

Regulation 52

Examination and testing of lifting equipment

52. (1) An employer shall ensure that, without prejudice to Regulation 30,

(a) fixed work equipment for lifting loads, including rail mounted work equipment for lifting loads, is not taken into use for the first time unless—

(i) it has been tested and thoroughly examined by a competent person, and

(ii) a certificate of test and examination specifying the safe working load and, if appropriate, the maximum numbers of persons permitted has been obtained,

(b) mobile work equipment for lifting loads is not taken into use in any place of work for the first time unless—

(i) it has been examined and certified in accordance with this Regulation, or

(ii) it is a new machine and which—

(I) is CE marked in accordance with the relevant directives of the European Communities,

(II) is accompanied by an EC declaration of conformity in accordance with the relevant directives of the European communities,

(III) is accompanied by a certificate of test and examination for that machine signed by the person making the test, specifying the safe working load and

(IV) has not been reassembled since dispatch from the manufacturer,

Regulation 52(1)(a) and(b) cover the examination of equipment before first use. In the case of new mobile equipment, the employer may rely on the certification of the manufacturer subject to the stated conditions being met. If this is not the case, the equipment should be examined and tested before being put into use.

(c) where

(i) any alteration or repair is carried out to lifting equipment or a lifting accessory, and

(ii) the alterations or repairs are relevant to the safe operation of the equipment, the equipment is examined by a competent person in compliance with this Regulation before the equipment's return to service, and examination before return to use is required if any alteration or repair could affect the stability or strength of the equipment. The manufacturer's guidance should be followed, and sought if not available. Useful information may also be available from competent persons experienced in lifting plant inspection. Even if a machine has simply been reassembled, it is advised that testing be carried out to ensure that it is in full working order.

(d) where a report of an examination pursuant to paragraph (3) specifies conditions for the safe working of the equipment, the equipment is used only in accordance with those conditions. Employers and users of equipment must be familiar with the contents of these reports and comply with any conditions laid down.

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(2) In the case of work equipment to which paragraph

(1)(b)

(ii) applies, the period to the first examination pursuant to paragraph

(3) shall be determined by reference to the date of the certificate referred to in paragraph (1)(b)(ii)(III).

This provision determines the date for the first statutory examination of mobile lifting equipment covered by Regulation 52(1)(b).

(3) Without prejudice to Regulation 30, an employer shall ensure that work equipment of a type or class listed in column 1 of Parts B or C of Schedule 1 is not used unless it has been examined by a competent person at least once in the period specified in column 2 of Parts B or C of that Schedule or as required under the other circumstances described in Part C.

Regulation 52(3) through reference to Parts B and C of Schedule 1 to the General Application Regulations 2007 sets down the framework for the periodic statutory examination and testing of lifting equipment and lifting accessories. The scheme of inspection regime for the electrical generation industry continues the status quo since the introduction of the Safety, Health and Welfare at Work Act 1989. Testing of self-erecting cranes is required before first erection on a site and again on that site if re-erected where there is uncertainty about the ground conditions. If the crane is retained on a secure base or platform, the act of dismantling and re-erecting the same structure does not constitute a change in configuration.

(4) Where equipment referred to in paragraph (3) has already been thoroughly examined in accordance with the relevant statutory provisions in force prior to the introduction of these Regulations, the beginning of the period referred to in paragraph (3) shall be deemed to be the date of the last such examination. The above provision credits examination work carried out under legislation in force up to 1 November 2007. See also Regulation 52(6).

(5) The requirements of this Regulation do not apply to the work equipment listed under Part D of Schedule 1.

While the equipment listed in Part D of Schedule 1 to the General Application Regulations 2007 has some lifting function, it is outside the scope of Regulation 52 but is still work equipment to which Regulation 30 applies and, therefore, the employer must have an appropriate scheme of inspection prepared.

(6) Where a thorough examination has been carried out in compliance with the relevant statutory provisions in force immediately before the commencement of these Regulations, the examination shall be regarded as being in compliance with this Chapter and this Regulation does not apply until after the expiry of the period specified under those statutory provisions.

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(7) An employer shall ensure that a thorough examination is carried out as soon as practicable if one is outstanding under the relevant statutory provisions from the period before the commencement of these Regulations.

The introduction of new legislation cannot be used as an excuse to delay examinations that were due under previous legislation.

Regulation 53: Reports by competent persons

53. (1) A competent person carrying out an examination under Regulation 52 shall—

(a) prepare a report of the result of every examination and test as referred to in Regulation 52 containing the particulars that are set out in Part E of Schedule 1,

(b) where work equipment is examined pursuant to Regulation 52 and the examination reveals that the equipment can only be used safely if certain repairs are carried out or if the person making the examination foresees a need for such repairs—

(i) inform in writing the owner and user of the need for such repairs or the potential need,

(ii) not later than 20 days after the completion of the examination, send a copy of the report of the examination to the Authority where immediate cessation of the work has been advised, and

(iii) in the case of potential need for repairs, specify the period within which, in his or her opinion, the repairs shall be carried out.

(2) A competent person carrying out an examination under Regulation 52(3) may specify a period less than that in column 2 of Parts B or C of Schedule 1 if in that person's opinion a more frequent examination is required but, if this is done, he or she shall provide the reason for the opinion in writing to the owner and user of the work equipment.

Regulation 53 sets out a range of duties for any competent person who conducts statutory examinations of lifting equipment. Such examinations are separate from maintenance examinations. The competent person may be an employee of the organisation or external to it. If the person is an employee, he or she has to be in a position to exercise independent judgement. If the Health and Safety Authority has reason to believe that the examinations and/or the reports of such examinations are not adequate, it has the power to require re-examinations to be conducted by another entity. It may also do the same if it is not satisfied as to the ability of the competent person. Repairs should not be carried out in the course of statutory examinations and the report of an examination must reflect the conditions as found. A copy of the report must be sent to the Health and Safety Authority where immediate cessation of work has been advised. Work should cease if there are defects in safety-related instrumentation or if the defect poses an immediate threat to the stability or strength of the equipment or its ability to control a load.

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Regulation 54: Keeping of records and registers of lifting equipment

54. (1) An employer shall ensure that a report produced under Regulation 53, or a copy of it—

(a) is kept at the place of work when the lifting equipment is permanently located there,

(b) in the case of lifting equipment on a construction site, is kept at the site office or at the business address of the contractor for whom the report was made, and

(c) in the case of mobile equipment, is kept on the equipment in addition to being available for inspection at the address of the equipment owner.

(2) An employer shall ensure that—

(a) a register of lifting equipment and lifting accessories containing details of the equipment, distinguishing number, date of first use and date of last thorough examination and testing is maintained and kept available for inspection by an inspector, and

(b) if the equipment does not have a distinguishing number or mark, one of long lasting duration is provided. Regulation 54(1) deals with the keeping of examination reports so that they are available at the point of use. See also Regulation 30(d) with regard to the availability of reports to those who use the equipment. Regulation 54(2)(a) calls for the creation of a lifting register so that one can tell at a glance the scope of equipment for examination and its current status. The register

may be in electronic or printed form. If the employer has separate locations, each with their own lifting inventory, a location-specific inventory may be useful. Regulation 54(2)(b) addresses the situation where lifting equipment for some reason may not have a distinguishing number/mark. In this case, the employer is obliged to provide it with one so that accurate inspection and examination records may be maintained.

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Regulation 55: Safe working loads for excavators, draglines, telehandlers, loaders or combined excavators and loaders when used as cranes

55. (1) In this Regulation, reference to “machine” is a reference to an “excavator, dragline, telehandler, loader or combined excavator and loader when used as a crane”.

(2) An employer shall ensure that—

(a) before a machine to which this Regulation applies is first used, a competent person—

(i) specifies the safe working load or loads which may be raised and lowered by the machine, or where its safe working load depends on the configuration of the machine, its safe working load for the different configurations are determined, and

(ii) provides a signed certificate specifying the safe working load and any necessary safety provisions,

(b) the certificate referred to in subparagraph (a)(ii) is kept available for inspection with the machine,

(c) a machine is not loaded beyond the relevant safe working load specified in the certificate required by subparagraph (a)(ii),

(d) the specified safe working load or loads and the outrigger position and the length of jib or boom to which the safe working loads relate is either plainly marked on the machine or a copy of the table relating safe working loads to the distance worked is affixed in a clearly visible position in the driver’s cab,

(e) if, after the issue of the certificate required by subparagraph (a)(ii), a machine undergoes any substantial alteration or repair likely to affect the specified safe working loads, that certificate is cancelled and a new certificate is obtained,

(f) hydraulically-operated machines, except for machines with a maximum rated lift capacity of a 1,000 kg or less, are fitted with check valves on the cylinders used for lifting or by another means to prevent a gravity fall of the load in the event of a hydraulic failure,

(g) in the case of a telehandler, the safe working load is not greater than 1,000 kg unless fitted with an automatic safe load indicator or rated capacity indicator,

(h) unless a machine is fitted with an automatic safe load indicator or a rated capacity indicator, the safe working load is the same for all radii at which a jib or boom is operated and is not greater than the load which the machine in its least stable configuration is designed to lift with that jib or boom, (i) means of identification are plainly marked on machines to which this Regulation applies, and

(j) machines to which this Regulation applies are examined and tested periodically in accordance with Parts B and C of Schedule 1.

Regulation 55 sets out the requirements for machines such as excavators if they are used to lift objects,

Guide to the Safety, Health and Welfare at Work (General Application) 48 e.g. trench boxes or pipes. In such cases they are regarded as cranes and the provisions apply. Another example is when a load is suspended from the forks of a teleporter.

The Health and Safety Authority’s view on the application of Regulation 55(f) is that reference to “cylinders used for lifting” includes the cylinders for both the main boom and dipper arm.

Regulation 56: Specific requirements for scotch and guy derrick cranes

56. An employer shall ensure that, where a scotch and guy derrick crane is to be used,

(a) the jib of a scotch derrick crane is not erected between the back stays of the crane,

(b) a load which lies in the angle between the back stays of a scotch derrick crane is not moved by that crane,

(c) appropriate measures are taken to prevent the foot of the king post of any scotch derrick crane from being lifted out of its socket or support whilst in use, and

(d) where the guys of a guy derrick crane cannot be fixed at approximately equal inclinations to the mast so that the angles between adjacent pairs of guys are approximately equal, such other measures are taken as will ensure the stability of the crane.

Regulation 56 deals with a particular design of crane. Both forms of derrick crane incorporate a vertical mast which carries the suspension ropes for a low-pivot derricking jib and in both cases the mast rotates with the jib as the jib is slewed.

Regulation 57: Construction, testing, examination and safe working load of lifting accessories

57. (1) An employer shall ensure that—

(a) subject to paragraph (2), a chain, rope or other lifting accessory is not used in raising or lowering or as a means of suspension unless—

(i) it is of good construction, sound material, adequate strength, suitable quality and free from patent defect,

(ii) it is properly installed and used,

(iii) it is properly maintained,

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(iv) it is used only for the purpose for which it was intended,

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(v) except in the case of a fibre rope or fibre rope sling, it has been tested and examined by a competent person and there has been obtained a certificate of such test and examination specifying the safe working load and signed by the person

making, or responsible for, the carrying out of the test and examination, (vi) in the case of a fibre rope or fibre rope sling, information from the manufacturer on its safe working load is available, and

(vii) it is marked in plain legible figures and letters with the safe working load and a means of identification, unless paragraph (2) applies to the safe working load,

(b) a chain, rope or lifting gear is not loaded beyond its safe working load except for testing purposes as specified by, and under the direction of, a competent person appointed to carry out the tests,

(c) a hook used for raising or lowering or as a means of suspension is either—

(i) provided with an efficient device to prevent the displacement of the sling or load from the hook, or

(ii) of such shape as to reduce as far as possible the risk of such displacement,

(d) a sling used for raising or lowering on a lifting appliance is securely attached to the appliance and the method of attachment is not a method likely to result in damage to any part of the sling or to any lifting gear supporting it,

(e) a double or multiple sling is not used for raising or lowering if—

(i) the upper ends of the sling legs are not connected by means of a shackle, ring or link of adequate strength, or

(ii) the safe working load of any sling leg is exceeded because of the angle between the sling legs,

(f) where a load is being lifted or otherwise moved, adequate steps are taken by the use of suitable packing, or otherwise, to prevent the edges of the load from coming into contact with a sling, rope or chain, where this would involve risk of personal injury,

(g) a load is not raised, lowered or suspended on a chain or wire rope which has a knot tied in any part of the chain or rope under direct tension,

(h) a chain which is shortened or joined to another chain by means of bolts and nuts inserted through the links is not used for raising, lowering or suspending any load, and

(i) where a chain or lifting gear is made of such material that would require annealing or a form of heat treatment to ensure its safety, the chain or lifting gear—

(i) is effectively annealed or subjected to an appropriate form of heat treatment under the supervision of a competent person and at intervals as specified by a competent person, and

(ii) is not used in raising or lowering or as a means of suspension unless a report has been made in writing of every annealing or appropriate heat treatment signed by the competent person under whose supervision the annealing or heat treatment was carried out.

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(2) Where the safe working load of a rope or rope sling is—

(a) contained in the report made pursuant to Regulation 53 and the rope or sling is so marked as to enable its safe working load as specified in that report to be ascertained from the report, or

(b) in the case of a fibre rope or a fibre rope sling, contained in a table of safe working loads clearly visible in a prominent position at the workplace the ropes or rope slings do not need to be marked with their safe working load.

The term “lifting accessories” is explained in Regulation 27. Regulation 57 covers their marking, use, test and examination. Lifting accessories must be uniquely marked to ensure the conduct of proper maintenance and inspection procedures.

Certain practices are banned in subparagraphs (1)(g) and (h) as they can reduce the overall strength of the rope or chain.

The question is sometimes asked as to what constitutes a load or a lifting accessory, for example, are concrete skips suspended from hooks, typically off tower cranes, a load or a lifting accessory? These skips constitute work equipment, are subject to deterioration liable to result in a danger to safety and are subject to periodic inspection and, if necessary, testing pursuant to Regulation 30(b) of the General Application Regulations 2007. One way of viewing whether a situation is covered

by “work equipment” or “lifting equipment” is to divide the equipment into:

- Lifting machine/equipment as far as the hook
- Lifting accessory between the lifting equipment and the load
- The load.

In the case of a concrete skip, it is suspended by lifting accessories and constitutes a load, which in the example above, is also work equipment.

Regulation 58: Delivery of loads with lifting accessories attached

58. Where—

(a) any article, material or other load intended for use in construction work is delivered at, or adjacent to, a construction site with a chain, rope or other lifting accessory attached thereto and designed for use as a means of raising and lowering that class of load when removing the same from the point of delivery to a position on the site, and

(b) the chain, rope or gear is free from patent defect whether of construction or quality and is not owned or hired by any contractor who is undertaking construction work on the site,

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this Chapter does not apply in respect of the use of such chain, rope or lifting gear for raising or lowering the load so long as the chain, rope or gear remains attached to the article, material or load. Some loads incorporate lifting fittings so that they can be handled without the use of separate lifting accessories. Where these fittings are part of the load and are not reusable, it is not practical to subject them to the provisions of Chapter 2 of Part 2 of the General Application Regulations 2007 relating to the use of work equipment. Nevertheless, those handling the load must check that the lifting attachments are sound before using them.

Regulation 59: Duty of persons who hire lifting equipment to others

59. Without prejudice to section 16 of the Act, a person who hires out lifting equipment for use by others, shall comply with the duties set out in Regulations 52 and 54.