



Forklifts & Powered Industrial Truck Safety

OSHA Requirements Explained

Our Presentation Will Begin Very Soon



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OSHA Requirements Explained

ICW Group Risk Management Services

Today's Presenter:

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Risk Management Consultant



Today's Topic

- OSHA Powered Industrial Truck (PIT) Standard defined
- Classes of Powered Industrial Trucks
- Training Requirements
- Developing a Training Program
- Inspection Requirements
- Keeping Pedestrians Safe
- Safety Training Resources



Forklift Accident Video



Poll Question

How can we prevent similar forklift/PIT accidents in our workplace?

- a) Immediately discipline employees for not following PIT safe work practices
- b) Terminate employees on the spot for operating unsafely
- c) Regularly assess the workplace to identify and control potential PIT hazards
- d) Implement a PIT training program as required by OSHA standards
- e) Both c and d

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PIT Statistics

- On average, **1 fatality every 3 days**
- **95,000** non-fatal injuries every year
- **25%** of all accidents are due to rollovers
- **36%** of related deaths are pedestrians
- **70%** of accidents could be prevented

Powered Industrial Truck Defined

According to OSHA standard 1910.178, a powered industrial truck is defined as a fork truck, tractor, platform lift truck, motorized hand truck, and other specialized industrial trucks powered by electric motors or internal combustion engines.

PIT Standard 1910.178 Defined

- a) Implement PIT training program
- b) Specific to types of PITs
- c) Specific to working conditions encountered
- d) Evaluate operator's performance
- e) Certify that operator is competent to operate PIT

Seven Classes of Powered Industrial Trucks

Class I — Electric Motor Rider Trucks (Cushion or Pneumatic)

Class II — Electric Motor Narrow Aisle Trucks

Class III — Electric Motor Hand Trucks or Hand/Rider Trucks

Class IV — Internal Combustion Engine Trucks (Cushion Tires)

Class V — Internal Combustion Engine Trucks (Pneumatic Tires)

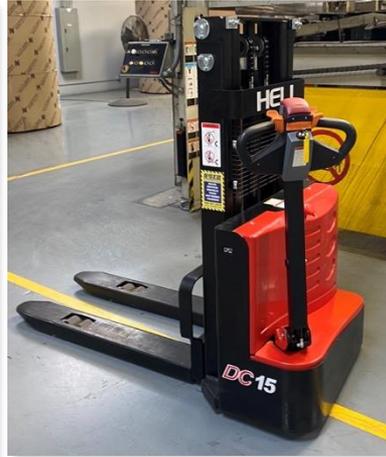
Class VI — Electric and Internal Combustion Engine Tractors

Class VII — Rough Terrain Forklift Trucks

Common PITs Covered Under 1910.178



Propane Powered Forklift -
Pneumatic Tires (Class V)



Electric Pallet Jacks
(Class III)



Electric Powered
Forklifts (Class I)



Order Pickers
(Class II)

Common PITs Covered Under 1910.178



Diesel Powered Forklift
(Class V)

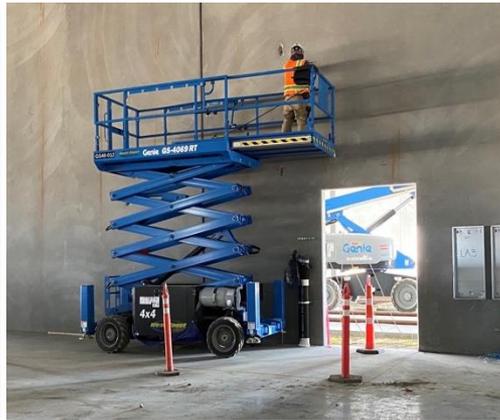


Rough Terrain Forklift
(Class VII)



Electric Rider Pallet Jack
(Class III)

Are These Covered Under 1910.178



Employer Training Requirements

- 1. Ensure operator competency**
- 2. Certify operators trained and evaluated**
 - Based on OSHA Standard 1910.178
- 3. Certification must include:**
 - Name of operator
 - Date of safety training
 - Date of operator evaluation
 - Name and signature of person(s) conducting the training and evaluation

Employer Training Requirements

1. Evaluate operators every 3 years
2. Refresher training needed if...
 - Operator is operating PIT unsafely
 - Accident or near-miss incident occurs
 - Operator is assigned different type of PIT
 - Changes in the workplace
 - Operator fails an evaluation

What Does Certification Mean?

Employer is certifying that each operator...

- Has received required safety training
- Has been evaluated
- Has demonstrated competency

Training Requirements

Who can train and certify my forklift operators?

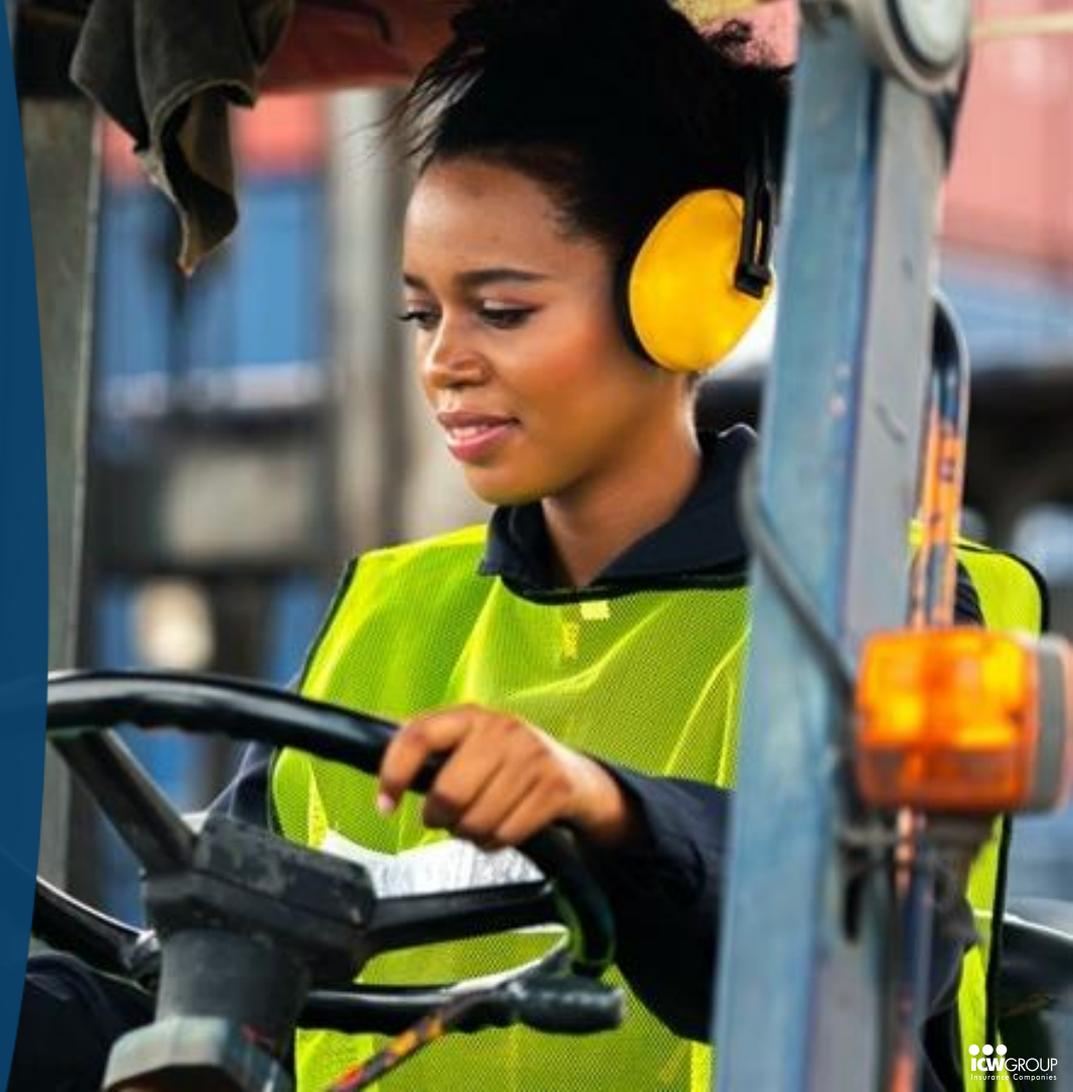
- Must have knowledge
- Must have training
- Must have experience



Training Requirements

Why is specific training required?

- Different work conditions and environments
- PITs have unique characteristics
- Each PIT has different hazards
- Modified or use attachments



Training Requirements

Who is required to comply?

- Employers with forklift operators
- Employers with pedestrians
- General contractors
- Vendors and visitors



Training Requirements

Who must be trained?

- Powered industrial truck operators
- New hires with prior certification?
- Occasional operator?
- Owner of business?



Developing a Training Program

What type of training format should be used?

- Combination of lecture, video, handouts
- Practical demonstration and exercises
- Exam to verify understanding & retention
- Operator practical skills evaluation
- Evaluation should be workplace and forklift specific

What PIT Subjects Must Be Covered?

- All operating instructions
- Similarities and differences to automobile
- Controls and instrumentation
- Steering and maneuvering
- Visibility (including restrictions due to loading)
- Fork and attachment adaptation
- Forklift capacity
- Understanding capacity plates
- Forklift stability
- Forklift inspection and maintenance
- Refueling or charging, recharging batteries
- Operating limitations; and....
- Any other operating instructions
- Operator Owners Manual

What Workplace Specific Subjects Must Be Covered?

- Surface conditions
- Composition of probable loads
- Load stability
- Load manipulation, stacking and unstacking
- Pedestrian traffic
- Narrow aisles and other restricted places of operation
- Operating in hazardous locations
- Operating the truck on ramps and sloped surfaces
- Operating the vehicle in closed or poorly ventilated areas; and....
- Other unique or potentially hazardous environmental conditions that exist or may exist in the workplace

Trainings & Evaluation Recordkeeping

- Maintain written certificates
- Maintain completed evaluation forms
- Maintain copies of completed exams
- Keep on file for 5 years

What's Wrong with this Picture?



PIT Inspection Requirements

OSHA standard 1910.178(q)(7) requires that powered industrial trucks shall be examined before being placed in service and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.

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1910.178(Q)(7)**

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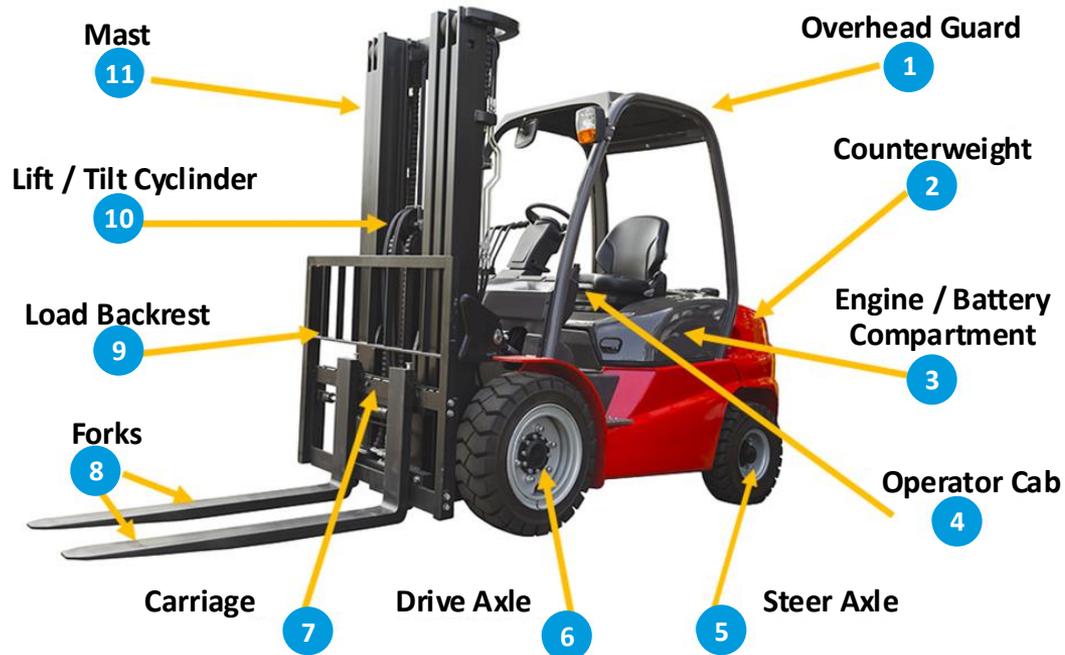
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PIT Inspection Requirements

- Conduct inspections daily, prior to using the equipment
- If using a round-the-clock basis, must be examined before each shift
- Document all corrective action items and maintenance work
- Maintain copies of work orders and repairs
- Develop a checklist specific to the lift

Common Forklift Components

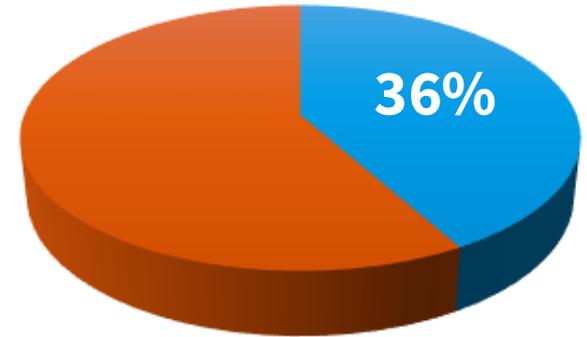


Forklift Pedestrian Accident



Pedestrian Safety Requirements

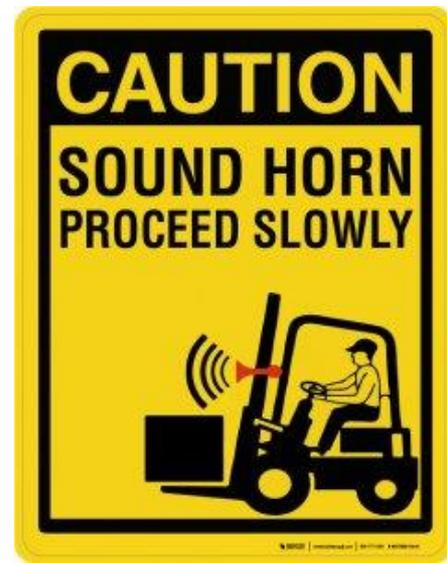
- Operator training on pedestrian traffic areas
- Pedestrian safety training
- Identify pedestrian walkways and forklift pathways
- Use convex mirrors at blind intersections
- Use mirrors on forklifts



36% of fatalities are pedestrians

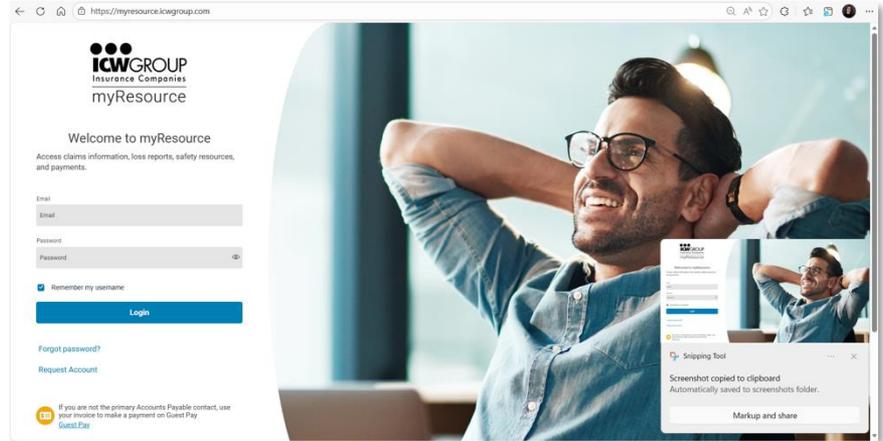
Pedestrian Safety Requirements

- Retrofit forklifts with pedestrian warning lights
- Make sure forklifts have back up alarms
- Enforce use of horns blind intersections
- Use a spotter when driving with a restricted view
- Use forklift warning and caution signs



Forklift Safety Training Resources

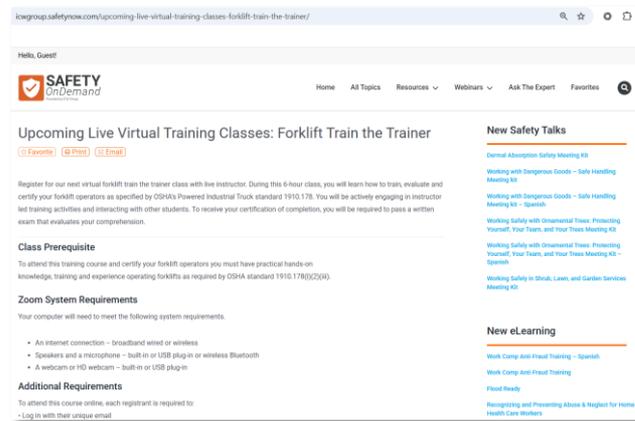
- Safety OnDemand®
 - Search “Forklift Safety” or “Powered Industrial Trucks”
- Streaming safety videos
- eLearning courses
- Safety meeting topics
- FREE with your policy!



<https://myresource.icwgroup.com>

Forklift Train the Trainer Course

- Free forklift train the trainer course
- Instruction based on OSHA 1910.178
- Convenient virtual format
- Next forklift trainer class: **Wednesday, May 13th** 8:00 a.m. to 2:00 p.m. PST
- Additional classes throughout the year
- [Safety OnDemand](#) – **Forklift Trainer Course**

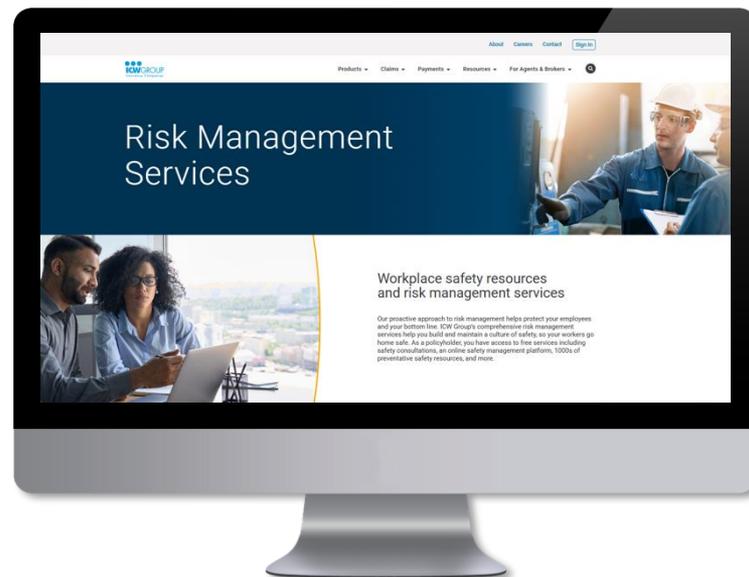


Safety Resources Available to You

Policyholder Website

- Injured Workers Resources
- Safety Webinars on demand
- Safety *OnDemand*®
- And More!!

icwgroup.com/safety



2025 Safety Training Webinar Series – What's Next!

- **March 26** – Top 10 Tips to Lower Your Ex-Mod
- **April 16** – 10 Essential Steps to Prevent Heat Illness
- **April 30** – Employee Mental Health: Strategies for a Resilient Workplace
- **May 14** – Accident Investigations

- **Register at** www.icwgroup.com/webinar

It's not enough to do your best;
you must know what to do,
and then do your best.

-W. Edwards Deming



Questions?

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Thank You!

riskmanagement@icwgroup.com