

What Equipment is Covered by the Regulations?

Lifting equipment includes any equipment used at work for lifting or lowering loads, including attachments used for anchoring, fixing or supporting it. The Regulations cover a wide range of equipment including, cranes, forklift trucks, lifts, hoists, mobile elevating work platforms, and vehicle inspection platform hoists. The definition also includes lifting accessories such as chains, slings, eyebolts etc.

Why is Lifting Equipment Safety Important?

Working with any machinery can be dangerous because moving machinery can cause injuries in many ways:

- People can be hit and injured by moving parts of machinery or dropped or ejected material. Parts of the body can also be drawn in or trapped between rollers, belts, chains and pulley drives;
- Sharp edges can cause cuts and severing injuries, sharp-pointed parts can stab or puncture the skin, and rough surface parts can cause friction or abrasion;
- People can be crushed both between parts moving together or towards a fixed part of the machine, wall or other object, and two parts moving past one another can cause shearing;
- Equipment or attachments can become unreliable and develop faults due to poor or no maintenance, or machines may be used improperly through inexperience or lack of training;
- Parts of the equipment may fail and loads may drop.

Before You Start

Before you start using any equipment you need to think about what risks may occur and how these can be managed.

You must:

- Check that it is complete, with all safeguards fitted, and free from defects.
- Produce a safe system of work for using and maintaining the equipment. Maintenance may require the inspection of critical features where deterioration would cause a risk. Also look at the residual risks identified by the manufacturer in their information/instructions provided with the equipment and make sure they are included in the safe system of work.
- Make sure the equipment has been installed properly, is stable and is not in a location where other workers, customers or visitors may be exposed to risk.
- Make sure you have chosen the right equipment for the job.

Make Sure the Equipment is:

- Safe for any work that has to be done when setting up, during normal use, when carrying out repairs for breakdowns or faults, and during planned maintenance;
- Properly switched off, isolated or locked-off before taking any action to remove blockages, clean or adjust the equipment.

Other Things you Should Consider

- Make sure control switches are clearly marked to show what they do.
- Have emergency stop controls where necessary, e.g. mushroom-head push buttons within easy reach.
- Make sure operating controls are designed and placed to avoid accidental operation and injury. Use two-hand controls where necessary and shroud start buttons and pedals.
- Do not let unauthorised, unqualified or untrained people use lifting equipment – never allow children to operate or help with lifting equipment. Some workers, e.g. new starters, young people or those with disabilities, may be particularly at risk and need instruction, training and supervision.
- Adequate training should ensure that those who use the equipment are competent to use it safely (they have the necessary skills, knowledge and experience), and are physically suited to the task.
- Make sure the work area around the equipment is kept clean and tidy, free from obstructions or slips and trips hazards, and well lit.

Dos and Don'ts of Equipment Safety

As the duty holder, you should make sure that all employees likely to use lifting equipment, understand and follow these dos and don'ts:

Do...

- ✓ Check the equipment is well maintained and fit to be used, i.e. appropriate for the job, working properly and all the safety measures are in place;
- ✓ Make sure all parts, including attachments, can accommodate the load weight;
- ✓ Use the equipment properly and in accordance with the manufacturer's instructions;
- ✓ Make sure employees are wearing the appropriate protective clothing and equipment, required for that machine, such as safety glasses, head protection and safety shoes.

Don't...

- ✗ Use equipment that has a danger sign or tag attached to it. Danger signs must only be removed by an authorised person who is satisfied that the equipment or process is now safe;
- ✗ Remove any safeguards, even if their presence seems to make the job more difficult;
- ✗ Wear dangling chains, loose clothing, rings or have loose long hair that could get caught up in moving parts;
- ✗ Distract people who are using equipment.

Safe Lifting by Machine

Safe lifting needs to be properly planned by a competent person, appropriately supervised and carried out safely. Any equipment you use must have been properly designed, manufactured and tested. Think about what risks there may be and how they can be managed.

For example:

- Damage or deterioration of the equipment or attachments caused by wet, abrasive or corrosive environments;
- Trying to move weights that are too heavy and exceed the load limit of the machine;
- Equipment failure;
- Untrained workers planning the lift or using the equipment;
- People being struck by moving parts of the equipment or by things falling.

Don't forget maintenance.

Factors you Should Consider

- What are you lifting, and what problems does it present?
- How heavy is it, and is this within the safe limits for the lifting gear?
- Where is its centre of gravity?
- How will you attach it to the lifting machinery?
- Who is in control of the lift?
- Could you rehearse the lift if necessary?

Dos and Don'ts of Lifting Safely**Do:**

- ✓ Use only certified lifting equipment, marked with its safe working load, which is not overdue for examination;
- ✓ Keep the reports of thorough examination as well as any declarations of conformity or test certificates;
- ✓ Make sure the load is properly attached to the lifting equipment. If necessary, securely bind the load to prevent it slipping or falling off;
- ✓ Before lifting an unbalanced load, find out its centre of gravity. Raise it a few inches off the ground and pause there will be little harm if it drops;
- ✓ Use packaging to prevent sharp edges of the load from damaging slings and do not allow tackle to be damaged by being dropped, dragged from under loads or subjected to sudden loads;
- ✓ When using jib cranes, make sure any indicators for safe loads are working properly and set correctly for the job and the way the machine is configured;
- ✓ Use outriggers where necessary;
- ✓ When using multi-slings make sure the sling angle is taken into account;
- ✓ Have a responsible slinger or banksman and use a recognised signalling system.

Don't...

- ✗ Use unsuitable equipment, e.g. makeshift, damaged, badly worn chains shortened with knots, kinked or twisted wire ropes, frayed or rotted fibre ropes;
- ✗ Exceed the safe working load of machinery or accessories like chains, slings and grabs. Remember that the load in the legs of a sling increases as the angle between the legs increases;
- ✗ Lift a load if you doubt its weight or the adequacy of the equipment.