

Rough Terrain Forklift Syllabus

Time: 16 hours

Maximum Class Size: 12

Prerequisites: None

Course Description: The 16-hour LIUNA Training and Education course addresses the safe use of a rough-terrain forklift with a combination of classroom and hands-on training. Topics include safe use and maintenance, safe practices, forklift basics, inspection of a work area, walk-around inspection, safe refueling, and estimating load weight. Students are given time on the equipment to practice start-up procedures, lifting and transporting a load, lifting and landing a load on an elevated platform, shut-down procedures, and navigating through an obstacle course.

Goals/Objectives/Student Learning Outcomes:

- List four unsafe operator practices that can lead to accident. For each unsafe practice, list and describe the safe operating procedure that helps prevent accidents.
- List the personnel that a forklift operator must communicate with while operating the forklift.
- Explain the concept of “center of gravity” and how it affects forklift operation. Identify the center of gravity on a forklift.
- List three factors that will affect the lifting force of a forklift and explain the impact each factor has on safe operation.
- Explain the concept of momentum and the hazards it presents to a forklift operator.
- Identify all the conditions that will affect the traveling and operating speed of a forklift on a jobsite.
- Given a variety of scenarios involving forklift operation, identify the hazards presented and describe at least one method to reduce or eliminate the hazards for each scenario.
- Given picture of rough terrain forklifts, identify straight-mast and extended-reach forklifts and describe the difference between the two.
- Locate and explain the purpose of the forklift’s operator’s manual.
- Explain the concept of load capacity. Given a forklift, locate the load capacity of the machine and explain how to locate the load capacity of any rough-terrain forklift.
- Estimate the weight of several sample loads within 5%.
- Describe two things that determine the speed at which the hydraulic system of a forklift operates.
- List the steps in the pre-start and post-start inspections.

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- Explain the safe procedure for each of the following circumstances when operating a forklift:
 - Carrying a load that obscures vision
 - Traveling on a slope, ramp, or uneven ground
 - Working near people and other vehicles
 - Traveling around blind corners
- Explain and demonstrate correct positioning of the forks to make the load as stable as possible while it is being moved.
- Describe and demonstrate safe work practices for placing a load, including
 - Correct use of outriggers (If available)
 - Placing loads above 10 feet
 - Placing a load on uneven terrain
 - Correct removal of the forks from the load
- Describe the safe work for refueling a forklift
- List and describe four items on the forklift that require regular maintenance
- Know and demonstrate the procedures to follow when parking and/or leaving the forklift unattended.
- Successfully complete a 50-question multiple choice Exit Exam with a score of 80% or above.
- Satisfactorily complete, alone or in a group, 7 performance checklists.

Standards

- 29 CFR 1926.602 (d) (1) Lifting and Hauling Equipment
- 29 CFR 1910.178 Powered Industrial Trucks
- 29 CFR 1910.178 (L) Powered Industrial Truck Training
- CAL/OSHA Subchapter 7 #3668 Powered Industrial Truck Training and Evaluation

Classroom Rules and Procedures

- All classes begin at 6:30 am and end at 3:00 pm
- Upon entering classroom, all participants must sign in and be seated by 6:30 am
- Class will consist of a combination of lecture, video, demonstration, coached group exercises, individual exercises and assessment.
- Students are required to report to class ready to work and maintain the provided PPE

Textbooks/Readings/Materials

- LIUNA Rough Terrain Forklift IG/PG

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- Pallet: 4 or 5 that are of sturdy construction
- Block or brick: at least enough units to provide enough weight on the pallet to make it easier to get the forks in and out
- Scaffold: Suggested enough for 6'6" scaffold and components to construct a fully planked scaffold 1 frame high, and a fully planked scaffold 2 frames high
- Fuel for the forklift
- Oil
- Hydraulic fluid
- Grease gun with grease
- Rags
- Rough Terrain Forklift; at least one in good running condition
- Rough Terrain Forklift 50-question Exit Exam

Personal Protective Equipment

- 12 pairs of gloves
- 12 pairs of Safety Glasses
- 20 pairs of Ear plugs
- 12 hard hats

Course Requirements

To receive credit for the course, participants must:

- Be present for full sixteen hours
- Participate in all classroom exercises
- Pass a written exam
- Pass two hands-on exams

Course Policies

- Participants must be on-time and ready to work.
- Participants must return from breaks on-time.
- Participants must participate in each exercise and assignment
- Participants who are on "light duty" are not allowed to take this course due to the physically demanding requirements.

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Assessment and Grading

Participants will be assessed on the following:

- All written exams must be passed with a score of 80% or above.
- All hands-on exercises are graded on performance and participation. They are pass/fail and must be passed with a score of 80% or above.

Safety

Failure to maintain and use PPE may result in dismissal from the course.