

Safety & Wellbeing Guidance Document

GD18 – Lifting Operations

E-mail <u>healthandsafety@northlan.gov.uk</u>

Lifting Operations - A Guide to LOLER (Supporting AS8 – Work Equipment)

1. Introduction

The Lifting Operations and Lifting Equipment Regulations (LOLER) apply in all work premises and work situations subject to the Health and Safety at Work etc. Act 1974. The Regulations replaced most of the existing law relating to the use of lifting equipment. The Regulations are aimed at equipment such as cranes, lifts and hoists, and components including chains, ropes, slings, hooks, shackles and eyebolts. Examples of equipment covered include a passenger lift, a dumb waiter, a vehicle inspection hoist and a scissors lift. There is also an important link with the Provision and Use of Work Equipment Regulations (PUWER) which apply to all work equipment, including lifting equipment. AS8 – Work Equipment provides further information on the implications for the Council of PUWER.

2. Suitability of Lifting Equipment

Lifting equipment needs to suitable and appropriate for the task in hand. This includes:

- Need to consider ergonomic risks when selecting lifting equipment.
- Material of manufacture needs to be suitable for conditions of use.
- Means of access/egress need to be safe and suitable.
- Need to minimise risks from slips, trips and falls from any part of the lifting equipment (e.g. cover or fence any floor openings, suitable edge protection where there is a risk of falling more than 2m, or less then 2m where there are other relevant risk factors involved).
- Adequate protection for operators (from adverse environmental conditions).
- Where affected by high wind, need to fit devices to detect dangerous situations (most commonly this would be anemometer).

3. Strength and Stability

Any equipment intended for use in lifting operations must have adequate strength for the proposed use to include an appropriate factor of safety against failure. The equipment must also have adequate stability for its proposed use and where appropriate, sufficient resistance to overturning must be provided prior to the equipment being used. Other factors to consider include:

- Mobile lifting equipment with pneumatic tyres to be inflated to the correct pressure with a means to check this built into the safe system of work.
- Where there is a significant risk of overloading, need to provide devices such as rated capacity indicators and limiters.

4. Lifting Equipment used for Lifting Persons

It is necessary that any equipment used for raising/lowering people should be specifically designed for the purpose. There are some very limited exceptions but even with these all necessary precautions to ensure safety (including supervision) must be taken – speak to your Service Health and Safety team prior to use of non standard equipment. Such equipment may include lift trucks, telescopic handlers and cranes.

There are a few considerations when it comes to utilising equipment to lift or lower people these include:

- Persons being carried (e.g. in a lift car) should be protected from being injured by something outside of it (i.e. fully enclosed when in use).
- Persons working from a carrier need to be protected by suitable edge protection; floor to be slip resistant.
- Lifts cars to have devices to prevent free-fall, independent of the means of suspension of the car.
- Where practicable, other carriers to have devices etc. to prevent the carrier falling in the event of the failure of the primary means of support.
- In the event of malfunction, persons being lifted must not be exposed to danger; and
- A reliable means of rescue must be available (incorporating means to summon assistance, emergency means of lowering the carrier or self-rescue equipment).

5. Position & Installation of Lifting Equipment

Lifting equipment must be positioned or installed in such a way as to minimise the risk of a person being struck or the load moving in an uncontrolled manner. There is a minimise the opportunities for loads to be lifted over people and prevent crushing of people during the operation.

The path of travel (where fixed) should be protected by suitable enclosure. Wherever possible, hooks and other similar devices used for lifting should have either safety catches fitted or be shaped to prevent the accidental displacement of the sling etc. Where 2 or more items of lifting equipment are used they, or their loads, should be prevented from coming into contact with each other.

Suitable gates must be provided at any access/egress points to any hoistway or shaft enclosure; also fitted with efficient interlocking.

6. Marking of Lifting Equipment

Lifting machinery and accessories need to be marked with their safe working load (SWL). Where it is not practicable to mark the equipment itself, a coding system should be used to provide the user with the SWL (e.g. colour coding, label). This also applies where the SWL is dependent upon varying configurations (e.g. forklift truck fitted with attachments).

Where a significant hazard arises from the use of the machinery it should be provided with appropriate equipment or devices such as rated capacity indicators/limiters.

Accessories for lifting include single item (e.g. a shackle) or an assembly of items (such as a lifting beam and slings). Accessories include slings, shackles, swivel or eyebolts, clamps, lifting magnets, vacuum lifters and lifting beams.

Any carrier of persons should display the maximum number of persons to be carried in addition to the SWL.

7. Organisation of Lifting Operations

Lifting operations need to be:

- properly planned;
- appropriately supervised; and
- carried out in a safe manner.

The person planning the operation should have adequate practical and theoretical knowledge and experience of planning such operations.

The plan must address:

- the risks identified;
- the resources required; and
- the procedures and responsibilities involved.

Where two or more items of lifting equipment are used simultaneously to lift any load then a written plan should be drawn up and applied.

Proper planning is a combination of:

- (i) **initial planning** to ensure that the equipment is suitable (with regard to consideration of the load to be lifted, its weight/shape/centre of gravity/availability of lifting points), its travel, frequency of use, environment of use, personnel available and their knowledge, training and experience), and
- (ii) **planning of individual lifting operations** for routine operations this will normally be a matter for the people using the equipment (e.g. the fork lift truck operator).

For routine operations, an initial plan may only be required once but it may need review occasionally to ensure it is still valid (e.g. forklift trucks in a warehouse). For complex operations a plan may be needed each time it is carried out.

Supervision should be proportionate to the risk and determined by the nature of the work and the competence of the personnel involved. Where practicable, loads should not be carried or suspended over areas occupied by persons. Where this is not practicable, need to establish a safe system of work to minimise the risk to persons who may need to be below the load.

Operators of lifting equipment must be able to see the full path of the load or have a responsible person with an appropriate means of communication to guide him/her.

Lifting accessories must be compatible with the load and used in a safe manner. The person attaching or detaching the load (or some other authorised person) must give their authorisation before the equipment is operated. Lifting equipment must not be used in the open air where weather conditions could affect the integrity of the equipment or expose persons to danger. Lifting equipment should not be used in a manner likely to cause it to overturn. Steps should also be taken to minimise risks from "proximity"

Hazards (e.g. overhead power lines, other equipment/structures, racking) would be identified through a risk assessment process. In some circumstances an appropriate traffic management system would be expected

Where appropriate, the safe working load (SWL) should be reduced to take into account the environment and mode in which it is being used (termed "de-rating"). Examples include using a carpet boom on a fork lift truck and the way a sling is attached to a load (i.e. the angle of its legs).

Employees should be given appropriate training and instruction. Lifting accessories must be stored in conditions that do not lead to damage or deterioration.

8. Thorough Examination & Inspection

Issues involved include:

- (i) Competent person this should be someone with appropriate practical and theoretical knowledge and experience of the particular lifting equipment. Should be independent and impartial.
- (ii) Thorough examination equipment which requires a thorough examination should be identified and thoroughly examined as required. The risks arising from failure will determine how thorough the examination needs to be.

Thorough examination may be needed at several points in the life of lifting equipment. Before you use any item of lifting equipment for the first tine, unless you have received physical evidence that a thorough examination has been carried out and it is safe to use, it should be thoroughly examined by a competent person.

LOLER requirements are:

- The initial thorough examination. In the case of new equipment, the 'thorough examination' is considered to have been carried out by the manufacturer or supplier and confirmed in the Declaration of Conformity.
- A thorough examination is required after substantial or significant modification or repair.
- Examinations will also be required when equipment is installed in a new location or a degree of reconfiguration has taken place.

9. Reassessments/inspections:

The lifting equipment should be thoroughly examined at intervals specified in the Regulations (see below) or shorter intervals if the competent person considers this appropriate, or in accordance with the intervals specified in the examination scheme for the equipment. (the specified period and examination scheme approaches respectively).

Some specific time periods exist and are summarised as:

- (i) lifting equipment for lifting persons, or an accessory for lifting, AT LEAST EVERY SIX MONTHS.
- (ii) other lifting equipment, AT LEAST EVERY 12 MONTHS.

The examination scheme may be drawn up by any competent person. The scheme should identify and specify which parts should be thoroughly examined, the intervals between examinations and, where appropriate, those parts that need to be tested. The competent person should be informed of any changes in the use of the equipment that may affect the examination scheme.

Different items or parts of the lifting equipment may be thoroughly examined at different intervals. The time between thorough examinations should be reviewed by the competent person periodically.

Examples of equipment likely to require a thorough examination include:

- overhead cranes and their supporting runwaysl;
- patient hoists;
- motor vehicle lifts;
- vehicle tail lifts and cranes fitted to vehicles;
- a building cleaning cradle and its suspension equipment;
- goods and passenger lifts;
- telehandlers and fork lifts;
- lifting accessories;
- stair lifts.

The frequency of the examinations is led by the risk assessment process (not to exceed the maximum timescales outlined above). The examination should include, where appropriate, visual checks and functional tests. The persons who determine the nature of the inspections required and carry out the inspections must be competent.

10. Transfer of Equipment

Lifting equipment must not leave an establishment or (if obtained from the undertaking of another person) be used on Council business unless it is accompanied by physical evidence (e.g. a paper copy of the last examination report) that the last thorough examination required has been carried out.

11. Reports & Defects

When undertaking a thorough examination the assessor is required to notify the head of establishment of any dangerous defects . Whilst this is likely to be provided on a verbal basis a formal notification will take place in writing and:

- must be made as soon as is practicable (containing information specified in Schedule 1 of the Regulations) to the employer and any person from whom the equipment has been hired or leased.
- where the defect involves an existing or imminent risk of serious personal injury, a copy of the report must be sent as soon as is practicable to the relevant enforcing authority. Where the equipment is hired or leased, this will be the HSE, otherwise it will be the enforcing authority for the premises.
- The employer must ensure that the lifting equipment is not used before the
 defect is remedied, or after a time specified in a report under Schedule 1 and
 before the defect is remedied. Inspection- any dangerous defects need to be
 notified to the employer forthwith by the competent person
- as soon as practicable, the competent person must make a record of the inspection in writing.

12. Keeping of Information

Employers need to keep the EC declaration of conformity relating to lifting equipment (where received) for so long as the equipment is operated. Reports of thorough examination of lifting equipment (but not an accessory for lifting) must be kept until use of the equipment ceases.

Reports of thorough examination of an accessory for lifting should be kept for two years after the report has been made. Other requirements relating to the keeping of records apply to where the safety of lifting equipment depends on installation conditions and where there is exposure to conditions causing deterioration.

The reports, or copies, should normally be stored at the premises where the lifting equipment is being used.

Appendix 1

Lifting Operations and Lifting Equipment Regulations

LOLER CHECKLIST		
1	Do you carry out any lifting operations or have any lifting equipment subject to LOLER?	YES / NO
2	Do you ensure that the equipment is:	
а	Suitable.	YES / NO
b	is of adequate strength and stability.	YES / NO
С	if used for lifting persons meets specified safety criteria	YES / NO
d	safe as regards position and installation	YES / NO
е	suitably marked with the safe working load	YES / NO
3	Are lifting operations properly planned, appropriately supervised and carried out in a safe manner	YES / NO
4	Is your lifting equipment covered by a scheme of thorough examinations?	YES / NO
5	Where operators face a significant risk, is lifting equipment subject to suitable inspections?	YES / NO
6	Are reports/defects dealt with promptly and appropriately?	YES / NO
7	Do you keep relevant records for appropriate periods of time?	YES / NO

Comments/Actions