**Scope and Application**

This procedure applies to all operations where forklifts, other Powered Industrial Trucks (PITs), or jacks are used for the purpose of material handling.

During the movement of products and materials there are numerous opportunities for personal injury and property damage if proper procedures and caution are not used.

This program applies to all powered industrial trucks, hoists, and lifting gear used in material handling. The information in this program shall be used to train prospective industrial truck operators and provide the basis for initial and refresher training.

**Implementation**

Implementation of this procedure is the responsibility of the facility manager.

**Procedure**

**1.0** **Operator Requirements**

1. Ensure that all candidates for powered industrial truck operators meet the following basic requirements:
2. No vision problems that cannot be corrected by glasses or contacts.
3. No hearing loss that cannot be corrected with hearing aids.
4. No physical impairments (including neurological, balance, or consciousness issues) that affect:
5. Perception
6. Vision
7. Physical abilities

**2.0 Training**

1. Training of operators must be done by an experienced operator that is familiar with the company equipment, applications, and layout.
2. Supervise trainees closely.
3. Never allow trainees to operate independently.
4. Trainees must only operate equipment:
5. In a safe area, under continual supervision
6. After they have successfully completed the training program
7. After they are evaluated on their skills with the equipment
8. They are not to be certified unless they clearly demonstrate the necessary skills and abilities.
9. Only organization certified operators are allowed to operate PITs.

* 1. **Periodic Evaluation and Refresher Training**

A. Sufficient evaluation and refresher training must be conducted to assure all operators truly understand and follow training received and proper procedures to operate the powered industrial truck safely. Job Hazard Analyses and Safety Observations can be used to reinforce proper behaviors.

B. A skills evaluation must be performed of each operator's performance on the type of powered industrial truck they will operate. This is to be completed after training, and at least every three years.

C. It is advisable that Safety Observations be done on an ongoing basis as part of a developed Safety Culture.

1. Refresher training is required if any of the following occur:
	1. The operator is involved in an accident or near-miss incident.
	2. The operator has been observed operating the vehicle in an unsafe manner.
	3. The operator has been determined in an evaluation to need additional training.
	4. There are changes in the workplace that could affect safe operation of the truck.
	5. The operator is assigned to a different type of truck.
2. It is advisable that refresher training be done throughout the year, and that it is coupled with ongoing Safety Observations. Any individual with poor behaviors should be pulled from the powered industrial truck responsibilities to assure their safety and that of their co-workers.
3. **PIT Maintenance Requirements**
4. Power-operated industrial trucks must be in safe operating condition or will be removed from service.
5. Copies of the vehicle inspections and owner’s manuals must be kept on the respective gear.
6. All repairs shall be made by authorized personnel to manufacturer standards.
7. Pre-shift, each PIT must be inspected to the manufacturer requirements.
8. Repairs to the fuel and ignition systems of industrial trucks must be conducted in locations designated for such repairs with ignition sources eliminated.
9. Repairs to the electrical system shall have the battery disconnected prior to repairs.
10. Industrial trucks are not to be modified to affect the weight limits of the truck or other safety aspects without the re-certification of the manufacturer.
11. Additional counter-weighting or lift gear not original to the PIT shall not be used unless approved by the manufacturer.
12. Any PIT that has noted deficiencies in the pre-shift inspection shall be removed from service.
13. All PITs and related equipment, storage areas, etc, will be kept in a clean condition, free of:
14. Debris
15. Dust
16. Oil
17. Grease
18. Cleaning is to be done in well ventilated areas with non-combustible cleaners.

**5.0 Safe Operating Procedures and Rules**

1. Certification by [Organization Name] is required before use.
2. Attend refresher training.
3. Any unsafe act results in de-certification and retraining. A new certificate is required.
4. Conduct safety observations.
5. Do not drive sideways on incline.

1. Grades shall be ascended or descended slowly.

2. When ascending or descending grades, loaded trucks shall be driven with the load upgrade.

3. Loads shall be tilted back and raised as necessary to clear the surface.

4. Training and care is to be focused on the transition of the inclines.

1. Keep loads uphill.
2. Keep all clear from fall zone around gear.
3. Ensure trucks, rail cars etc. are checked before entering for load and that gear is secured to prevent it from moving when loading or unloading.
4. Ensure use of stop logs at edges of docks.
5. Maintain designated walkways for pedestrian traffic as well as warning systems and mirrors at blind spots.
6. Assume that pedestrians do not see you.
7. Always keep load upgrade and do not use truck on grades greater than 10%.
8. Keep arms and legs inside operator compartment.

1. Keep all clear from lifting mechanism and loads.

1. Avoid bumps, slippery areas, and rough services.
2. Avoid sudden starts and stops.
3. Ensure clearances for vehicle components, mast, and swing of truck.
4. Handle only stable secured loads.
5. Ensure weight is centered on forks, and that load center and weight are within limits of gear, and that load is against the carriage.
6. Ensure good visibility at all times.
7. Always look behind and beep before backing.
8. Ensure back-up alarms are functional and that they can be heard above ambient noise levels.
9. Always keep loads in a down position when moving.
10. Do daily inspection and correct deficiencies before use.

1. Any safety defects (such as hydraulic fluid leaks; defective brakes, steering, lights, or horn; and/or missing fire extinguisher, lights, seat belt, or back-up alarm) are to be reported for immediate repair

2. Any unsafe gear is to be taken “Out of Service.”

3. Ensure that the horn works and can be heard above ambient noise levels.

1. Always put forks down and set brake when forklift is stopped.
2. Use restraint systems provided.
3. Slow at all transition points and beep.

1. Stop at blind spots and beep before proceeding slowly.

1. Know the weight limits, load centers limits of the equipment and never exceed posted weight limits of:

1. Forklifts

2. Racks

3. Shelves

4. Any other storage areas

1. Never allow riders.
2. Ensure vehicle horn is operative.
3. Lifting personnel:

1. If using the forklift for lifting people, always use an approved work platform provided with guardrails.

2. Make sure it is guarded between the work platform and mast.

3. Attach the work platform to the forks; ensure that fall protection is used in accordance with a Hazard Assessment.

4. Assure that the operator stays with the forklift, and employees are not to travel from point to point in the platform!

**6.0 Hazards**

A. Being caught by moving part or stored energy: A fracture or crushing hazard

1. Use lockout procedures for any maintenance, service and or dejamming work and eliminate stored energy

2. Block mast and forks in the upright position if working with forks elevated

B. Forklift battery changes: Hazards can include exposure to acid, eye injury, fire hazards

1. Wear full eye protection, face shield, chemical resistant apron and gloves, and safety shoes when handling batteries

2. Ensure ventilation is adequate in area

3. Ensure eye wash is functional

4. Ensure no ignition sources in area

5. Ensure no smoking signs are posted and adhered to

6. Wash hands and any contaminated clothing immediately and when finished handling batteries

C. Forklift re-fueling with propane can include diesel or gasoline hazards: flammability, health effects from overexposure including skin drying/ dermatitis, headache, nausea, dizziness, nervous system effects

1. Refer to Safety Data Sheet (SDS). But at a minimum, wear full eye and skin protection.

2. Ensure ventilation is adequate in area.

3. Ensure eye wash is functional.

4. Ensure no ignition sources in area.

5. Ensure no smoking signs are posted and adhered to.

6. Wash hands and any contaminated clothing immediately and when finished handling batteries.

7. Use grounding and bonding procedures for container transfers involving flammables.

8. Use approved cabinets and storage procedures; assure they are locked and secured.

9. Store outside, assuring protected from vehicle traffic, and provided with spill containment.

10. Fuel tanks shall not be filled while the engine is running. Spillage shall be avoided.

11. Spillage of oil or fuel shall be completely cleaned and evaporated, and the fuel tank cap replaced before restarting engine.

12. No truck shall be operated with a leak in the fuel system until the leak has been corrected.

13. Open flames shall not be used for checking electrolyte level in storage batteries or gasoline level in fuel tanks.

14. LPG tanks will be removed in the following order:

a) Shut off service valve, and let engine run down

b) Shut off engine

c) Disconnect tank from hose

d) Unbuckle and remove tank from bracket

15. LPG tanks will be replaced in to following order:

a) Place tank in bracket and re-buckle

b) Reconnect hose to tank and tighten firmly

c) Open valve slowly and assure proper seal

d) NOTE: Federal Law Prohibits dispensing an improper fuel type into any Vehicle or into a non-approved fuel container.

16. In case of LPG Leaks or Tank Ruptures

a) DO NOT start or move the PIT.

b) If fuel hose is leaking, if safe, close the valve immediately and place PIT

c) "Out of Service" until repaired.

d) If tank ruptures, immediately leave the area (at least 50 feet), warn others and, notify management and call 911.

e) Do not re-enter the area until cleared by Management.

D. Slips, falls, and tip overs

1. Keep steps and walking surfaces clear of mud and debris

2. Immediately clean up any hydraulic fluid, fuel, or oil, which is on the steps or walking surfaces

3. Maintain three points of contact when entering or exiting a forklift

4. NEVER jump off a forklift, always step off under control

5. Ensure that all powered industrial trucks will be equipped with:

a) Overhead guard

b) A fire extinguisher

c) Rotating beacon

d) Back-up alarm

e) Seat belts

6. An overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., but not to withstand the impact of a falling capacity load or roll-over.

7 Tilt loads back and carry no more than 6-8 inches from the ground.

a) Loads that restrict the operator's vision will be transported backwards.

8. Travel no faster than 2 mph or faster than a normal walk.

9. Hard hats will be worn by PIT Operators in high lift areas.

10. Aisles will be maintained free from obstructions, marked and wide enough (six foot minimum) for vehicle operation.

11. Lift capacity will be marked on all PITs.

a) Operator will assure load does not exceed rated weight limits, know weight limits and weights being lifted.

12. When un-attended, PITs will be turned off, forks lowered to the ground, key controlled, and parking brake applied.

13. All near misses, incidents and accidents, regardless of fault and severity, are to be immediately reported to Management.

a) Management will conduct an investigation.

14. When lift trucks or other mechanically powered vehicles are being operated on open decks or docks (e.g., decks of ships or barges, or docks), the edges shall be guarded by railings, dockboards, or other means sufficient to prevent vehicles from going over.

15. Loading trucks and railcars

a) Rail cars and trailers will be parked squarely to the loading area and have wheels chocked in place or axles locked as applicable.

* Keys need to be controlled to prevent movement of vehicles.

b) Ensure that wheels are chocked on the downhill side and dock plates are in place and secure if entering a trailer.

c) The flooring of trucks and trailers shall be checked for breaks and weakness before use.

d) The brakes shall be set and wheel chocks to prevent movement.

 e) Fixed jacks may be necessary to support a semitrailer and prevent upending during the loading or unloading when the trailer is not coupled to a tractor.

f) When loading rail cars and trailers, dock plates will be used.

* Operators will assure dock plates are in good condition and properly placed.
* Positive protection shall be provided to prevent movement while dockboards or bridge plates are in position.

g) A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car.

h) Dockboard or bridgeplates shall be properly secured before they are driven over.

* Dockboard or bridgeplates shall be driven over carefully and slowly and their rated capacity never exceeded.

16. PITs shall not be driven up to anyone standing in front of a fixed object.

a) No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty, or within the fall zone.

17. PITs shall not be used for opening or closing freight doors.

18. There shall be sufficient headroom under overhead installations, lights, pipes, sprinkler system (18” minimum).

19. A load backrest extension shall be used whenever necessary to minimize the possibility of the load or part of it from falling rearward.

20. PITs shall not be parked so as to block fire aisles, access to stairways, or fire equipment.

a) Parking closer than 8 feet from the center of railroad tracks is prohibited.

21. All traffic regulations shall be observed, including authorized speed limits.

a) PITs shall be operated at a speed that will permit it to be brought to a stop in a safe manner.

b) Internal speed is to be limited to 2 mph.

c) A safe distance shall be maintained approximately three truck lengths from the truck ahead, and the truck shall be kept under control at all times.

d) Other trucks traveling in the same direction at intersections, blind spots, or other dangerous locations shall not be passed.

e) The driver shall be required to slow down; stop at ANY blind spots; and sound the horn at intersections or other areas where vision is obstructed.

* If the load being carried obstructs forward view, the driver shall be required to break the load up or travel with the load trailing (if safe).

f) Railroad tracks shall be crossed diagonally wherever possible.

g) The driver shall be required to look in the direction of, and keep a clear view of the path of travel.

22. Fast or unsafe operation and horseplay are not permitted.

23. The driver shall be required to slow down for wet and slippery floors.

a) Debris on the surfaces shall be removed and avoided.

24. While turning, speeds must be reduced to a safe level and steering movements performed in a smooth motion.

a) Except when maneuvering at a very low speed, the hand steering wheel shall be turned at a moderate, even rate.

25. Only stable or safely arranged loads shall be handled.

a) Center loads and assure they are within the rated capacity of the PIT.

b) Loads that affect balance shall be adjusted.

26. PITs equipped with attachments shall be operated as partially loaded trucks when not handling a load.

27. Tilting loads forward is to be avoided especially when elevated; except to pick up a load.

a) Elevated loads cannot be tilted forward except when the load is being set over a rack or stack.

b) When stacking or tiering, only enough backward tilt to stabilize the load is to be used.