### PRESENTER'S GUIDE

# "MOTORIZED PALLET TRUCK SAFETY"

Part of the General Safety Series



## **OUTLINE OF MAJOR PROGRAM POINTS**

The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- When loaded pallets need to be moved, people often think about using a forklift.
  - But in many situations, forklifts may not be the most efficient or effective equipment for the job.
- This is when motorized pallet trucks such as "walkies" and "walkie riders", come into their own.
  - They're more agile and easier to handle than a forklift, and can do a great job of maneuvering pallets around.
- But like all materials handling equipment, pallet trucks can be hazardous if they are not used safely.
- At first sight, motorized pallet trucks might seem to be the "poor cousin" of a forklift, but they often have significant advantages for performing materials handling tasks in a busy workplace.
  - They can move loads weighing thousands of pounds, but still maneuver easily in areas where space is limited, such as inside small trailers and in narrow warehouse aisles.

### Unlike forklifts:

- Powered pallet trucks are designed to raise loads only a few inches above the floor.
- They steer by means of a "tiller lever" that's connected to their rear wheels.
- Their controls and displays are located on the tiller's "ring handle".

- The two most common types of motorized pallet trucks are "walkies" and "walkie-riders".
  - Walkies are operated by a driver who walks behind or to the side of the truck as it travels.
- Walkie riders can be operated while walking with them, or while riding on them on a built-in "operator platform".
- Neither walkies nor walkie riders are designed to carry passengers.
  - No one, not even the operator, should ever ride on a walkie.
  - A walkie rider should only carry the person who is driving it.
- To work safely with motorized pallet trucks, you need to remember that they are heavy, even when they are unloaded.
  - If they hit part of a building or another piece of equipment, they can do significant damage.
  - They can also "damage" people, including bystanders and the operator.
- Abrasions, contusions, bone fractures and worse can result when a pallet truck:
  - Hits someone.
  - Runs over their feet.
  - "Pins" them against an immovable object such as a wall or a bollard.
- There are two safety devices, a "deadman switch" and a "belly switch", built into a pallet truck's tiller to help prevent an operator from being "pinned" by a truck.
- Walkies and walkie riders can also become hazardous if they are unstable. This can occur when they are operated on surfaces that are:
  - Rough or uneven.
  - Inclined, like a ramp.
  - Covered with debris.
  - Slick with oil, water or other substances.

- An unstable truck can skid, roll away out of control, run over its operator or tip over.
- A truck can also become unstable when it carries a load that is loose, oversize or unbalanced.
  - Problem loads can also fall off the forks and hit someone.
- To address the hazards that are associated with motorized pallet trucks and other equipment, the Occupational Safety and Health Administration (OSHA) has created a set of safety regulations known as the "Powered Industrial Truck Standard".
- The Standard establishes rules and safe work practices that must be followed when operating a motorized pallet truck.
  - If you have any questions about the regulations and how they apply to you, talk to your supervisor.
- A fully loaded pallet truck that's rolling has:
  - A lot of weight.
  - A lot of momentum.
  - A lot of potential to cause damage, both to things and people.
- A pallet truck operator needs to understand and adhere to the safety regulations that OSHA has established for the equipment.
  - Employers are required to provide employees who operate motorized pallet trucks with training on the OSHA Standard.
- There are also some general guidelines that you should always follow when working with a truck.
  - Before you start your shift, you need to protect yourself by putting on the appropriate PPE.
  - At a minimum you should wear steel-toed work boots with slip-resistant soles.

- Make sure that your hands are clean and dry.
  - Moisture, oil or grease could cause you to lose your grip on the tiller, and lose control of the truck.
- Always inspect a pallet truck before you use it.
  - Your employer or the equipment's manufacturer can usually provide a checklist that will help you perform a thorough examination.
- Make sure the truck is undamaged, fully functional and safe for you to operate.
  - If you find any problems, take it out of service and inform your supervisor.
- Depending on the situation, sometimes you will need to operate a pallet truck with the forks in front, other times with the forks trailing.
- As a general rule you lead with the forks when:
  - You're inserting the forks into a pallet.
  - You're positioning a load.
  - You're entering a confined space, such as a warehouse aisle or trailer.
- But traveling "forks first" requires you to steer the truck with its wheels behind the load.
  - This can be tricky, and increases the chances that you'll "oversteer" and run the truck into things or people.
- So when you're traveling any distance, you should proceed with the forks trailing.
- When using a "walkie" or walking along with a "walkie rider", stay out of its path.
  - Walk to the side, using the arm that is nearest to the truck to hold the tiller.

- Always watch where you're going and allow plenty of clearance around the truck.
  - Maintaining a moderate pace helps keep the load stable and allows you to stop quickly and safely when necessary.
- When you're driving a walkie rider you should have one hand on the control handle and the other on the grab bar, so you can hang on securely.
  - Keep your arms and legs inside the operator platform, to prevent them from being hit by or crushed against things that you pass.
- You can travel at a higher speed when you're riding a pallet truck than when you're "walking" with one.
  - But you should never go faster than conditions allow, or too fast to stop safely if you have to.
- Always start, stop and turn the equipment gradually.
  - Sudden movements can destabilize the truck or its load, so that it tips over.
- A truck's handling can also be affected by the condition of the driving surface, so keep an eye on the floor ahead of you as you go.
  - Avoid potential hazards such as uneven areas, potholes and accumulations of debris, oil, water and other substances.
- In a busy workplace, it's all too easy for a pallet truck to collide with pedestrians or other equipment.
  - Stay alert and follow established traffic lanes.
  - Don't assume that other people see you.
  - Always give pedestrians the right of way.
- Your pallet truck's horn is an important safety device.
  - Beep the horn to let people know that you're coming.
  - Sound the horn at all intersections, cross aisles, blind corners and wherever vision is obstructed.

- Remember, the workplace is no place for risky behavior.
  - Never engage in any type of horseplay while operating a pallet truck.
- The process of moving loads with a motorized pallet truck can be broken down into three stages.
  - Lifting the load.
  - Carrying it.
  - Putting it down at its destination.
- To handle materials effectively, it's important that you follow safe work procedures at each of these stages, every time you perform them.
- To begin with, make sure you know the maximum carrying capacity of the truck you are using.
  - This information can be found on the truck's data plate.
- Always inspect a load itself before you move it. If it's loosely packed, oversize or unbalanced, it could:
  - Fall off the forks and hurt someone.
  - Destabilize the truck so that it tips over.
- Repack any problem loads securely on other pallets before you move them.
- Before you insert a truck's forks into a pallet, make sure that any bystanders are standing well clear.
  - Center the forks side-to-side and insert them as far as they will go.
- Make sure the forks' wheels are resting on the floor, and not on top of the pallet's bottom planks.
  - Lifting the forks with the wheels on a pallet's planks will tear the pallet apart!
- Raise the forks enough to create about one inch of clearance between the pallet and the floor beneath it.
  - The lower you keep a load, the more stable the load is.

- Once you've planned the route that you'll use to reach your destination, it's time to move off.
- Travel with the forks trailing, so you'll have better steering control.
  - Face in the direction you're heading.
  - Maintain a moderate walking pace.
  - Start, stop and change direction gradually.
- When you reach your destination, turn the truck and lead with the forks, so you can position the load more precisely.
  - If you're carrying a large load that obstructs your view, have a coworker spot for you as you move it into place.
- When you've got the pallet where you want it, come to a complete stop.
  - Again, make sure that any bystanders, and your own feet, are safely clear of the forks.
  - Then lower the pallet.
- Careful parking also plays an important role in the safe operation of pallet trucks.
  - Whenever you leave a walkie or walkie rider for an extended period of time (like overnight), you should return it to its assigned storage location.
- When parking for shorter periods, position the truck on a level surface so that it won't roll.
- Make sure the truck is not blocking access to exits, stairways or emergency equipment such as fire hoses or extinguishers.
  - Pallet truck forks can create a trip hazard, so avoid parking in areas where there is a lot of foot traffic.
- Then lower the forks.
  - Never leave a walkie or walkie rider unattended with the forks raised.

- Be sure to leave the tiller in the vertical position, so people won't trip over it.
- Most of the time, operating a motorized pallet truck safely in your facility will be pretty straightforward.
- However, some work areas, including loading docks and inclined surfaces such as ramps, can create unique hazards for walkies and walkie riders.
  - To operate safely in these areas, you need to follow some special procedures.
- On a loading dock a lot of busy people and equipment can be crowded into a small area.
  - A pallet truck operator needs to stay alert and proceed with caution.
  - Remember to keep yourself and the truck away from the edge of the dock.
  - The potential for "falling overboard" creates a serious hazard there.
- Another problem area is the gap between a loading dock and the trucks and trailers that park there.
  - Dock boards, plates and levelers are used to safely bridge that gap.
- Before you drive across any of them you should check that they are properly positioned, secure and rated to support the weight of your truck and its load.
  - Make sure the floor of the parked vehicle can support that weight as well.
- Always drive a pallet truck straight across bridge plates, at right angles to the edge of the dock.
  - Go slow.
  - Always beep the truck's horn as you go in and come out.

- There is another potential problem associated with bridge plates as well.
  - Loading and unloading activity can cause a parked vehicle to gradually move away from the dock.
  - This phenomenon is known as "trailer creep".
- Eventually, trailer creep can create a gap that is wide enough to let the bridge plates slip, so that people and equipment can fall through.
  - This can result in serious injuries, even fatalities.
- To guard against this, before driving onto a parked vehicle OSHA requires you to verify that its parking brakes have been applied and its wheels have been chocked.
  - Keep an eye on the chocks, too, because loading and unloading activity can loosen them as well.
- Motorized pallet trucks work best on surfaces that are level.
  - When you're operating a walkie or walkie rider on an inclined surface, such as a ramp, there are things you need to do to prevent it from becoming unstable or getting out of control.
- When you're walking with a walkie or walkie rider on a ramp, you should always proceed with the forks pointed downhill.
  - This will keep you safely uphill from the equipment, so you won't be run over if it starts to roll.
- When you're riding a walkie rider on a slope, some different rules apply.
  - If the truck is carrying a load, you should always proceed with the forks pointed up the grade.
  - That means traveling down the slope in reverse.

- If a walkie rider is not carrying a load, you should:
  - Drive with the forks pointed down the slope.
  - Go uphill in reverse.
- And no matter which way you're travelling, you should proceed straight up or down, in the center of the ramp.
  - Traveling at an angle or trying to turn on a slope can cause a truck to skid or tip over.

#### \* \* \* SUMMARY\* \* \*

- Even unloaded pallet trucks are heavy and can damage things and people if they are misused.
- Watch out for unsafe surface conditions and improper loading that can cause a truck to skid, tip over or lose its load.
- Be sure you know the safe work practices that you should use at every stage of the materials handling process, and follow them at all times.
- Remember that when a truck is traveling forks first, you must be careful not to oversteer.
- Understand the special hazards that exist on loading docks and inclined surfaces, and follow the procedures that are required to operate safely on them.
- Pallet trucks can be hazardous to operate, but now that you understand the hazards that you can encounter and know what to do to avoid them, you can help ensure that you and your coworkers go home safe and injury-free at the end of every day.