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Risk Control Services

Warehouse Safety

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Hand Truck Operations

Warehousing involves the movement of products, equipment, and materials. This must be accomplished in a safe manner, while protecting the product.

While loading or unloading and moving materials on hand trucks, the following safety tips should be observed:

- When loading hand trucks, keep your feet clear of the wheels.
- Do not exceed the manufacturer's load capacity rate. (The capacity plate is located on the hand truck.)
- Place the load so that it will not slip, shift or fall, and secure it with straps if they are provided.
- For extremely bulky or pressurized items, such as gas cylinders, strap or chain the items to the hand truck.
- Tip the load slightly forward so that the tongue of the hand truck goes under the load, and then push the tongue of the hand truck all the way under the load.
- If your view is obstructed, ask a spotter to assist.
- Keep the center of gravity as low as possible by placing heavier objects below lighter ones.
- Push the load so that the weight will be carried by the axle and not the handles.
- Do not walk backward with the hand truck, unless going up stairs or ramps.
- When going down an incline, keep the hand truck in front of you so that it can be controlled at all times.
- Move hand trucks at a walking pace.
- Store hand trucks with the tongue under a pallet, shelf, or table.



Walkie Trucks/ Pallet Jack Use

Walkie trucks/pallet jacks are very versatile, but can be dangerous if not used properly. This equipment is designed to transport loads, unload, lift, pick, stage, and store materials or product. Workers operating walkie trucks/pallet jacks may be injured by the pallet jack rolling over feet, catching hands between the operating handle and a fixed object, and when heavy loads fall onto the operators.

To safely operate this equipment, the basic safety principles below must be rigorously followed. By following these guidelines, you will ensure your safety and the safety of others.

- Only pallet jack operators may operate pallet jacks.
- Do not exceed the manufacturer's load capacity rate and read the lift capacity plate on the pallet jack if you're unsure.
- Start and stop the pallet jack gradually to prevent the load from slipping.
- Pull manual pallet jacks and push them when going down an incline or passing close to walls or obstacles.
- If your view is obstructed, ask a spotter to assist in guiding the load.
- Stop the pallet jack if anyone gets in your way.
- Never place your feet under the pallet jack.
- Never use a second piece of equipment to push, pull, or lift the unit.
- Move slowly when transporting an empty unit that could tip while negotiating a sharp turn.
- Always wear the required personal protective equipment.
- Keep hands, feet, and other body parts confined to the running lines of the walkie truck/pallet jack.
- Never ride on pallet jacks.



Hazardous Materials

Chemicals are very common in a warehouse. If not handled or stored safely, some chemicals can cause serious injuries. Chemicals may arrive at a dock in containers or on a pallet. Other chemicals may be a part of the standard work environment in the building and/or may be caused by carbon monoxide that is produced from internal combustion engines on powered equipment or trailer trucks.



You should consistently practice the following the safety guidelines for hazardous materials:

- Follow the instructions on the label and in the corresponding (MSDS) for only those chemical products you will be using in your workplace.
- Use personal protective clothing or equipment, such as neoprene gloves, rubber boots, shoe covers, rubber aprons, and protective eyewear, when using chemicals labelled *Flammable*, *Corrosive*, *Caustic* or *Poisonous*.
- Always use your chemical goggles and the face shield when handling chemicals labelled *Corrosive* or *Caustic*.
- Do not use protective clothing or equipment with split seams, pin holes, cuts, tears, or other visible signs of damage.
- Before removing your rubber/neoprene gloves, wash them with cold tap water in a normal hand-washing motion.

Always wash your hands after removing your gloves.

- Do not use chemicals from unlabeled containers or unmarked cylinders.
- Do not perform "hot work," such as welding, metal grinding or other spark producing operations, within 50 feet of containers labelled *Flammable* or *Combustible*.
- Never drag a container labeled *Flammable*.
- Do not store chemical containers labeled *Oxidizer* with containers labeled *Corrosive* or *Caustic*.
- Never store flammable or combustible liquids within 50 feet of a heater, water heater, or any ignition sources.

Dispensing Flammables

Before pouring, dispensing or transferring any liquid from a bulk container labeled *Flammable*, observe the following safety procedure:

- 1) Only use the red color-coded metal safety containers for transferring the liquid.
- 2) Electrically ground and bond the containers by:
Attaching the clip at one end of the grounding wire to the rim of the dispensing container and then attach the clip at the other end of the grounding wire to a ground source, such as a ground-driven steel stake.

Attach the clip at one end of the bonding wire to the rim of the dispensing container and then attach the clip at the other end of the bonding wire to the rim of the receiving container.

You are now ready to dispense the liquid from the bulk container into the opened receiving container. Upon completion, replace the lid on the receiving container and remove the bonding wire.



Material Handling & Storage



Products must be stored safely to prevent them from falling on employees or visitors and to reduce product damage. The storage of products involve the safe use of powered industrial trucks (forklifts), as well as secure and safe racking to support loads.

When moving materials from storage, the following safety tips should be observed:

- When stocking shelves by hand, position the materials to be shelved slightly in front of you to avoid twisting your body when lifting and stacking.
- Visually inspect for sharp objects or other hazards before reaching into containers, such as garbage cans, boxes, bags, or sinks.
- Remove or bend nails and staples from crates before unpacking the crates.
- When cutting, always cut away from you and your co-workers.
- Do not try to kick objects out of walkways. Objects should be pushed or carried from walkways.
- Do not let items overhang from shelves into walkways.
- Move slowly when approaching blind corners.
- Place heavier loads on the lower or middle shelves.
- Remove one object at a time from shelves.
- Place items flat on shelves so that they do not wobble.



Manual Handling/ Lifting Materials

Despite the fact that most of the materials in warehouses are transported by powered industrial trucks and hand trucks, employees can still be injured. Materials can easily fall on your feet, your hands can be pinched between boxes while handling them, and you could injure your back moving product.

Some basic safety procedures for proper lifting are:

- Keep materials/loads situated from the knee level to chest level for the easier lifting.
- Whenever possible, avoid placing loads on upper shelves or on floor.
- Never bend over at the waist to lift a load, regardless of its size or weight.
- Whenever possible, use lifting devices such as forklifts rather than manually handling loads.
- Wear the correct size of gloves to help protect your hands, as well as to maintain a good grip.
- Get help from co-workers on a lift that is considered too heavy or awkward.
- Minimize the amount of lifting by pre-planning your tasks.

There are several basic rules of lifting and moving that can help prevent back injuries:

- Lift with your legs, not your back; your legs muscles are larger and better-positioned over the hips and knees to provide this activity.
- Do not twist; instead, always position your hips and feet toward the object you are lifting or moving.
- Maintain the natural curves of the neck, upper back and lower back while lifting, moving and even sitting.
- Keep objects close to your body; this reduces the leverage on your spine.
- Push rather than pull when possible. Pushing naturally places your legs in a position to do the work. Pulling naturally places your back in a forward bent position.

Powered Industrial Trucks

Forklifts are an essential piece of material handling equipment in the warehouse. Forklifts are involved in numerous injuries and deaths each year throughout the industry. It is vital that all forklift operators are properly trained and only certified forklift operators operate the forklift.

Pre-Use Inspection

Always follow the pre-use instructions in the manufacturer's manual and do not use the forklift if any of the following conditions exist:

- Mast has broken or cracked weld-points.
- Roller tracks are not greased or the chains are not free to travel.
- Forks are unequally spaced or cracks exist along the blade or at the heels.
- Hydraulic fluid levels are low.
- Hydraulic lines and fittings have excessive wear or are crimped.
- Fluid is leaking from the lift or the tilt cylinders.
- The hardware on the cylinder is loose.
- The tires are excessively worn or split, or have missing tire material.
- Inflatable tires are not filled to the operating pressure indicated on the tire.
- The batteries have cracks or holes, uncapped cells, frayed cables, broken cable insulation, loose connections or clogged vent caps.

Starting the Forklift

- Apply the foot brake and shift gears to neutral before turning the key.

Picking up a Load

- "Square up" on the center of the load and approach it straight-on with the forks in the travel position.
- Stop when the tips of your forks are about a foot from the load.
- Level the forks and slowly drive forward until the load is resting against the backrest of the mast.
- Lift the load high enough to clear objects underneath it.
- Back up about one foot, then slowly and evenly tilt the mast backwards to stabilize the load.



Putting the Load Down

- “Square up” and stop about one foot from the desired location.
- Level the forks and drive to the loading spot.
- Slowly lower the load to the floor.
- Tilt the forks slightly forward so that you do not hook the load.
- When the path behind you is clear of obstructions, back straight out until the forks have cleared the pallet.

Stacking One Load on Top of the Other

- Stop about one foot away from the loading area and lift the mast high enough to clear the top of the stack.
- Slowly move forward until the load is squarely over the top of the stack.
- Level the forks and lower the mast until the load is no longer supported by the forks.
- Look over both shoulders for obstructions and back straight out if the path is clear.

General Forklift Safety Guidelines

- Do not use bare forks as a man-lift platform.
- Approach railroad tracks at a 45° angle when driving the forklift.
- Steer the forklift wide when making turns.
- Sound the forklift horn when approaching blind corners, doorways or aisles to alert other operators and pedestrians.

Lifting

- Do not exceed the lift capacity of the forklift and read the lift capacity plate on the forklift if you are unsure.
- Follow the manufacturer's guidelines concerning changes in the lift capacity before adding an attachment to a forklift.
- Lift the load an inch or two to test for stability; if the rear wheels are not in firm contact with the floor, take a lighter load or use a forklift that has a higher lift capacity.
- Do not raise or lower a load while you are moving. Always wait until you are in the loading area and have stopped before raising or lowering the load.
- After picking up a load, adjust the forks so that the load is tilted slightly backward for added stability.
- Raise the forks an additional two inches to avoid hitting or scraping the ramp surface as you approach the ramp.



Driving a Forklift



- Always obey all traffic rules and signs.
- Drive with the load at a ground clearance height of four to six inches at the tips and two inches at the heels in order to clear most uneven surfaces and debris.
- Drive at a walking pace and apply the brakes slowly when driving on slippery surfaces, such as icy or wet floors.
- You should not exceed five miles per hour and slow down in the congested areas.
- Do not drive into an area with a ceiling height that is lower than the height of the mast or overhead guard.
- Do not drive up to anyone standing or working in front of a fixed object, such as a wall.
- Do not drive along the edge of an unguarded elevated surface, such as a loading dock or staging platform.
- Stay a minimum distance of three truck lengths from other operating mobile equipment.
- Drive in reverse and use a signal person when your vision is blocked by the load.
- Look in the direction that you are driving and proceed when you have a clear path.
- Do not drive the forklift while people are on the attached man-lift platform.
- Drive unloaded forklifts in reverse when going up a ramp and forward when going down a ramp.
- Drive a loaded forklift in a forward gear when going up a ramp and upon approaching the ramp, raise the forks an additional two inches to avoid hitting or scraping the ramp surface.
- Do not attempt to turn the forklift around on a ramp.
- Do not shift into reverse to slow down or stop the forklift.
- Lower the mast completely, turn the engine off, and set the parking brake before leaving your forklift.

Loading Docks

- Keep the forklift clear of the dock edge while vehicles are backing up to the dock.
- Do not begin loading or unloading until the supply truck has come to a complete stop, the engine has been turned off, the dock lock has been engaged, and the wheels have been blocked.
- Do not drive the forklift into the truck until the bridge or dock plate has been attached.
- Do not drive the forklift into a truck bed or onto a trailer that has "soft" or loose decking or other unstable flooring.
- Drive straight across the bridge plates when entering or exiting the trailer.
- Use dock lights or headlights when working in a dark trailer.





Fire Safety

To protect the assets of the building and workers, fire safety must be a top priority in any warehouse. Storage of certain products can result in a greater risk of fire. Flammable liquids can easily ignite and raze a warehouse to the ground. Sprinklers, fire extinguishers, and emergency plans will help safeguard people and property. Some of the largest fire losses in the industry have occurred in warehouses.

The following fire safety guidelines can be very useful:

- Storage of materials should be at least 18 inches below fire sprinkler heads.
- Clear access should be maintained to all fire extinguishers and fire alarm panels.
- Fire extinguishers must be identified with appropriate signage.
- Trash accumulation and debris can be a potential fire hazard, as well as a hindrance to evacuations. There should be a designated area for storage of pallets, crates, etc., and limit the stack height of pallets to 6 feet.
- Aisle ways must be clear and free of obstructions.
- Emergency lights must be functional at all times.
- Extension cords cannot be used for permanent wiring.
- Store flammable liquid properly.
- Never store materials in front of electrical panels or in electrical rooms.

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