

9. No gear used for attachment or as a means of suspension shall be loaded beyond its safe working load, except for the purpose of making tests.

10. Every chain, ring, hook, shackle, and swivel used in hoisting or lowering, or as a means of suspension which has been lengthened, altered, or repaired by welding shall be adequately tested and examined before being again taken into use.

11. Every hook used for hoisting or lowering shall either—

- (a) Be provided with an efficient catch to prevent the displacement of the sling or load from the hook; or
- (b) Be of such shape as to reduce as far as possible the risk of such displacement.

12. The parts of hooks liable to come into contact with ropes or chains during the raising or lowering of loads shall be rounded.

13. Where double or multiple slings are used for hoisting or lowering purposes the upper ends of the slings shall be connected by means of a shackle or ring and not be put separately into a lifting-hook; this requirement shall not apply when the total load lifted is less than one-half of the safe working load of the hook.

14. When bulky objects are being raised or lowered the maximum safe load of slings shall be determined with reference, not only to their strength, but also to the angle of the legs.

15. Sharp edges of a load shall not be in contact with slings, ropes, or chains.

16. All chains, ropes, slings, and other gear used for hoisting or lowering, or as a means of suspension, shall be periodically examined by a competent person, and this person's findings shall be entered on a certificate or in a special register.

Regulation 29.—Cranes.

1. The stage for every crane shall be built of sound material and be of good mechanical construction having regard to its height and position and to the lifting and reaching capacity of the crane.

2. The platform of every crane shall—

- (a) Be close-planked or plated;
- (b) Be securely fenced according to these regulations;
- (c) Be provided with safe means of access; and
- (d) Be of sufficient area—
 - (i) In all cases, for the driver or operator and signalman; and
 - (ii) In the case of a guy derrick crane, also for the operator of the slewing mechanism.

3. (1) Every fixed crane shall either be securely anchored or be adequately weighted by suitable ballast firmly secured to ensure stability.

(2) When a crane is weighted by ballast a diagram showing the position and size of the counter-weights shall be posted up in the driver's cab.

(3) Every travelling crane shall be provided with a device for anchoring it to the rails of the crane-track.

4. On every stage, gantry, or other place on which a crane moves there shall in so far as practicable be maintained at every position of the crane an unobstructed passageway of a width of at least 60 cm. between the moving parts of the crane and the fixed parts or edge of such stage, gantry, or place.

5. If at any time it is impracticable to maintain a passageway of a width of at least 60 cm. at any place or point, all reasonable steps shall be taken to prevent the access of any person to such place or point at such time.

6. All rails on which a travelling crane moves shall be of adequate section and have an even running surface.

7. The following requirements shall apply to every track of a travelling crane, whether resting on the ground or raised above the ground:—

- (a) The whole track shall be properly laid;
- (b) All the supports shall be of sufficient strength and be maintained in good condition; and
- (c) The ends of the track shall be provided with shoes or buffers.

8. All rails on which a travelling crane moves shall, unless other adequate steps are taken to ensure the proper junction of, and to prevent any material alteration in the gauge of, the rails—

- (a) Be jointed by fish-plates or double chairs; and
- (b) Be securely fastened to sleepers.

9. The track and turntable of every travelling crane shall be installed with the greatest care and in conformity with sound technical principles.

Regulation 30.—Examination of Cranes: Certificates.

1. No crane shall be used unless it has been tested and examined by a competent person acting for the inspection authority and there has been obtained from the person who made the test and examination a certificate thereof specifying the safe working load at various radii of the jib, including the maximum radius at which the jib can be worked.

2. The examinations and tests required by this regulation shall be repeated—

- (a) At such regular intervals as are prescribed by the competent authority; and
- (b) After all substantial alterations or repairs to the crane.