UNIVERSITY of LOUISIANA LAFAYETTE

Health, Safety and Environmental

P.O. Box 43646 • Lafayette, LA 70504-3646
Office: (337) 482-1840
Fax: (337) 482-5830

Université des Acadiens

Standard Operating Procedure (SOP):
Forklift Operation

Effective Date: 8/4/2025 (revised as needed)
Prepared By: Environmental Health and Safety Office (EHS)
Approved By: Carl Taz Wininger, EHS Director

1. Purpose
To ensure safe and compliant operation of forklifts on university property, protecting personnel, property, and pedestrians.

2. Scope
This SOP applies to all university departments and personnel operating or working around forklifts, including Facilities, Maintenance, Grounds, Shipping & Receiving, and Event Services.

3. Definitions
Powered Industrial Truck (PIT) is a motorized, power-driven vehicle used to carry, push, pull, lift, stack, or tier material. This definition generally includes vehicles that are commonly referred to as high lift trucks, counterbalanced trucks, cantilever trucks, rider trucks, forklift trucks, high lift platform trucks; low lift trucks, low lift platform trucks; motorized hand trucks; narrow aisle rider trucks; high lift order picker rider trucks; and counterbalanced front/side loader lift trucks.

The term PIT does **NOT** include hand trucks that are not motorized; compressed air or nonflammable compressed gas-operated industrial trucks; vehicles intended primarily for earth moving or over-the-road hauling; or farm vehicles, agricultural tractors, and skid loaders equipped with buckets used to move seed/feed/manure/soil/material. However, operators of vehicles that are excluded must be appropriately trained in safe operation.

4. Operator Requirements
- Must be **at least 18 years old**
- Must complete an **OSHA-compliant forklift operator training and certification**
- Must receive **site-specific training** for operating on university grounds
- Refresher training is required **every 3 years**, or sooner after a safety incident

5. Procedure

1. Assuming Initial Operation
    - Before entering the vehicle, the operator must perform the Pre-Use Inspection Checklist (Appendix A attached)
    - Mount PIT, fasten seatbelt, start PIT, Perform operation inspections with motor running
2. Picking Up a Load with a PIT
    - Do not exceed the safe load capacity of a forklift at any time. The rated load limit shall be decreased as necessary to account for load sizes. Do not counterweight a forklift to increase its lifting capacity. (see attachment E for calculation sample)
    - Compensate for loads with an off-center point of gravity. Position the load such that the distance from the front wheels to the load center is minimized, and the heaviest portion of the load is closest to the mast.
    - Position the load in a way that will shorten the load's center of gravity
    - Approach the load squarely and position the forks under the load as far as possible. Lift the load before moving the vehicle but lift only the minimum amount necessary to safely maneuver.
    - Do not lift a load with one fork.
    - No load should be moved unless it is safe and secure.
    - When unloading trucks or trailers, the brakes on the vehicle must be set (locked) and the wheels chocked.
    - No person is permitted to stand or walk under elevated forks.
3. Moving a Load with a PIT
    - PITs should be driven on the right side of the road or aisle-way and operated at a safe speed with due regard for traffic and conditions (slippery surfaces, obstructed vision, cross aisles, etc.).
    - Operators should avoid making jerky starts, quick turns, or sudden stops. The operator is not permitted to use reverse as a brake.
    - The maximum speed allowed is 10MPH outdoors and in uncovered areas and 5MPH for all indoor use
    - The operator must look in the direction of travel and their view should not be obstructed by the load. The operator should turn and drive facing away from the load when their view is blocked.
    - Operators must not drive toward any person who is in front of a fixed object or wall.
    - At blind intersections, the operator should: STOP, SOUND THE HORN, LOOK BOTH WAYS, PROCEED SLOWLY.
    - Operators may not overtake and pass another forklift traveling in the same direction, at intersections, blind spots, or hazardous locations.
    - The forks should not be operated while the forklift is traveling and kept as low as
    - possible when traveling (whether loaded or unloaded). The load should be kept level or slightly cradled (tilted back).
    - When traveling on slopes, keep the heavy end uphill. On a downgrade, the forklift should be driven in reverse, and the forks raised only enough to clear the surface.
    - Use extra care when handling long lengths of bar stock, pipe, or other materials.

- Compressed gas cylinders must be moved only with special pallets designed for this purpose.
- Operators must cross railroad tracks diagonally whenever possible.
- If using a service elevator with a PIT, the operator must: verify that the elevator capacity can support the weight of the lift truck plus the load; confirm that the dimensions of the elevator (width and height) are sufficient to accommodate the PIT and load; approach the elevator slowly and stop at a safe distance before entering, then proceed slowly and squarely; shut off the motor and apply the brakes while on the elevator.
- If operating on ramps or loading docks, verify that the dock board is secure and of adequate capacity; proceed slowly when approaching or leaving; do not turn or park on a ramp or dock board and keep the forks downgrade.

4. Parking a PIT
   - PITs must be safely parked in the designated area when not in use. The controls must be neutralized, power shut off, brakes set, key removed, and the forks secured in the lowest position, flat on the surface, and not obstructing walkways or aisles.
   - A forklift may not be left on an incline unless it is safely parked, and the wheels blocked.
   - Forklifts may not be parked in areas that will block exits, stairways, fire extinguishers or any other emergency equipment.

4.1 Lifting People with a PIT
- A forklift may not be used to elevate a platform or pallet with persons on it, except work platforms specifically designed and marked for this purpose.
- Work platforms must have standard guard rails and toe boards; and must be securely fastened to the forks. Personal fall protection (e.g., full body harness, self-retracting lifeline (SRL), etc.) is required.
- The PIT may be used only to raise and lower a person- it shall not travel with a person on the platform. Order pickers designed to raise and lower the operator while in motion are exempt.

6. Responsibility

A) Administration
- Ensure that responsibilities of these procedures are assigned to individuals within their department
- Actively support the implementation and follow-through of these procedures within their department
- Ensure that adequate funding is available to support these procedures

B) Environmental, Health, and Safety (EHS)
- Maintain PIT support materials (e.g., SOP and web-based training).
- Investigate near misses and accidents involving PITs.
- Advise supervisors and operators, upon request.

C) Managers / Supervisors
- Conduct practical training and operator performance evaluations or designate one or more qualified individuals with appropriate knowledge, training, and experience to perform this function.

- Ensure that all employees under their direction who are designated to operate a PIT are trained, evaluated, and certified prior to independent operation of the equipment.
- Ensure that certification is kept current (e.g., re-evaluation/driving test and refresher training, as applicable).
- Maintain training records. It is recommended that records be maintained for six year or until such time as an employee is no longer assigned to operate a PIT.
- Notify EHS of accidents and near-misses involving PIT operation.
- Ensure that PITs and attachments are appropriate for the use conditions and maintained in safe operating condition. Immediately remove defective equipment from service until repaired or replaced.
- To the extent feasible, reduce operational hazards presented by use location and loads.

D) Operators

- Complete all components of training at the required intervals.
- Conduct pre-operational inspections prior to start of each shift (attachment A and/or C).
- Do not operate a PIT that does not successfully pass the pre-operational checklist.
- Immediately stop operating any defective PIT or attachment and report the situation
- to the supervisor.
- Read the manufacturer's operator's manual. Observe all precautions discussed in training
- and the recommendations of the manufacturer of the PIT.

MAINTENANCE

- All maintenance to be performed by a licensed and approved vendor, as required by the PIT manufacture. All repairs to be coordinated by Facility Management Administration or the EHS Director.

7. Training

Forklift/Powered Industrial Truck (PIT) operators must be trained before independently operating a PIT, and complete refresher training every three years, or sooner if warranted. Initial PIT training consists of three parts:

1. Online Formal instruction
2. Practical training (attachment B)

Evaluation of operator performance

The formal instruction component is achieved when a trainee completes the EHS Forklift Web based training module (Cornerstone training platform via ULINK). Other options include equivalent training provided by the Safety Council, equipment distributors, community colleges, or similar training provider. This training must be approved by the EHS Director.

Practical training consists of instruction regarding workplace specific factors and conditions, PIT specific considerations (e.g., location of controls, name plate information, warnings, manufacturer's operating instructions, etc.), as well as hands-on exercises of typical vehicle

inspections, operations and maneuvers that will be conducted at the specific worksite by the operator. Generally, the trainer will demonstrate proper operation and techniques, followed by the trainee repeating those operations/techniques (see attachment B). This should be with the same or similar equipment that the trainee will be using and in the same or similar location where the employee will be operating the PIT. This is a process that allows the trainee to achieve competency in safe operation of the PIT. Topics for practical training include:

- Specific pre-operational checklist for the equipment used.
- Specific operating instructions, warnings, and precautions as listed in the operator's manual for the specific type of truck the trainee will operate.
- Surface conditions where the PIT will be operated.
- Composition and stability of loads to be carried.
- Load manipulation, stacking, and un-stacking.
- Pedestrian traffic in areas where the PIT will be operated.
- Narrow aisles and other restricted places where the vehicle will be operated.
- Hazardous (classified) locations where the vehicle will be operated.
- Ramps and other sloped surfaces that could affect the vehicle's stability.
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust.
- Other unique or potentially hazardous environment al conditions in the workplace that could affect safe operation.

The evaluation of operator performance portion of training consists of the trainee demonstrating proper and safe operation of the PIT to a trainer. The trainer must have knowledge, training, and experience sufficient to evaluate the trainee's performance. Following successful demonstration of competency, the trainee will be considered "certified" to operate the PIT. A trainee must demonstrate satisfactory operation of the specific type of forklift to be used, in the actual space where the trainee will operate the vehicle (or another space that is materially similar to accurately reflect the conditions and hazards of the actual area of use) and perform the types of tasks with the types of loads that the trainee will be handling. Employees operating more than one style of PIT will demonstrate their skills with each style of truck. A summary of the individual evaluation topics follows include the following items and the use of the Performance Operators Checklist (Appendix B):

- Proper completion of a pre-operational inspection, method of reporting deficiencies.
- Understanding of and adherence to nameplate information
- Smooth and proper operation of truck controls, including safe speeds and maintaining body in the safe zone of the PIT
- Use of attachments
- Observing proper direction of travel and maintaining a clear view of direction of travel and safely navigating intersections and corners
- Proper signaling and observation of pedestrian safety
- Properly approaching, balancing, lifting, maneuvering, traveling with, lowering, stacking, and placing loads
- Proper parking and disengagement of PIT
- Proper battery charging or re-fueling, including proper and appropriate PPE use

Re-training will be required of any operator that has been involved in an incident; a different type of forklift is used; or when the operator has been observed performing unsafe practices involving the lift, and for all others, every 3 years. This will consist of re-observation, using the Performance Operators Checklist (Appendix A).

8. Records Retention

Maintenance, inspection, and training records shall be maintained for equipment and its operators. The following records must be maintained by each department who owns a scissor lift. In addition, EHS should receive copies of all items listed below:

- Work zone inspection documents
- Pre-operation inspection documents
- All training records
- Annual inspection documentation, all maintenance performed, and all operators' manual acknowledgement form

9. Contact Information

- **Environmental Health & Safety Office:**
  - Carl Taz Wininger 337-482-1840 | safety@louisiana.edu
- **University Police/Emergency Services:**
  - 911 or 337-482-6447 | police@louisiana.edu

Appendix A
Pre-Use Inspection Checklist

NSC Lift Truck Operator • Pre-Shift Safety Inspection Checklist

Truck ID #/Model #: _____ Hour Meter Reading: Start _____ End _____

Attachments: _____ Shift: 1____ 2____ 3____

Pre-Shift Safety Inspection	✓ Visual	✓ Operational	Issues/Needs Attention
1. Obvious damage or loose parts			
2. Overhead guard			
3. Bridge and mast			
4. Forks and locking pins			
5. Chains			
6. Tires			
7. Fuel			
8. Wires, hoses, cables and belts			
9. Fire extinguisher			
10. Engine fan belts and wiring			
11. Data plate and load limitations			
12. Placards or warnings			
13. FOPS and ROPS			
14. Outrigger			
15. Hazards			
16. Attachments			
17. Boom extension			
18. Grab handles and steps			
19. Safety belts			
20. Steering			
21. Mirrors			
22. Operating manual			
23. Controls			
24. Gauges			
25. Operation of lift			
26. Unusual noises			
27. Fluids under truck			
28. Brakes			
29. Horn			
30. Lights			

Operator Signature: _____ Date: _____

Appendix B
Performance Observation Checklist

NSC Lift Truck Operator • Performance Checklist Summary

Program date: _____ Operator name: _____

Program name: _____

Program location: _____

	Meets Requirements	Needs Practice
Skill Step		
1. Recognizes lift truck controls		
2. Conducts a thorough pre-shift safety inspection		
3. Conducts a thorough worksite inspection		
4. Reads a data plate accurately		
5. Follows safety guidelines when traveling without a load		
6. Follows steps to pick up a load		
7. Follows safety guidelines when traveling with a load		
8. Follows steps to set down a load		
9. Follows steps to pick up and set down a load in a narrow aisle		
10. Follows steps to shut down a lift truck		
Complete Skills		
Optional Skills		
11. Reads a load chart accurately		
12. Follows safety guidelines for driving on a slope		
13. Follows safety guidelines for loading a tractor-trailer		

Facilitator Signature: _____ Date: _____

Appendix C
POWERED PALLET JACK INSPECTION CHECKLIST

TRUCK ID	MAKE/Model	Operator

Operators are required to inspect their trucks at the beginning of their shift. Record the date/time at the top of the column; For each inspection item, record "OK" if the item is in good and operational condition. Record "NA" if the inspection item does not apply. Record "BAD" if an item requires maintenance or repair before the unit can be safely operated.

Date/Time					
Foot Protection Wear					
Steering Arms					
Horn					
Backup Alarm					
Brakes					
Leaks/Corrosion					
Lift Controls					
Speed Controls Switch					
Emergency Controls					
Safety Signs					
Speed Controls					
Forks					
Load/Wheels/Tires					
Battery					
Gauges & Meters					
Standing Platform					
Items of Concern:					
Corrective Action					

Attachment D
Load Rating Reduction

For symmetrical loads, the center of gravity is at the middle of the load in terms of the load's length, width, and height. The rated capacity of a forklift is generally based on a load that simulates a cube, measuring 48" in all directions with the center of gravity in the middle (24"). The rated capacity of the vehicle must be decreased to accommodate loads that are not symmetrical or exceed the rated load center. Failure to account for load variations with respect to the rated capacity of the PIT increases risk of tip over, loss of steering control, and instability of the load.

If available, use the manufacturer's instructions for reducing load capacities. In the absence of such instruction, follow the procedure described below.

Divide the rated load center by the actual load center and multiply by the stated capacity. For example, consider a forklift with a rated capacity of 5,000 pounds at a 24" (48" cube) load center that will be used to move a load with an actual load center of 28" (56" cube). The estimated load capacity is reduced to 4,285 pounds.

(24/28) (5000) = 4,285