materials must be UN approved. These bags are reinforced with corrugated side panels that provide rigidity and make them self-supporting, which reduces the risk of hazardous materials spilling from the bag and harming employees. Always make sure you are using the right bag for your product.

Another area of potential injury is from filled bags that are improperly stored and stacked. A UK company was accused of <u>safety violations</u> after a bulk bag containing 600 KG (1323 lb) ammonium nitrate fell onto an employee as he removed pallets from a stack. The employee was severely injured and out of work for thirteen weeks. An investigation revealed the company stacked the bags on top of each other instead of pyramid style, which was part of its safety plan. The same types of <u>accidents</u> happen in the US, too. It is essential that you are stacking bags in the manner intended for the bag you are using to prevent serious injury.

Palletized Corrugated Boxes

Palletized loads can also cause injuries. Products that are not secured properly or that are stacked incorrectly pose a grave risk to employees. Last year an employee was struck in the head and killed from a pallet that fell. There is no information on what happened, but this is not an isolated incident. In 2019, another employee suffered back and neck fractures from a falling pallet. While placing pallets on a top rack, a forklift driver couldn't see a box that had come loose from another pallet and was



lying on the rack. When the driver placed his pallet, it pushed the box into a pallet on the adjacent rack, which fell, hitting the employee below who was in the adjacent aisle.

<u>Proper palletization</u> plays a significant role in keeping employees safe. Pallet loads should be secured with stretch wrap and strapped or banded to the pallet to avoid products from coming loose. Before securing the product, pallets should be appropriately stacked using either interlocking or column stacking as suitable for the load. Pallet strength and stiffness should be suitable to prevent instability of the load.

Transit Protection

Federal regulations are in place to prevent hazards from unsecured loads during over-the-road and rail transportation. Unstable loads can shift, and when an employee opens the trailer to unload product, it can fall out on them, causing injury. Shifting loads can also cause a truck to overturn or a train to derail, injuring or killing employees.

Between January and March this year, the Federal Railroad Administration database reports of one <u>train derailment</u> from a load shifting and two from improperly loaded cars, resulting in millions of dollars in damage and one nonfatal casualty. In 2014, an improperly loaded car resulted in a fatality.

Improper <u>transit securement</u> can lead to failures from walking and leaners, wrap-around shifting, underhang voids, and lack of rear securement. The use of saddle packs, airbags, custom-fitted dropdown void fillers, and corrugated bulkheads can be used to secure your loads in trailers and containers and, ultimately, protect your employees.

Tyoga Can Help

Not sure which products you need to help protect your employees? We offer a full line of bulk bags and can help you choose the correct one for your application. With 50 years of experience, an understanding of intermodal requirements, and industry connections for support, we can help you design a transit securement plan to keep employees safe while minimizing freight damage and increasing load efficiency. Contact us today.