

4. In the case of a crane fitted with a derricking-jib, the safe working load at various radii of the jib shall be plainly marked upon it.

5. A crane, crab, winch, or any other hoisting-appliance, or any part of such appliance, shall not, except as permitted by the following paragraph, be loaded beyond the safe working load.

6. For the purpose of making tests of a crane or other hoisting appliance or gear the safe working load may be exceeded by such amount as the competent person appointed to carry out the tests may authorize.

7. During hoisting operations effective precautions shall be taken to prevent any person from standing or passing under the load.

8. No load shall be left suspended from a hoisting-appliance unless there is a competent person actually in charge while the load is so suspended.

9. Every crane-driver or hoisting-appliance operator shall be properly qualified.

10. No person under eighteen years of age shall be in control of any hoisting-machine, including any scaffold-winch, or give signals to the operator.

11. Under normal working-conditions one person only shall be appointed as being responsible for the giving of all signals to the crane-driver.

12. When any hoisting or lowering is performed by means of a crane and the crane-driver or person operating the crane is unable to see the load in all its positions, one or more look-out or signal-men shall be stationed so as to see the load throughout its travel and give the necessary signals to the crane-driver or person operating the crane.

13. (1) For each operation to be performed there shall be a distinctive signal of such a character that the person to whom it is given shall be able to hear or see it easily.

(2) Where a sound, colour, or light signal is used, it shall be made by an efficient device.

(3) Every signal wire shall be adequately protected from accidental interference.

14. Motors, gearing, transmissions, electric wiring, and other dangerous parts of hoisting-appliances shall be provided with efficient safeguards, which shall not be removed while the machine or apparatus is in use. If the safeguards have to be removed they shall be replaced as soon as possible by the persons removing them, and in any case before the machines and apparatus are again taken into normal service.

15. The driver of every crane or similar hoisting-appliance shall be provided with a safe and covered stand, cab, or cabin.

16. (1) Where reasonably practicable the driver's cab on every crane or other hoisting-machine shall, before the crane or other hoisting-machine is put into general use, be completely erected or adequate provision made for the protection of the driver from the weather.

(2) During cold weather the cabin of every power-driven crane or other hoisting-appliance in use shall be adequately heated by suitable means.

Regulation 27.—Winches, Crabs, and Pulleys.

1. Every part of the framework of every crab or winch, including the bearers, shall be of metal.

2. When wire ropes are used, the diameter of the pulleys or drums shall not be less than 400 times the diameter of the wires in the rope excluding the core of the rope.

3. When winch-drums are grooved—

(a) The radius of the grooves shall be approximately the same as, but not less than, the radius of the rope; and

(b) The pitch and the grooves shall not be less than the diameter of the rope.

4. Winch-drums shall be provided with flanges that prevent the rope from slipping off the drum.

5. Every crane, crab, and winch shall be provided with an efficient brake or brakes, and with any other safety device required to prevent the fall of the load when suspended.

6. On every crab or winch the control lever shall be provided with a suitable locking-device.

7. On steam-driven lifting-engines the lever controlling the link motion reversing-gear shall be provided with a suitable springlock arrangement.

Regulation 28.—Suspension and Attachment.

1. All cables or ropes used on hoisting-appliances for raising or lowering materials shall be long enough to leave at least two turns on the drum at every operating position of the appliance.

2. No rope shall be used over a grooved drum or pulley if its diameter exceeds the pitch of the drum grooves or the width of the pulley groove.

3. Wire ropes shall be such as to have a factor of safety of at least six under the maximum load. In calculating the dimensions of wire ropes the ropes shall be assumed to be under tensile stress only.

4. No chain or wire rope which has a knot tied in it shall be used for raising or lowering any load.

5. Every hoisting or derricking rope or chain shall be securely fastened to the barrel of the crane, crab, or winch with which it is used.

6. Each temporary attachment or connection of a rope, chain or other appliance used in the erection or dismantling of a crane shall be adequate and secure.

7. Every rope used in hoisting or lowering or as a means of suspension shall be of suitable quality and adequate strength and in good condition.

8. Every chain, ring, hook, shackle, swivel, and pulley-block used for hoisting or lowering or as a means of suspension shall have been tested and be marked in plain figures and letters with the safe working load and an identification mark.