

Safe use of lift trucks



Lift trucks (powered and non-powered, pedestrian and rider operated) are involved in many fatal and major injuries every year.

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Safe use of lift trucks

This is a topic that requires serious consideration with proper and effective communication, so the importance of safe use and everyone's responsibility is recognised by all workers.

Common scenarios that result in injuries, fatalities and property damage include:

- unsafe reversing;
- speeding;
- overloading;
- using the truck to do something it wasn't designed for (e.g. carrying passengers or lifting people);
- a lack of driver training;
- failure to appropriately assess the risks;
- poor communication and co-operation;
- ineffective (or a lack of) arrangements for segregation of pedestrians and vehicles;
- hazardous surface conditions (on roads, yards, car parks and designated pedestrian routes);
- insufficient information, instruction and training; and
- inadequate vehicle selection, inspection, maintenance and repairs.

Cases of ill health can arise from using diesel trucks in enclosed and confined working areas (allowing fumes to build up and causing breathing problems), as well as poor seating and controls and damaged roadways, which may cause vibration leading to back problems and upper-limb disorders.

Key actions to manage the risks from lift trucks

- Carry out a risk assessment for where the lift truck is used, identifying blind spots and designing traffic routes that minimise interaction between trucks and pedestrians.
 - Make sure the risk assessment is reviewed on a regular basis and whenever the workplace changes.

- Get the right truck for the job. Base your purchasing decisions on findings and conclusions of your risk assessments.
- Maintain all lift trucks regularly, in accordance with the manufacturer's instructions and only by trained, competent persons.
- Maintain seats to minimise unhealthy postures and vibration.
- Have a recorded system for daily inspections so any defects are identified and reported as soon as possible. Where appropriate, the truck should be taken out of action until the defect is corrected.
- Get thorough examinations carried out periodically, along with regular safety inspections, within periods set out by legislation – or recommended following previous examinations.
 - Examine attachments at least once a year. For attachments that carry people, the frequency is increased to every six months.
- Select personnel for training as operators/drivers carefully – keep written records of who is authorised to operate and drive lift trucks.
- Hold regular refresher training for operators/drivers.
- Avoid lift truck routes near vulnerable plant and hazardous areas (e.g. flammable liquid stores) and/or install physical protections (i.e. barriers) for such plant and areas.
- Put speed limits, clear signs and road markings in place (as well as training) along lift truck routes to make drivers aware of hazards.
- Protect drivers against falling objects, collisions and overturning with seat restraints, roll-over protective structures (ROPS), falling object protective structure (FOPS) and canopies.
- Segregate busy lift truck areas/routes from pedestrians and working areas as much as possible. Pay particular attention to barriers, layout, visibility and lighting.
- Set up different entrance and exit points for pedestrians and lift trucks.
- Ensure operating surfaces are strong enough, well maintained and gradients aren't too steep.
- Train all employees on lift truck movements if the truck is used on the road (to load and unload a lorry, for example) and provide a second person to help with traffic (a banksman), as necessary.
- Check with the Driver and Vehicle Licensing Agency (DVLA) what provisions need to be made so that lift trucks can be used regularly on the road for long periods, along with the arrangements required for the drivers.
- Keep keys secure when trucks are not being used.

- Make sure battery charging takes place in well ventilated areas with restricted access and no sources of ignition in close proximity and those responsible for charging the trucks are sufficiently informed, instructed and trained and are provided with suitable personal protective equipment (PPE).
- Refuel combustion engines and replace LP gas cylinders on lift trucks outside the building.
- Check that workers operating high level reach trucks have completed training in the use of the emergency evacuation equipment and such equipment held within the cab gets inspected on a regular basis.
- Ensure that the lift truck is not used within an explosive atmosphere unless it complies with the relevant ATEX directive.
- Do not use forks, pallets or bins to lift a person for work at height; Use properly designed mobile work platforms.

Electric forklift truck battery charging

Recharging electric forklift truck batteries has a number of significant hazards which can, if not suitably controlled increase the risk of fire, explosion, injury or even death.

Battery charging often takes place at night while the building is empty which means faults in charging equipment may not be detected until there is a fire, and by then the damage has been done. In addition to fire risks you also need to consider other health and safety hazards for your employee's protection, including electrocution and the handling of battery acid.

Here are some of the key actions you should look at to reduce and manage forklift truck battery charging risks.

Key actions for safe forklift truck battery charging

Health and safety

Make sure your health and safety risk assessments:

- are up to date, suitable, sufficient and completed by a competent person.
- include all risks, such as fire, explosion, acid burns, acid fume inhalation, manual handling, electrocution and impact by lift trucks or other vehicles.
- consider specific obligations under health and safety regulations including:
 - The Dangerous Substances and Explosive Atmospheres Regulations (DSEAR) and Dangerous Substances (Notification and Marking of Sites) Regulations (NAMOS) for areas where an explosive atmosphere may be present
 - The Control of Substances Hazardous to Health Regulations (COSHH), for battery acid
 - The Electricity at Work Regulations for the risks from electrical equipment.

Testing and maintenance

- Include charging units in a documented system for periodic inspection, testing and maintenance schedule.
- Make sure the fixed electrical installation supplying the charging areas is inspected and tested periodically by a competent electrical contractor.
- Only use and charge the battery according to the manufacturer's instructions.

People and training

- Ensure all employees are aware of all the hazards identified, and have been trained and are provided with all the necessary equipment to work safely.
- Provide safe systems of work (SSOW) documentation for all dangerous activities. Make sure you base the SSOW on your obligations under relevant regulations and applicable HSE guidance.
- Make sure you record all the training you run and ask employees to sign to acknowledge they attended.
- Review your first aid assessment to make sure it covers all risks identified.

Location

- Review your fire risk assessment to make sure the area is suitable for battery charging and that, it is stored in an enclosure that has a fire resistance to at least 120 minutes as a minimum, preferably a detached outbuilding.
- Ventilation of the charging area needs to be enough to keep hydrogen below its lower explosive level (LEL). Where there is a significant risk of hydrogen gas, suitable gas detectors should be considered.
- Provide and maintain suitable fire extinguishers and train staff in correct use of them.
- Make sure battery charging areas are protected by guard rails and floor markings, providing 2 metres of clearance.
- Keep battery charging area free of combustibles and display suitable signage.