

**Training Solutions, Delivered!** 

# WALKIE STACKER SAFETY

# Leader's Guide, Fact Sheet & Quiz

Item Number: 3209 © Safety Source Productions

# This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

# PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes <u>before</u> the quiz itself, which is on the final page.

### CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

# 3209 WALKIE STACKER SAFETY FACT SHEET

#### LENGTH: 10 MINUTES

#### **PROGRAM SYNOPSIS:**

The walkie stacker model forklift is designed for a person to operate the truck while walking, not riding the equipment. Unlike the rider forklifts that are counterbalanced equipment that are designed for heavier loads, the walkie stackers are designed for less-demanding loads and shorter travel distances. This program reviews the basic safe work practices walkie stacker operators must follow to prevent injuries and damage to property. Topics include key-off and key-on inspections, basic operating procedures, engineering principles of walkie stacker, centers of gravity, the stability triangle and safe traveling.

#### **PROGRAM OBJECTIVES:**

After watching the program, the participant will be able to explain the following:

- How to perform both key-Off and key-on daily inspections of walkie stackers;
- What the basic operating procedures for a walkie stacker are;
- How the load capacity of a walkie stacker is determined;
- How the center of gravity and combined center of gravity relate to the stability triangle in keeping the walkie stacker stable while traveling or raising loads.

#### **INSTRUCTIONAL CONTENT:**

#### **TRAINING & AUTHORIZATION**

- Quite often, this equipment is called a straddle truck, as it straddles the load; don't let the names confuse you. Walkie stacker, walkie truck or straddle truck means the same thing.
- As with any equipment, you must be trained to operate the equipment and you must be authorized by your company before you operate the walkie stacker.
- The walkie stacker is easy and safe to operate, if you follow the rules. If you fail to follow the rules, this equipment can be dangerous.
- The red button is the safety-reversing switch, which automatically reverses the direction of the walkie stacker should the handle contact the operator or a fixture, wall or other obstruction.
- It's a safety feature to keep a person from being crushed against a wall or other object. The handle also acts as the steering mechanism.

#### DAILY INSPECTIONS

- You must perform a daily inspection at the beginning of your shift, before you operate the equipment.
- This inspection should be thorough. Don't give the walkie stacker a quick once over. It's important to provide a thorough inspection.
- Basically, there are two parts to the inspection. First, with the key in the "off" position, and secondly, with the key "on" and the battery engaged.

#### **Key-Off Inspection**

- With the key off, check to see if the forks are located in place and the correct working width is set.
- Check the wheels for cracks and gouges.
- Make sure the battery plates are in place and secured.
- Pull the handle down and make sure it snaps back to the vertical position when released.
- Check all chains and cables to make sure they aren't loose, frayed or otherwise damaged.
- The take up wheel should be free of binding.
- Check for leaks in the hydraulic system.
- Of course, make sure the battery is properly charged and in serviceable condition.

#### **Key-On Inspection**

• With the key in the on or engaged position, make sure the horn works.

• Check all operational controls such as the raising, lowering and tilting functions; make sure they are all operating properly.

- Check the safety-reversing mechanism.
- Check the brakes. They should work with the handle in the vertical and horizontal positions.
- Make sure the battery disconnect switch is functioning.

#### **BASIC OPERATING PROCEDURES**

• You already know that the only way to operate any equipment is the safe way. For the walkie stacker trucks, the same rule applies.

• Stand close enough to the truck so you have proper control, but don't stand too close.

• Standing too close can result in the wheels of the truck running over feet or legs, causing serious injury to the operator. Keep a safe and practical distance from the equipment.

• There are different methods of slowing down and braking the truck. Pushing the handle all the way down is one method; pushing the handle all the way up is another.

• The throttle twist grips can also control braking. While traveling forward, twisting the grips into reverse also stops the truck. This is known as plugging.

• The rear wheel performs the walkie stacker steering. Most material handling equipment operates differently than automobiles.

• Automobiles steer with the front tires, while material handling equipment generally steers with the rear tires. Rear steering allows the operator to maneuver the machinery in tight spaces.

• Of course, rear steering usually takes a bit more time to learn and become proficient at. Pushing the handle to the right steers the truck to the right and pushing the handle to the left steers the truck to the left.

• Make sure you fully understand how to steer the walkie stacker safely before you operate.

#### **ENGINEERING PRINCIPLES**

- The walkie stacker operates on the straddle principle. This means the load is straddled by outriggers.
- It's the same principle as when lifting a box. Your legs straddle the load and acts as the balancing agent.
- A data plate is mounted on every walkie stacker and should be located near the power handle. The data plate lists the load capacity of the truck as well as other vital information.
- The load capacity is determined by the truck's own physical weight and based on a load center standard of 24 inches. The load center distance is measured from the load bracket to the center of the load.

• A standard industrial pallet is 48 inches by 42 inches. The stringer is generally the 48-inch measurement. Half of 48 is 24.

• This is the basis for all load capacity measurement. It can be stated another way: a 24-inch load center.

• Another determination is based on the extended load center rule. This rule states that for every 12 inches the actual load center increases, the load capacity will decrease by 1000 pounds.

#### **CENTERS OF GRAVITY**

• The center of gravity, or COG, is a balance point of a given object. For the walkie stacker, the center falls near the center of the bottom of the vehicle.

• For a loaded walkie stacker, there is a center of gravity that would fall in the front of the vehicle just in front of the forks, given the mast is aligned vertical and the forks are in a horizontal position. This is called a combined center of gravity.

• When operating your truck, you need to know where this combined center of gravity falls in order to maintain stability.

• To fully understand the center of gravity on stability, let's discuss the stability triangle, as it applies to straddle trucks or walkie stackers. The combined center of gravity is affected by the movement of the truck or load.

• As you pick up a load, the combined center of gravity will shift forward. As you tilt the forks back, this shifts the combined center of gravity back.

• Turning the truck to the right or left also affects the combined center of gravity, shifting it to the right or left. This movement is based on centrifugal force, shifting to the opposite direction of the turn.

• The closer the combined center of gravity gets to the triangle lines, the less stable the truck becomes. If moved outside the lines, the truck will tip over.

- Another important feature of the mechanics or engineering principle is as the forks are raised, the combined center of gravity is raised also, which lowers the stability factor.
- Be aware that the triangle narrows the higher the load is raised. This is called pyramiding, so keep the load close to the ground when moving and raise the load only when absolutely necessary to complete the job.

• The most dangerous maneuver any operator can make is to make a turn with a raised load. If you have knowledge of the center of gravity, the combined center of gravity, pyramiding and the stability triangle, you can fully understand why turning with a raised load is so dangerous.

#### TRAVELING SAFELY

• When working near a loading dock, be extra cautious. Never drive close to the edge of the dock. This could cause a major accident. Be aware of where the wheels of the truck are at all times.

- When loading material onto a truck, make sure the dock plate is properly installed and secure.
- Debris on the floor can cause the walkie stacker to skid or lose control. If you notice debris or other material on the floor, pick it up! By doing this you are making your environment safer for everyone.

• If you fully understand the capabilities and limitations of your truck and apply the proper operating procedures and safety rules, you'll be a professional and your job will be much easier, and of course, much safer.

# WALKIE STACKER SAFETY

# ANSWERS TO THE REVIEW QUIZ

- 1. a 2. a 3. c 4. b 5. b 6. a 7. c 8. a
- 9. b

#### WALKER STACKER SAFETY REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.		
Na	NameDateDate	
1.	You must be authorized by your company before operating a walkie stacker.	
a. b.	True False	
2. ve	During which type of inspection should the handle of the walkie stacker be pulled down to see if it snaps back to the rtical position when released?	
a. b.	The key-off inspection The key-on inspection	
3.	When checking the brakes during inspection, they should work with the handle in the position(s).	
a.	Vertical	
b.	Horizontal	
c.	Vertical and horizontal	
4.	Twisting the throttle twist grips into reverse to stop the truck while traveling forward is known as	
<u>а</u> .	Pressing	
b.	Plugging	
c.	Pushing	
5.	The front wheels perform the steering on the walkie stacker.	
a.	True	
b.	False	
6.	As you pick up a load, the combined center of gravity will shift	
a.	Forward	
b.	Backward	
7.	For every 12 inches a load center increases, the load capacity will decrease by pounds.	
a.	100	
b.	500	
c.	1,000	
8.	What is the most dangerous maneuver a walkie stacker operator can make?	
a.	Waking a turn with a raised load	
b.	Raising a load while moving	
c.	Making a turn with a lowered load	
9.	The narrowing of the stability triangle as the load is raised higher is known as	
a.	Triangling	
b.	Pyramiding	

c. Contracting