
STATUTORY INSTRUMENTS

1960 No. 1932

The Shipbuilding and Ship-repairing Regulations 1960

PART IV

RAISING AND LOWERING, ETC

Application of Part IV

31. The provisions of this Part of these Regulations shall apply in the case of any chain, rope, lifting gear or lifting appliance used in raising or lowering, and the provisions of Regulation 33 shall apply in the case of any plant or gear used for anchoring or fixing a lifting appliance.

Operation of Part IV

32. In the case of a shipyard this Part of these Regulations shall, as respects the operations, be in substitution for the following provisions of the principal Act, that is to say, section 23 (which relates to chains, ropes and lifting tackle) and subsections (1), (2), (4), (5), (6) and (8) of section 24 (which relates to cranes and other lifting machines).

Construction of lifting appliances

33. Every lifting appliance, including all parts and working gear thereof, whether fixed or movable, and all plant or gear used for anchoring or fixing such an appliance, shall be of good construction, sound material, adequate strength and free from patent defect and shall be properly maintained:

Provided that plant or gear permanently attached to a structure may be used for anchoring or fixing any lifting appliance if that plant or gear is first thoroughly examined and appears to satisfy the requirements of this Regulation.

Tests, examinations and marking of lifting appliances

34.—(1) Subject to the provisions of paragraphs (4) and (5) of this Regulation, no lifting appliance shall be taken into use for the first time in the operations or after it has undergone any substantial alteration or repair, unless it has been tested and thoroughly examined by a competent person in the manner described in the Second Schedule to these Regulations. A certificate of such test and examination, in the prescribed form and containing the prescribed particulars, signed by the person making or responsible for the carrying out of the test and examination and specifying the safe working load or loads of the appliance, shall have been obtained and shall be available for inspection.

(2) Subject as aforesaid, every lifting appliance shall be thoroughly examined by a competent person at least once in every period of twelve months and a report of the results of every such examination, containing the prescribed particulars and signed by the person making or responsible for the carrying out of the examination, shall be kept in an approved manner and shall be available for inspection. In the case of lifting appliances in a shipyard, the person by whom the report is signed shall within twenty-eight days of the completion of the examination send to the inspector for the

district a copy of the report in every case where the examination shows that the lifting appliance cannot continue to be used with safety unless certain repairs are carried out immediately or within a specified time.

(3) Subject as aforesaid, every lifting appliance shall have plainly marked upon it the safe working load. Every crane of variable operating radius (including a crane with a derricking jib) shall—

- (a) have plainly marked upon it the safe working load at various radii of the jib or crab and, in the case of a crane with a derricking jib, the maximum radius at which the jib may be worked; and
- (b) be fitted with an accurate indicator, clearly visible to the driver, showing the radius of the jib or crab at any time and the safe working load corresponding to that radius.

(4) The foregoing provisions of this Regulation shall not apply to sheerlegs temporarily erected for the purpose of the operations.

(5) This Regulation shall not apply as respects—

- (a) any lifting appliance to which the Docks Regulations, 1934, apply and which satisfies the requirements of those Regulations; or
- (b) any operation carried out on a ship not registered in the United Kingdom by means of any of the ship's engine room cranes where such cranes are used with the express authorisation and under the supervision of a competent person.

Construction of chains, ropes and lifting gear

35. Chains, ropes and lifting gear shall be of good construction, sound material, adequate strength and free from patent defect.

Testing and annealing of chains, etc

36.—(1) No chain, rope or lifting gear shall be taken into use for the first time in the operations, or after it has undergone any substantial alteration or repair, unless it has been tested and thoroughly examined by a competent person in the manner described in the Second Schedule to these Regulations. A certificate of test and examination, in the prescribed form and containing the prescribed particulars, signed by the person making or responsible for the carrying out of the test and examination and specifying the safe working load of the chain, rope or gear, shall have been obtained and shall be available for inspection:

Provided:

- (a) that this paragraph shall not apply to a fibre rope or fibre rope sling; and
- (b) that a wire rope sling need not be tested and examined in accordance with this paragraph if the rope of which the sling is constructed has been so tested and examined and all joins in the sling are by splices which satisfy the requirements of Regulation 39.

(2) A chain, ring, link, hook, shackle, swivel, eye-bolt or plate clamp being a chain, ring, link, hook, shackle, swivel, eye-bolt or plate clamp which has been lengthened, altered or repaired shall not be used unless, since such lengthening, alteration or repair, it has been tested and thoroughly examined by a competent person and a certificate of such test and examination, in the prescribed form and containing the prescribed particulars, signed by the person making or responsible for the carrying out of the test and examination and specifying the safe working load, has been obtained and is available for inspection.

(3) This paragraph applies only to chains and lifting gear made of wrought iron. Chains and lifting gear to which this paragraph applies shall be annealed at least once in every fourteen months or, in the case of chains, slings, rings, links, hooks, shackles, or swivels being chains, slings, rings, links, hooks, shackles or swivels of half-inch bar or smaller material, at least once in every six months,

so, however, that chains and lifting gear not in regular use need be annealed only when necessary; and the prescribed particulars of the annealing shall be kept in an approved manner and shall be available for inspection.

- (4) Nothing in this Regulation shall apply to chains, ropes or lifting gear—
- (a) to which the Docks Regulations, 1934 apply and which satisfy the requirements of those Regulations; or
 - (b) which are permanently attached to a structure.

Periodic examination of chains, ropes, etc

37.—(1) Chains and lifting gear other than rope slings shall be thoroughly examined by a competent person at least once in every period of six months and reports of the results of such examinations, containing the prescribed particulars and signed by the person making or responsible for the carrying out of the examination, shall be kept in an approved manner and shall be available for inspection.

(2) Ropes and rope slings shall have been thoroughly examined by a competent person within the immediately preceding period of three months, or, in the case of a wire rope or wire rope sling in which such an examination has disclosed that a wire of the rope has broken, one month, and reports of the results of such examinations, containing the prescribed particulars and signed by the person making or responsible for the carrying out of the examination, shall be kept in an approved manner and shall be available for inspection.

- (3) Nothing in this Regulation shall apply to chains, ropes or lifting gear—
- (a) to which the Docks Regulations, 1934 apply and which satisfy the requirements of those Regulations; or
 - (b) which are permanently attached to a structure.

Indication of safe working loads

38.—(1) A table showing the safe working load of every chain, rope and article of lifting gear in use, and, in the case of a multiple sling, the safe working loads at different angles of the legs, shall be posted in a permanent position in the store in which the chains, ropes and articles of lifting gear are kept; so, however, that this Regulation shall not apply to any article of lifting gear if the safe working load thereof, or, in the case of a multiple sling, the safe working loads at different angles of the legs, is or are plainly marked upon it.

- (2) Nothing in this Regulation shall apply to chains, ropes or lifting gear—
- (a) to which the Docks Regulations, 1934 apply and which satisfy the requirements of those Regulations; or
 - (b) which are permanently attached to a structure.

Splices in wire ropes

39. A thimble or loop splice made in any wire rope shall have at least three tucks with a whole strand of the rope and two tucks with one half of the wires cut out of each strand. All tucks shall be against the lay of the rope:

Provided that this Regulation shall not operate to prevent the use of another form of splice which can be shown to be as efficient as the form of splice specified in this Regulation.

Load not to exceed safe working load

40. No lifting appliance or chain or rope or lifting gear shall be loaded beyond its safe working load except—

- (a) for the purpose of making a test of the appliance, chain, rope or gear, and then only to such extent as is specified in the Second Schedule to these Regulations, or
- (b) in the case of a crane, in exceptional circumstances to such extent and subject to such conditions as may be approved by the engineer in charge or other competent person, if on each occasion—
 - (i) the written permission of the owner or his responsible agent has been obtained; and
 - (ii) a record of the overload is kept in the prescribed form.

Secureness of loads

41.—(1) Loads shall be securely suspended or supported whilst being raised or lowered, and all reasonable precautions shall be taken to prevent danger from slipping or displacement.

(2) Where by reason of the nature or position of the operation a load is liable, whilst being moved by a lifting appliance or lifting gear, to come into contact with any object so that the object may become displaced, special measures shall be adopted to prevent the danger so far as reasonably practicable.

Support of lifting appliances and lifting gear

42. Every lifting appliance and all lifting gear shall be adequately and suitably supported or suspended having regard to the purpose for which it is used.

Wire ropes with broken wires

43. No wire rope shall be used if in any length of ten diameters the total number of visible broken wires exceeds five per cent. of the total number of wires, or if the rope shows signs of excessive wear or corrosion or other serious defect.

Knotted chains, etc

44.—(1) No chain or wire rope shall be used when there is a knot tied in any part thereof.

(2) No chain which is shortened or joined to another chain by means of bolts and nuts shall be used:

Provided that this does not exclude the use of a chain bolted or joined to another chain by an approved and properly constructed attachment.

Precautions against damage to chains and ropes

45. Appropriate steps shall be taken to prevent, so far as practicable, the use of chains or ropes for raising or lowering in circumstances in which they are in or liable to come into contact with sharp edges of plant, materials or loads, or with sharp edges of any part of the vessel on which work is being carried out.

Loads on lifting appliances

46.—(1) No load shall be left suspended from a lifting appliance other than a self-sustaining, manually operated lifting appliance unless there is a competent person in charge of the appliance while the load is so left.

(2) It shall be the duty of the persons employed to comply with the foregoing paragraph of this Regulation.

Heavy loads

47. Where there is reason to believe that a load being lifted or lowered on a lifting appliance weighs more than twenty tons its weight shall be ascertained by means of an accurate weighing machine or by the estimation of a person competent for the purpose, and shall be clearly marked on the load:

Provided that this Regulation shall not apply to any load lifted or lowered by a crane which has either a fixed or a derricking jib and which is fitted with an approved type of indicator in good working order which—

- (a) indicates clearly to the driver or person operating the crane when the load being carried approaches the safe working load of the crane for the radius of the jib at which the load is carried; and
- (b) gives an efficient sound signal when the load moved is in excess of the safe working load of the crane at that radius.