

Powered Industrial Trucks / Forklift Fundamentals

Professional downloadable safety training

TRAINING OUTCOME

Explain forklift stability, load center and center-of-gravity basics

AUDIENCE

Forklift / PIT operators

TIME

40-55 min

REFERENCE

29 CFR 1910.178(l)

USE NOTE

Formal instruction component only. Practical training and workplace evaluation by a qualified trainer are required before independent operation.

Start with the hazard. Build the safe decision.

Use this slide to connect the topic to what employees actually see, touch, drive or do.

Forklifts are not cars

Rear-wheel steering changes how the back end swings.

Pre-use inspection

Inspect tires, forks, mast, chains, hydraulics, controls, horn, brakes, lights and safety devices as applicable.

Load handling

Know capacity plate limits and attachments.

ASK THE ROOM

01

Where could this go wrong here?

02

What control keeps us safe?

03

What should make us stop?

What employees should be able to do

Keep the session practical: recognize the hazard, choose the control, know when to stop.

01

Explain forklift stability, load center and center-of-gravity basics

02

Use safe travel, visibility, pedestrian and dock practices

03

Recognize truck-specific and workplace-specific hazards

04

Understand OSHA requirements for practical training, evaluation, refresher training and certification

Forklifts are not cars

Start with what the employee is exposed to.

- Rear-wheel steering changes how the back end swings.
- A high center of gravity and narrow stability triangle make tip-over possible.
- Loads change steering, braking, visibility and stability.

FIELD DECISION

01

Where could this fail?

02

What control do we use?

03

What makes us stop?

Pre-use inspection

Tie every point to a visible action or decision.

- Inspect tires, forks, mast, chains, hydraulics, controls, horn, brakes, lights and safety devices as applicable.
- Remove unsafe trucks from service.
- Know battery/LP/fuel hazards and charging/refueling rules.

FIELD DECISION

01

What changes the risk?

02

What must the employee do?

03

Who needs to know?

Load handling

Tie every point to a visible action or decision.

- Know capacity plate limits and attachments.
- Center and secure the load; tilt only as needed.
- Travel with the load low enough for stability and visibility.
- Never raise or transport people on forks unless using an approved personnel platform and procedure.

FIELD DECISION

01

Where could this fail?

02

What control do we use?

03

What makes us stop?

Travel and visibility

Tie every point to a visible action or decision.

- Look in the direction of travel; travel in reverse when the load blocks the view unless site rules specify another safe method.
- Slow at intersections, blind corners and wet/uneven surfaces.
- Maintain clearances from edges, racks, doorways and overhead hazards.

FIELD DECISION

01

What changes the risk?

02

What must the employee do?

03

Who needs to know?

Pedestrians, docks and trailers

Tie every point to a visible action or decision.

- Separate pedestrian routes where feasible.
- Sound the horn at cross aisles and obstructed locations per site rules.
- Verify dock plates, trailer restraint/chocks and floor capacity before entry.
- Never allow people under elevated forks or loads.

FIELD DECISION

01

Where could this fail?

02

What control do we use?

03

What makes us stop?

Training and evaluation

Tie every point to a visible action or decision.

- Formal instruction must be combined with practical training and workplace evaluation.
- Operators need refresher training after unsafe operation, an accident/near miss, unsafe evaluation, different truck assignment, or workplace change.
- Operator performance must be evaluated at least once every three years.

FIELD DECISION

01

What changes the risk?

02

What must the employee do?

03

Who needs to know?

These are the moments to slow down and regain control.

01

Capacity plate is unreadable or attachment changes capacity

02

Load blocks view and operator continues forward blindly

03

Pedestrian enters the truck path without eye contact or separation

04

Truck has brake, steering, fork, tire or hydraulic defects

What would you do next?

Give the group 30-60 seconds before revealing the recommended response.

A loaded forklift is approaching a blind intersection while a pedestrian is walking in the cross aisle. What should the operator do?

RECOMMENDED RESPONSE

Slow or stop as needed, sound the horn per site rules, maintain control and proceed only after the path is clear and pedestrian separation is established.

DISCUSS

01

What is the hazard?

02

What control is missing?

03

What is the safest next action?

04

What is our site rule?

This is where generic training becomes your program.

Replace examples with your actual equipment, procedures, hazards and expectations.



Train on each truck type actually used and manufacturer instructions



Review traffic routes, pedestrian controls, ramps, docks, trailers and hazardous areas



Conduct hands-on practice under qualified supervision



Evaluate the operator in the actual workplace and document training/evaluation

BEFORE WORK

01

Show the actual procedure

02

Show the actual equipment/task

03

Confirm questions are answered

04

Complete required evaluation

Can the employee apply it?

Written knowledge matters. Safe performance in the real workplace matters more.

☐ Completes pre-use inspection

☐ Uses seat belt/restraint when provided

☐ Maintains low stable travel position

☐ Uses safe speed and controlled turns

☐ Demonstrates safe load pickup/placement

☐ Maintains pedestrian separation and horn use

☐ Safely approaches docks/ramps/trailers

☐ Parks truck with forks lowered and controls neutralized

Use the included evaluation form when hands-on demonstration or workplace verification is appropriate or required.

Knowledge check 1-5

Use the printable test in the course package for employee responses.

1 OSHA PIT training must include:

2 Operator performance must be evaluated at least:

3 A forklift load should generally be carried:

4 If a load blocks forward view, the operator should:

5 Pedestrians should:

Knowledge check 6-10

Use the printable test in the course package for employee responses.

6

A truck with a safety defect should be:

7

Refresher training can be triggered by:

8

The capacity plate matters because it:

9

At a blind intersection the operator should:

10

Passing this course by itself means the employee is OSHA-certified to operate a forklift.

Know the hazard. Use the control. Stop when it is not right.

- 01 Explain forklift stability, load center and center-of-gravity basics
- 02 Capacity plate is unreadable or attachment changes capacity
- 03 Train on each truck type actually used and manufacturer instructions

NEXT STEPS

- 01 Answer questions
- 02 Complete site-specific training
- 03 Complete required hands-on evaluation
- 04 Document attendance/completion

Use this package as a strong training foundation.

Always align the material to current requirements, manufacturer instructions and your own procedures.

Primary reference

29 CFR 1910.178(l)

Training use note

Formal instruction component only. Practical training and workplace evaluation by a qualified trainer are required before independent operation.

BEFORE YOU DELIVER

- ✓ Confirm current OSHA/state-plan requirements
- ✓ Insert your procedures and equipment information
- ✓ Use qualified/competent trainers where required
- ✓ Complete practical/workplace evaluation where required
- ✓ Keep training and authorization records

<https://www.osha.gov/etools/powerd-industrial-trucks/training>