Handling Materials Safely



Almost every worker handles materials at some point during the work day. Using the right method of moving materials combined with the correct personal protective equipment is the only way to reduce the threat of injury.

Stacking Materials

When it comes to preventing injury, stacking materials properly is just as important as using proper lifting techniques and the right equipment to move a load.

- Before stacking any materials, it is important that the material type, height and weight are given consideration.
- If a skid is to be used, inspect the skid for damage.
- Stacking materials too high or too deep on a shelf will increase the risk of injury when materials are being manually moved.
- When stacking bags or bundles, use interlocking rows to increase the stability of the load.
- When stacking drums, barrels, and kegs, use a symmetrical pattern. If they are to be stacked on their ends, use a sheet of plywood or skid inserted between the levels to provide stability and an even surface for each level. When stored on their sides, block the bottom tier to prevent the bottom drums from rolling out from under the load.
- All cylindrical materials such as structural steel, poles, and tubing must be stacked and blocked to prevent spreading or tilting. Pipes, bars, and tubing should be stored in racks that run parallel to the warehouse aisles to eliminate a safety hazard for those who use the aisles.

Hand Carts

Hand cart injuries occur when wrists and fingers are caught in the cart itself, between the cart and the load, or between the load and another stationary object. Also in danger are feet and legs being crushed by the cart or the load being moved. Handcart use can result in serious back and shoulder strain, as well as straining leg and arm muscles.

Lifting And Moving

Roughly 75 per cent of all material handling workers will suffer a back injury

at some time during their working life. Using a hand cart, instead of strength when moving objects can save workers from a stress injury. If they have to lift, use correct lifting and moving methods for loads within your strength limit combined with proper protective equipment. Prior to lifting materials, assess each load for weight, sharp edges, slivers, and wet or greasy spots. Also assess the route to ensure it is clear of clutter, spills and obstructions.

If the load requires a team to lift the material, chose team members who are of similar size and strength. Choose one leader to direct the team and issue lifting, moving and setting down commands. Try to equally distribute the load among all team members.

Irregular Objects

Although boxes and cartons are not considered to be irregular shaped objects, there is still a correct way to lift and carry. Grasp a carton with one hand on the top and one hand on the bottom, both placed in opposite corners of the box. Sacks should also be lifted using opposite corners. But once the sack has been lifted, it should be shifted so that it rests against your hip or stomach so you can swing the sack up and over your shoulder. If you cannot swing it over your shoulder, then the sack is too heavy. Irregular objects can be shaped irregularly or unevenly weighted. Such objects require special solutions. If the object is unwieldy and will not allow you to securely grasp and lift the object, then you should seek assistance and/or use a handcart. When carrying long objects such as pipes and tubing, the correct method is to balance the objects on your shoulders. When carrying long sections, use a guide to make sure the way is always clear of workers who could be injured by the jutting pipes.