

Occupational Safety and Health Admin., Labor**§ 1918.61**

of the deck load and the inside of the bulwark or rail, a pendant or other alternate device shall be provided to allow trimming of the gear and to prevent employees from going over the side.

[62 FR 40202, July 25, 1997, as amended at 65 FR 40945, June 30, 2000]

§ 1918.55 Cranes (See also § 1918.11).

The following requirements shall apply to the use of cranes forming part of a vessel's permanent equipment.

(a) *Defects.* Cranes with a visible or known defect that affects safe operation shall not be used. Defects shall be reported immediately to the officer in charge of the vessel.

(b) *Operator's station.* (1) Cranes with missing, broken, cracked, scratched, or dirty glass (or equivalent) that impairs operator visibility shall not be used.

(2) Clothing, tools and equipment shall be stored so as not to interfere with access, operation or the operator's view.

(c) *Cargo operations.* (1) Accessible areas within the swing radius of the body of a revolving crane or within the travel of a shipboard gantry crane shall be physically guarded or other equally effective means shall be taken during operations to prevent an employee from being caught between the body of the crane and any fixed structure, or between parts of the crane. Verbal warnings to employees to avoid the dangerous area do not meet this requirement.

(2) Limit switch bypass systems shall be secured during all cargo operations. Such bypass systems shall not be used except in an emergency or during non-cargo handling operations such as stowing cranes or derricks or performing repairs. Any time a bypass system is used, it shall be done only under the direction of an officer of the vessel.

(3) Under all operating conditions, at least three full turns of rope shall remain on ungrooved drums, and two full turns on grooved drums.

(4) Crane brakes shall be monitored during use. If crane brakes are unable to hold the load, the crane shall not be used.

(5) Cranes shall not be used if control levers operate with excessive friction or excessive play.

(6) When cranes are equipped with power down capability, there shall be no free fall of the gear when a load is attached.

(7) When two or more cranes hoist a load in unison, a designated person shall direct the operation and instruct personnel in positioning, rigging of the gear and movements to be made.

(d) *Unattended cranes.* When cranes are left unattended between work periods, § 1918.66(b) (4)(i) through (v) shall apply.

Subpart G—Cargo Handling Gear and Equipment Other Than Ship's Gear**§ 1918.61 General (See also appendix IV of this part).**

(a) *Employer provided gear inspection.* All gear and equipment provided by the employer shall be inspected by the employer or designated person before each use and, when appropriate, at intervals during its use, to ensure that it is safe. Any gear that is found upon such inspection to be unsafe shall not be used until it is made safe.

(b) *Safe working load.* (1) The safe working load of gear as specified in §§ 1918.61 through 1918.66 shall not be exceeded.

(2) All cargo handling gear provided by the employer with a safe working load greater than five short tons (10,000 lbs. or 4.54 metric tons) shall have its safe working load plainly marked on it.

(c) *Gear weight markings.* The weight shall be plainly marked on any article of stevedoring gear hoisted by ship's gear and weighing more than 2,000 lbs. (.91 metric tons).

(d) *Certification.* The employer shall not use any material handling device listed in paragraphs (f) and (g) of this section until the device has been certificated, as evidenced by current and valid documents attesting to compliance with the requirements of paragraph (e) of this section.

(e) *Certification procedures.* Each certification required by this section shall be performed in accordance with part 1919 of this chapter, by a person then

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currently accredited by OSHA as provided in that part.

(f) *Special gear.* (1) Special stevedoring gear provided by the employer, the strength of which depends upon components other than commonly used stock items such as shackles, ropes, or chains, and that has a Safe Working Load (SWL) greater than five short tons (10,000 lbs or 4.54 metric tons) shall be inspected and tested as a unit before initial use (see Table A in paragraph (f)(2) of this section). In addition, any special stevedoring gear that suffers damage necessitating structural repair shall be inspected and retested after repair and before being returned to service.

(2) Special stevedoring gear provided by the employer that has a SWL of five short tons (10,000 lbs. or 4.54 metric tons) or less shall be inspected and tested as a unit before initial use according to paragraphs (d) and (e) of this section or by a designated person (see Table A in this paragraph (f)(2)).

TABLE A

Safe working load	Proof load
Up to 20 short tons (18.1 metric tons) ...	25 percent in excess.
From 20 through 50 short tons (18.1 to 45.4 metric tons).	5 short tons in excess
Over 50 short tons (45.4 metric tons) ...	10 percent in excess

(g) Every spreader that is not a part of ship's gear and is used for handling intermodal containers shall be inspected and tested before initial use to a proof load equal to 25 percent greater than its rated capacity. In addition, any spreader that suffers damage necessitating structural repair shall be inspected and retested after repair and before being returned to service.

(h) All cargo handling gear covered by this section with a SWL greater than five short tons (10,000 lbs. or 4.54 metric tons) shall be proof load tested according to Table A in paragraph (f) or paragraph (g), as applicable, of this section every four years and in accordance with paragraphs (d) and (e) of this section or by a designated person.

(i) Certificates and inspection and test records attesting to the tests re-

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quired by this section shall be available for inspection.

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§ 1918.62 Miscellaneous auxiliary gear.

(a) *Routine inspection.* (1) At the completion of each use, loose gear such as slings, chains, bridles, blocks and hooks shall be so placed as to avoid damage to the gear. Loose gear shall be inspected and any defects corrected before reuse.

(2) Defective gear, as defined by the manufacturers' specifications (when available), shall not be used. Distorted hooks, shackles or similar gear shall be discarded.

NOTE TO PARAGRAPH (a): When manufacturers' specifications are not available to determine whether gear is defective, the employer shall use the appropriate paragraphs of this section to make these determinations.

(b) *Wire rope and wire rope slings.* (1) The employer shall follow the manufacturers' recommended ratings for wire rope and wire rope slings provided for use aboard ship, and shall have such ratings available for inspection. When the manufacturer is unable to supply such ratings, the employer shall use the tables for wire rope and wire rope slings found in appendix II to this part. A design safety factor of at least five shall be maintained for the common sizes of running wire used as falls in purchases, or in such uses as light load slings.

(2) Wire rope with a safety factor of less than five may be used only as follows:

(i) In specialized equipment, such as cranes, designed to be used with lesser wire rope safety factors;

(ii) According to design factors in standing rigging applications; or

(iii) For heavy lifts or other purposes for which a safety factor of five is not feasible and for which the employer can show that equivalent safety is ensured.

(3) Wire rope or wire rope slings provided by the employer and having any of the following conditions shall not be used:

(i) Ten randomly distributed broken wires in one rope lay or three or more