

Forklift Safety Training Programme

Introduction

Forklift operations are a critical part of daily activities in warehouses, factories, ports, and logistics centres across Asia. While forklifts improve productivity, they also present serious safety risks when operated without proper training, awareness, and discipline. Many workplace accidents involving forklifts are not caused by equipment failure, but by unsafe behaviour, poor judgement, and lack of understanding of basic safety principles.

This Forklift Safety Training Programme is designed to equip operators with the knowledge, skills, and mindset required to operate forklifts safely and responsibly. The programme combines practical operational training with an understanding of workplace risks, human behaviour, and accident prevention. It emphasises compliance with safety regulations, protection of people and assets, and the development of a strong safety culture within the organisation.

This programme aims to:

1. Equip participants with essential knowledge of forklift safety principles and operator responsibilities
2. Develop safe and correct forklift operating skills, including load handling and manoeuvring
3. Improve awareness of workplace hazards and pedestrian safety
4. Reduce forklift-related accidents, equipment damage, and operational disruptions

Learning Outcomes

By the end of the programme, participants will be able to:

1. Identify common forklift hazards and apply basic safety controls
2. Perform pre-operational inspections and operate forklifts safely
3. Handle loads correctly and manoeuvre forklifts with confidence
4. Demonstrate safe behaviour when working around people and obstacles

Who Should Attend

This programme is suitable for personnel who are directly or indirectly involved in forklift operations, including:

1. New forklift operators who require foundational safety and operational training

2. Existing forklift operators who need refresher training or competency reinforcement
3. Warehouse, factory, logistics, and port workers who regularly operate forklifts
4. Supervisors and team leaders responsible for overseeing forklift operations and safety
5. Maintenance or operations personnel who work in areas with active forklift movement

Program Methodology

The programme adopts a practical, learner-centred approach that combines theory with hands-on application to ensure real workplace readiness.

1. Classroom-based learning to explain safety principles, legal responsibilities, and accident causes using real industrial scenarios
2. Interactive discussions and case sharing to connect safety rules with daily operational realities
3. Demonstrations by trainers to show correct inspection, driving, and load-handling techniques
4. Supervised hands-on practice to allow participants to apply skills in a controlled and safe environment
5. Practical assessment and observation to verify competency and safe behaviour

Program Outline

Day 1

Session 1: Introduction to Forklift Safety

This opening session sets the tone for safety as a professional responsibility, not just a rule. Participants are introduced to common forklift-related accidents in Asia, including tip-overs, pedestrian strikes, and load falls. The session explains employer and operator duties, legal obligations, and the consequences of unsafe practices, using real industrial examples from warehouses, manufacturing plants, and ports.

Session 2: Types of Forklifts and Workplace Hazards

Participants learn the differences between common forklift types such as counterbalance, reach trucks, pallet stackers, and rough-terrain forklifts. The discussion then shifts to workplace hazards, including narrow aisles, blind spots, uneven floors, ramps, loading bays, and mixed traffic with pedestrians. Emphasis is placed on recognising hazards before incidents occur.

Lunch Break

Session 3: Forklift Components and Stability Principles

This session explains forklift anatomy in practical terms: mast, forks, overhead guard, counterweight, tyres, hydraulics, and warning systems. The concept of the stability triangle is introduced to help operators understand why forklifts tip over and how load height, weight, and movement affect balance. Simple demonstrations and diagrams are used to reinforce learning.

Session 4: Pre-Operational Inspection and Safe Start-Up

Participants are trained on systematic pre-use inspections, covering tyres, forks, chains, brakes, steering, horn, lights, and seat belts. The session includes hands-on inspection using an actual forklift, reinforcing the habit of checking before operating. Common inspection failures that lead to accidents are discussed.

Day 2

Session 5: Safe Driving Techniques and Load Handling

This session focuses on correct driving posture, steering techniques, speed control, and safe turning. Participants learn proper load handling practices, including load rating limits, correct fork positioning, lifting and lowering procedures, and stacking methods. Special attention is given to operating on ramps, slopes, and loading docks.

Session 6: Pedestrian Safety and Traffic Management

Forklifts often operate in shared spaces. This session addresses pedestrian safety, including right-of-way rules, use of horns at intersections, visibility management, and communication through hand signals and eye contact. Real workplace scenarios are discussed, highlighting how most serious accidents involve people, not machines.

Lunch Break

Session 7: Practical Driving Assessment and Coaching

Participants undergo supervised hands-on driving practice in a controlled environment. Exercises include straight driving, turning, reversing, picking up and placing loads, stacking, and parking. Trainers provide immediate coaching, correcting unsafe habits and reinforcing best practices.

Session 8: Incident Response, Assessment, and Certification

The final session covers emergency procedures, including forklift breakdowns, load spills, and collision response. Participants learn how to report near-misses and incidents properly. The programme concludes with a written or verbal assessment and a practical evaluation. Successful participants receive a certificate of completion, subject to organisational or regulatory requirements.