

Fork Lift Truck Safety



1. Introduction

This document examines the safe use of materials handling equipment, focusing on fork lift and other lift trucks, plus other mobile plant and associated specialist equipment.

Key Insurance Risks: Impact Damage & Fire

Poorly loaded, operated and maintained fork lift trucks risk causing impact damage to buildings, racking, stock and serious injuries to the workforce. Impact damage can also be caused to water pipes, especially those forming part of a sprinkler system.

Operators must be aware of the inherent fire hazards of materials being moved and ensure equipment is well maintained, properly loaded and carries a suitable fire extinguisher or fire suppression system.

Understanding the key safety guidelines for operating fork lift trucks and other specialist equipment can reduce the risk of an insurance claim for fire or impact damage.

2. Choosing the right fork lift truck

“A safe truck is one that is suited to its task and location”

Choosing the correct equipment for different operational needs is a key safety requirement.

Begin with a **design assessment**. Review the questions below to establish the key operating requirements of your fork lift truck.

Indoor or Outdoor Use?

- Fork lift trucks are powered by either electricity - by battery, or diesel / LPG engines. Diesel powered trucks are not considered safe for indoor use.
- Assess the terrain: Will the truck be used inside a warehouse, on a loading dock or be driven across rough, uneven outdoor surfaces?
- If the area of use contains flammable vapours, you will require specialist intrinsically safe containment equipment to ensure the safety of truck and operator.

Load Assessment: Size, shape, maximum weight

- Understand the key parameters of what you will be loading to ensure you have the correct equipment for the task. Irregular loads, or loads with uneven distribution may need specialist attachments.

Example: Large rolls of paper not stored on pallets may need to be picked up using paper reel clamps instead of standard forks

Reach and Space

- Determine the width of the narrowest aisle and door/other access points to reduce the risk of impact damage to racking, goods, doorways and building structures
- Know the maximum reach required. Clarify how high the stock is stored and write down the maximum racking height and ease of accessibility. Ensure your fork lift truck is designed to reach the heights you require safely.

Length of operational day – will the equipment be in constant use or for short periods?

- Consider the type of fuel used. Battery powered fork lifts may run low on charge, resulting in the need to allocate time to either recharge or replace the battery.

3. Safety Risk Assessment

A thorough safety risk assessment must be undertaken by a trained person.

This will include:

- The nature and type of environment in which the fork lift truck will be used
- The risk of injury to the operator and others that may be affected by the use of the equipment

The Fork Lift Truck Association has published this 'at a glance'

MANAGEMENT SAFETY

... creating and maintaining a safe working environment is a key function of management ...

Management in this context should cover all levels – from the managing director through to supervisors and shift leaders.

Managers have ultimate responsibility.

Risk assessment is a key tool in the fight for a safe working environment. This includes the layout and condition of the site/facility, the type and specification of equipment used, the maintenance regimes, and the training, monitoring and discipline of equipment operators.

A safe manager....

Understands the tasks to be performed and the risks involved.

- Sees to it that regular inspections of the site and equipment take place.
- Ensures that remedial action is taken to keep the site, facility and equipment in a clean and safe condition.
- Makes sure that work practices are designed to minimise risk.
- Knows that different types of materials handling equipment have different operating characteristics, and that it may be necessary to use different types of equipment for different tasks and/or locations.
- Maintains an awareness of developments in materials handling equipment so that best use can be made of the safest and most appropriate equipment for the task to be performed.
- Ensures that equipment maintenance is carried out in accordance with manufacturers' recommendations and that Thorough Examinations are carried out as required by current regulations.
- Understands and acknowledges the requirement for operator training and the monitoring of skills and attitudes.
- Is aware and understands that, if tasks vary and different equipment is to be used, additional training will probably be required.
- Is able to identify good and bad practice and has authority to take positive action to rectify poor performance as quickly as possible.

- The use and storage of fuel – specifically diesel, LPG and battery charging facilities
- All relevant findings must be recorded and any necessary safety improvements actioned.

ce' advice for all managers and equipment operators.

OPERATOR SAFETY

... a safe operator respects his/her equipment and looks out for co-workers ...

Safe operators take training seriously and maintain high standards at all times.

Safe operators don't try to operate types of equipment they haven't been trained to use – and don't allow untrained colleagues to operate, or mess with, any kind of materials handling equipment.

Safe operators check their truck properly before every shift. They report any defects and won't use equipment that's considered to be unsafe.

A safe operator....

Doesn't take short cuts but observes good practice at all times. In particular they:

- Don't speed.
- Don't overload their truck (and they check with their supervisor if they are unsure).
- Use the parking brakes, correctly, as they have been trained.
- Wear the seat belt (if fitted).
- Keep well clear of pedestrians and potential hazards.
- Slow down when near pedestrians, trucks and other hazards.
- Take particular care in loading bays.
- Respect their truck.
- Look out for their co-workers.
- Safe operators understand that they and others are at great risk if their truck overturns, and will do all they can to avoid this happening.

4. Introduction

The following recommendations apply to ALL equipment:

- **Servicing & Maintenance:** All fork lift trucks should be serviced and maintained by a suitably qualified competent person, in line with the manufacturers' instructions and schedules
- **'Thorough Examination' requirements:** Fork lift trucks do not generally require MOTs, however in the United Kingdom, all lifting equipment must be subject to a regular 'thorough examination' as per the requirements of the Lifting Operations & Lifting Equipment Regulations 1998
- **Owned Equipment:** The business owner is responsible for ensuring the 'thorough examination' is undertaken (by a suitably qualified competent person). The exception to this rule is where the lifting equipment is subject to a short term lease
- **Leased Equipment:** The business owner must ensure the equipment has been subject to such testing by the leasing company. CNA Hardy recommends that a copy of any report/certification in place at the time for each piece of leased equipment must be obtained from the leasing company.
- **People Lifting Equipment:** It's important to note that for equipment or accessories being used to lift people, the regulations are clear in that a thorough examination must be undertaken at least once every six months whereas all other lifting equipment must be examined at least once every twelve months.
- **Fire Safety:** Warehouse keepers/fork lift operators should be familiar with those goods stored and recognise the inherent fire hazards of the materials being moved, ensuring they take special care.

All fork-lift trucks and similar equipment should carry a suitable fire extinguisher or be equipped with a suitable fire suppression system and all drivers should be trained in the use of the fire extinguisher/manual activation of an installed suppression system.

Pre-Shift Safety Check

A responsible person (usually the operator) should carry out a daily pre-use (beginning of each shift) inspection which must include:

- Checking for hydraulic or other oil leaks
- Testing the integrity of fuel hoses
- Checking the electric cable installation
- Ensuring battery connections and that protected covers are correctly in place
- Checking all safety devices are operational and that wheels, tyres, lifting chains, forks, steering and brakes are all in good working condition
- Cleanliness of equipment

Safety Recommendations

Inspection findings must be recorded and there should be a formal procedure for reporting defects to management. All reported defects should be corrected prior to the fork lift truck being returned to operations.

The following points highlight other key areas essential for safe operations:

- Vehicles should only be driven by authorised/trained persons. Driving performance should be monitored and action taken if vehicles are not operated in a safe manner.
- Gangways and aisles should be maintained to facilitate safe truck operations – if appropriate a one way system should be in place. Pedestrian routes should be marked from vehicular routes. Separation can be by means of painted demarcation lines, although barrier rails, which prevent pedestrians from wandering onto vehicle access routes, are preferable.
- Fire doors, compartment walls and other structural elements provide passive fire protection. Consider suitable impact protection barriers to avoid impact damage to these areas

- Storage racking protection barriers should be fitted to prevent or reduce impact damage and costly downtime
- Those facilities which benefit from sprinkler protection should be subject to a detailed assessment specifically focusing on the risk of impact damage to sprinkler heads (particularly those sited within storage racks), range pipes and main installation control valves. Where appropriate, suitable impact protection should be provided.
- Emergency plans should be in place to ensure that any section of the sprinkler system affected by impact can be identified and isolated quickly. A sprinkler impairment process should then be raised and insurers advised until repairs are completed without delay by a competent contractor.

Security Awareness

- All equipment can and should be isolated when not in use by removing ignition keys and keeping them in a secure place, away from the fork lift truck/other equipment (e.g. in an approved key safe, secured to the fabric of the building, (steel) secure cabinet or other secure compartment).
- Security best-practice can prevent the fork lift truck from being stolen or used in the event of burglary at premises and as such could limit or prevent the loss of stock and contents, especially where the stock or contents are bulky, heavy items.

Incorporating the awareness of Management Safety, Site Safety and Operator & Truck Safety into workplace safety practices, will ensure that the risks of fire, explosion and impact damage can be greatly reduced.

This data sheet is for information and risk control guidance only and should not be considered as specialist advice. Further specialist advice may be required in order to implement passive and/or active fire detection and protection measures detailed. CNA Hardy will be pleased to assist you via your insurance broker.

No liability shall be assumed as a consequence of this document. CNA Hardy and its associated companies liabilities will be governed by their policy of insurance in force only. It is the duty of the insured to ensure that the implementation of any risk control measures does not contravene any statutory or local authority regulation.

References:

HSE ACOP L117 Rider-Operated Lift Trucks

<http://www.hse.gov.uk/pubns/books/l117.htm>

Fork Lift Truck Association

<http://fork-truck.org.uk/>

LOLER ACOP. RC11. Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)

<http://www.hse.gov.uk/work-equipment-machinery/loler.htm>

CNA / HARDY

20 Fenchurch Street London EC3M 3BY United Kingdom
Tel +44 (0)20 7743 6800

cnahardy.com

The information contained in this document does not represent a complete analysis of the topics presented and is provided for information purposes only. It is not intended as legal advice and no responsibility can be accepted by CNA Insurance Company Limited for any reliance placed upon it. Legal advice should always be obtained before applying any information to the particular circumstances.

Please remember that only the relevant insurance policy can provide the actual terms, coverages, amounts, conditions and exclusions for an insured.

All products may not be available in all countries.

CNA Insurance Company Limited (company registration number 950) and Hardy (Underwriting Agencies) Limited (company registration number 1264271) are authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (firm reference number 202777 and 204843 respectively). CNA Services (UK) Limited (registered number 8836589). CNA HARDY' is a trading name of CNA Insurance Company Limited and/or Hardy Underwriting Bermuda Limited (which includes Hardy (Underwriting Agencies) Limited) and/or Hardy Underwriting Asia PTE Limited and/or CNA Services (UK) Limited.

The above companies are all registered in England with their registered office at 20 Fenchurch Street, London, EC3M 3BY.

Switchboard: +44 (0)20 7743 6800 Facsimile: +44 (0)20 7743 6801 VAT registration number 667557779.