



# LOLER: How the Regulations apply to forestry

## Agriculture Information Sheet No 29

### Introduction

This information sheet gives advice to people working in forestry to help them understand the requirements of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). These requirements came into force on 5 December 1998.

The requirements of LOLER apply to employers, the self-employed and people in control of or managing operations which involve lifting.

LOLER is aimed at ensuring that all lifting operations are properly planned, that lifting equipment is used in a safe manner and that, where necessary, lifting equipment is thoroughly examined at suitable intervals by a competent person.

This information sheet *does not* include all of the detail of the Regulations. It aims to provide guidance **on mobile forestry machines which lift as part of their function.**

Details of the complete LOLER Regulations, Approved Code of Practice and Guidance can be found in the 'References' section.<sup>1</sup>

### Other key legislation

LOLER has links with other health and safety legislation which you need to consider when applying the Regulations.

### Management of Health and Safety at Work Regulations 1999 (MHSWR)

The MHSWR require a risk assessment to be carried out to identify the nature and level of the risks associated with a lifting operation. Factors that you need to consider include:

- the type of load being lifted;
- the risk of it falling and striking a person;
- the risk of the lifting equipment striking a person;
- the risk of the lifting equipment failing or falling over in use.

You should assess the risks for each type of lifting equipment and the way it is used in your business, and

take action to control the risks. Risks from lifting operations identified by the risk assessment should be eliminated, or reduced to an acceptable level by applying LOLER.

### Provision and Use of Work Equipment Regulations 1998 (PUWER 98)

PUWER 98 applies to all work equipment including lifting equipment. Under PUWER 98 you are required to select suitable work equipment in terms of:

- its construction and design;
- where it is to be used; and
- the purpose for which it is to be used.

### Lifting Operations and Lifting Equipment Regulations (LOLER) 1998

#### What is lifting equipment in forestry?

Any equipment that lifts or lowers loads, including:

- processing machines that lift as part of their function, such as tree harvesters, bed processors;
- extraction machines that lift as part of their function, such as cable cranes;
- machines fitted with log loaders, such as forwarders and clambunk skidders.

#### What is not lifting equipment in forestry?

Wire rope skidders are not considered to be lifting equipment under normal conditions of use.

The three-point linkage on a forest tractor will not be considered as lifting equipment if used to lift implements and machines designed to be operated as such on a tractor.

### Strength

LOLER requires you to make sure that your lifting equipment will be strong enough for its proposed use. This should not be a problem for forestry machines when used for their normal design purpose, ie handling trees and timber. When used for other purposes you should assess that they are strong enough for the job. This would include activities such as:

- lifting grab tanks for fuel, oil or urea;
- lifting items with chains, slings or hooks;
- lifting unusual loads such as pipes for culvert building etc.

### **Stability**

In the same way, LOLER requires you to ensure that your lifting equipment will not collapse or overturn when working. The risk of this happening during forestry operations can be reduced by:

- selecting equipment appropriate for the products to be handled given the slope and terrain of the forestry work site;
- training operators in the limitations of the machine;
- planning the harvesting pattern and extraction routes to avoid lifting on side slopes;
- ensuring tyres are inflated to the correct pressure;
- using stabilising equipment such as outriggers and articulation brakes/locks;
- locating cable crane winch units on level ground with suitable points for anchoring;
- selecting trees of adequate strength with suitable points of anchorage to rig cable cranes;
- selecting firm and level areas for timber stacks.

The load and anything attached to it should also be of adequate strength. This would, for example, apply to the bar on a grab tank designed to be clasped by the grapple of a log loader.

### **Lifting equipment for lifting people**

See the HSE information sheet on LOLER and arboriculture (AIS30<sup>2</sup> available free from HSE Books).

### **Positioning and installation**

Lifting equipment should be positioned and installed to reduce to as low as reasonably practicable the risk of the equipment or the load striking people or the risk from the load drifting, falling freely or being released unintentionally.

Lifting equipment should be positioned to minimise the need to lift loads over people. Check that:

- cable cranes are located so that operators and others are not exposed to unacceptable risks from the crane, the loads carried by the crane or by secondary lifting/processing operations at the landing area;

- where timber is being lifted on or near areas to which the public have access, effective measures have been taken to prevent unauthorised access to the work area.

Lifting equipment should be fitted with suitable devices to minimise the risk from the load falling freely. Make sure that:

- cable cranes extracting downhill have a suitable device to protect against the uncontrolled descent of the load if the hauling cables are overloaded (for example, an emergency control which lowers the skyline or a suitably rated safety stop between the carriage and the haul-back line);
- chokers on cable cranes are self-tightening or can be adjusted to keep the load securely attached.

### **Marking of lifting equipment**

Information on the safe working load of any machine or accessory used for lifting should be available to the operator.

Where lifting machines have a fixed configuration, the safe working load (SWL) should be marked on the machine.

Where the SWL depends on the machine's configuration, then the operator will need information to keep both machine and loads within the safe working limits for any particular configuration.

- Cable crane operators should have a chart showing the safe working load of the machine for the rack length depending on the strength of the cables used on the machine (these calculations should be discussed and agreed with the chokerman before work on the rack starts).
- Operators of equipment fitted with log loaders should have a chart or diagram (clearly visible at the operating position) that shows the SWL for any radius of the loader such as a safe working load plate or a load radius diagram.

Accessories should be marked with any information needed for their safe use. The use of labels or colour coding is acceptable. Examples of this in forestry include:

- where polypropylene chokers of different strengths are used they will need to be distinguishable from each other;
- slings, shackles etc used in the rigging and support of cable cranes should have their SWL marked.

### **Organisation of lifting operations**

Lifting operations should be properly planned, appropriately supervised and carried out in a safe manner. It is particularly important that:

- people planning a lifting operation should have adequate practical and theoretical knowledge and experience of planning similar lifting operations;
- you organise the work so that, where practicable, loads are not carried or suspended over people;
- where possible people should not walk or stand under loads that have been left suspended;
- your workers have appropriate training and instructions so that they can ensure that lifting equipment is safe to use.

### **Thorough examination**

Lifting equipment may need to be thoroughly examined:

- when it is put into service;
- following major refurbishment or repair;
- after installation at a new location; and
- at suitable intervals to detect deterioration arising from wear and tear.

(NB Initial thorough examination is not required where the machine has an EC declaration of conformity less than 12 months old.)

Thorough examination is to protect both operators and people in the vicinity of lifting operations who may be at risk if lifting equipment suddenly failed.

Equipment should be thoroughly examined where it lifts loads over people.

Equipment does not need to be thoroughly examined where it does not lift loads over people and where the operators of equipment are protected by:

- a roll over protective structure (ROPS); or
- a tip over protective structure (TOPS);

combined with:

- a falling object protective structure (FOPS); and
- an operator protective structure (OPS).

Working to the above criteria, normally, machines such as:

- cable cranes and forestry machines that lift as part of their function without appropriate protective structures (whether purpose-built or adapted from other industries) will require thorough examination;
- tree harvesters and forwarders with appropriate protective structures **will not** require thorough examination.

However, you should assess your equipment and working practices for the risks involved and decide which items have to undergo thorough examination.

Where lifting equipment is assessed as needing thorough examination, you should ensure that it is done:

- the first time it is put into service (unless it has not been used before **and** has an EC declaration of conformity not more than 12 months old);
- at intervals of:
  - either every six months for any equipment used for lifting people, and all accessories (such as chains and slings) and every twelve months for other lifting equipment; or
  - in either of the above cases, in accordance with the time intervals in an examination scheme prepared by a competent person;
- each time that exceptional circumstances occur which are liable to jeopardise the safety of the lifting equipment (for example, following a repair or a major failure).

LOLER requires lifting equipment to be thoroughly examined when it is installed in a new location. However, the rigging of cable cranes is regarded as moving or repositioning and not 'installation' as covered by this regulation. They **do not** have to be thoroughly examined each time they move to a new rack or site.

Thorough examination will normally be carried out by an independent competent person from outside your business, such as an engineer from the supplier or manufacturer of the equipment or an independent examining engineer from an insurance company or specialist forestry engineering company.

You should ensure that the person chosen to act as the competent person for the thorough examination has the appropriate practical and theoretical knowledge and experience of the lifting equipment to be thoroughly examined which will enable them to detect defects or weaknesses which it is the purpose of the examination to discover. Also they should be able to assess their importance in relation to the safety and continued use of the particular equipment.

When forestry equipment subject to thorough examination is contracted to be used in the business of another employer, then a copy of the equipment's current thorough examination report should be available.

### Inspection

LOLER also requires machines that are thoroughly examined to be regularly inspected to detect wear and tear that may make the equipment unsafe to use. Such inspections can be carried out by a competent operator. It is recommended that:

- forestry machines that are thoroughly examined are inspected once a week or every 50 working hours if the machine has worked less than 50 hours in that week;
- all forestry machines that lift as part of their function, whether they are thoroughly examined or not, are inspected as above.

### Reports and defects

A person making a thorough examination for an employer should notify defects and make a report of the examination.

The competent person should notify the employer immediately of any defect which in their opinion is or could become a danger to people. They should also send a copy of the report to HSE where they consider there is an imminent risk of serious personal injury.

If you are notified of a defect you should ensure that the lifting equipment is not used before the defect is rectified or that it is rectified within the time specified in the report.

Operators carrying out inspections should report any defect in the equipment which in their opinion could become a danger to people and as soon as practicable make a record of the inspection in writing.

### Records

Copies of EC declarations of conformity for any lifting equipment should be kept as long as the equipment remains in use.

Information contained in any thorough examination report should be kept available for inspection.

### References

1 *Safe use of lifting equipment. Lifting Operations and Lifting Equipment Regulations 1998. Approved Code of Practice and Guidance L113* HSE Books 1998 ISBN 0 7176 1628 2

2 *LOLER: How the Regulations apply to arboriculture AIS30* HSE Books 1998

### Further information

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA. Tel: 01787 881165 Fax: 01787 313995. Website: [www.hsebooks.co.uk](http://www.hsebooks.co.uk)

HSE priced publications are also available from good booksellers.

For other enquiries ring HSE's InfoLine Tel: 0871 545500, or write to HSE's Information Centre, Broad Lane, Sheffield S3 7HQ. Website: [www.hse.gov.uk](http://www.hse.gov.uk)

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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