

## DEPARTMENT OF LABOR

## Occupational Safety and Health Administration

## 29 CFR Parts 1917, 1918, and 1919

[Docket No. S-025]

RIN 1218-AA56

## Longshoring, Marine Terminals, and Gear Certification

**AGENCY:** Occupational Safety and Health Administration (OSHA), Labor.

**ACTION:** Final rule; technical amendments.

**SUMMARY:** The Occupational Safety and Health Administration (OSHA) comprehensively revised its Safety and Health Regulations for Longshoring and those parallel sections of its Marine Terminals Standard with the publication of a final rule in the **Federal Register** on July 25, 1997. These rules address cargo handling and related activities conducted aboard vessels (the Longshoring Standard) and landside operations at marine terminals (the Marine Terminals Standard). The final rule contained typographical and other errors. This document corrects those errors. This document also corrects several cross-references to the rules that are found in the rules on gear certification. These cross-references are changed because the referenced section numbers have changed as a result of the revisions to the longshoring and marine terminals rules.

**DATES:** Effective on June 30, 2000. The Incorporation By Reference of a publication listed in the regulations is approved by the Director of the **Federal Register** as of June 30, 2000.

**FOR FURTHER INFORMATION CONTACT:** Paul Rossi, Office of Maritime Safety Standards, Room N 3609, 200 Constitution Avenue, NW, Washington, DC 20210, Telephone (202) 693-2086 (not a toll-free call).

**SUPPLEMENTARY INFORMATION:** This document makes technical amendments to Parts 29 CFR 1917, 29 CFR 1918, and 29 CFR Part 1919. OSHA comprehensively revised 29 CFR parts 1917 and 1918 on July 25, 1997 (62 FR 40142). In accordance with the rulemaking provisions of the Administrative Procedure Act (5 U.S.C. § 553) and 29 CFR 1911.5, OSHA hereby finds good cause to publish these amendments without any further delay or public procedure. No stakeholder is likely to object to these amendments, as will be demonstrated in the following description of the technical amendments. In fact, the need for many

of these amendments was pointed out to OSHA by stakeholders.

The types of amendments fall into nine basic categories: (1) Corrections of errors where text was inadvertently omitted or incorrectly spelled; (2) corrections of incorrect citations or cross-references; (3) corrections to provide parallel language between the two Parts (Part 1917 and Part 1918, Marine Terminals and Longshoring Operations, respectively) where the regulatory intent is identical; (4) corrections to eliminate a duplicative requirement; (5) corrections to revise mandatory language where the language was only intended to be illustrative; (6) clarifications of regulatory text to better reflect the regulatory intent; (7) technical drafting corrections; (8) corrections of errors made when converting from English units to metric units; and (9) editorial corrections to Safe Working Load Tables and Charts.

The first category, errors where text was inadvertently omitted or incorrectly spelled, includes ten of the amendments (because some of the amendments involve multiple revisions, amendments may fall into more than one category). Amendment #4 corrects the acronym for Incorporation By Reference to IBR.

Amendment #4 also adds one Incorporation By Reference approval that was inadvertently omitted. Amendment #8 and the first part of amendment #46 correct the "a" in the reference "Note to paragraph a" from a capital "a" to a lower case "a." Similarly, amendment #33 corrects the "b" in the reference "Note to paragraph b" from a capital "b" to a lower case "b," and the second part of amendment #48 corrects the "f" in the reference "Note to paragraph f" from a capital "f" to a lower case "f." The second part of amendment #14 and the second part of amendment #45 add identical sentences to each Part (Parts 1917 and 1918) requiring inspection and retesting following the repair of damaged special stevedoring gear. The sentence states, "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." This requirement was proposed to be included in section 1917.50, paragraph (c)(5)(i) and in section 1918.61, paragraph (f)(1) and received only favorable comment. The final rule inadvertently failed to include this requirement in the two rules. The first part of amendment #3 and amendment #16 correct a typographical error in the former standard that was included in the final rule and not identified until after publication. These amendments replace the term

"brailwater" with the correct term, "bailwater." The third part of amendment #43 corrects a typographical error by changing the words "greater than" to "less than" in an exception to the rules of cargo hooks that now correctly reads: "Exception: This provision shall not apply when the construction of the vessel and the operation in progress are such that fall angles are less than 120 degrees." This correction reflects the correct wording of the exception in the former rule as well as the proposed rule.

The third part of amendment #46 adds an exception to the requirement for positively securing the pins of screw pin shackles. The exception was in the former and proposed rules and was inadvertently left out of the final rule. The fourth part of amendment #46 adds the words "Exception: Manufacturers" test certificates indicating performance to the criteria in § 1919.31 (a), (c) and (d) shall be acceptable." This exception was in the proposed rule and was inadvertently left out of the final rule.

Amendment #49 adds the words "a closed" so that the text now reads "\* \* \* equipped with switches of a type that must be manually held in a closed position." The words "a closed" were in the former rule and the proposed rule, but were inadvertently omitted in the final rule.

The second part of amendment #51 adds a type of ramp (bow) that was inadvertently omitted in both the proposal and the final rule but more accurately reflects the regulatory intent of the overall provision.

The second category, incorrect citations or cross-references, includes eleven amendments. Amendments #2, #5, and #6 correct references to paragraphs in the final rule's definition section; in the final rule, definitions appeared in alphabetical, rather than numerical, order. The first part of amendment #14 amends the section heading of § 1917.50 by adding a reference to a new chart in newly added Appendix I of Part 1917. This chart replaces a simple reference that was in Appendix IV in Part 1918 citing its applicability to Part 1917. The first part of amendment #9, the second part of amendment #15, amendment #17, the first part of amendment #41, the first part of amendment #50, the first part of amendment #55, and amendment #56 correct simple cross-referencing errors.

Amendments #61 and #62 correct cross-references found in Part 1919, Gear Certification, to sections in Parts 1917 and 1918. These cross-references have changed because of the final rule's revisions to Parts 1917 and 1918.

The third category, corrections to provide parallel language between the two Parts (Part 1917 and Part 1918, Marine Terminals and Longshoring) where the regulatory intent is identical, includes six amendments. The second part of amendment #9 adds a footnote to Part 1917 addressing the emergency action plan requirement that was intended to be identical to the corresponding footnote in the Longshoring rule.

The eighth part of amendment #14 adds parallel language that exempts certain types of cargo handling gear from the certification requirements of § 1917.50. This includes gear used only for handling or holding hoses, handling ship's stores or handling the gangway. OSHA intended that this exemption apply to both longshoring and marine terminals. This amendment carries over the exemptions as found in the Longshoring Regulations, in § 1918.2, under the definition of "Vessels's cargo handling gear."

The second part of amendment #55 corrects editorially the parallel footnote in Part 1918. The second part of amendment #11 makes the regulatory language addressing the hazard of employees riding elevated powered industrial trucks identical in both Parts. Amendment #31 adds the previously mentioned chart at the end of Part 1917 titled: "Special Cargo Gear and Container Spreader Test Requirements," as newly added Appendix I. This chart closely parallels the chart found in Part 1918, Appendix IV. This amendment also replaces a reference to Part 1917 in the introductory language to Appendix IV in Part 1918, with the actual chart being added to the end of Part 1917. The first part of amendment #48 adds a sentence concerning holding brakes to Part 1918, which is found in the parallel section in Part 1917.

The fourth category, eliminating a duplicative requirement, involves two amendments. The second part of amendment #3 moves a repeated definition of "dockboards" from § 1917.124(b) to the definitions section (§ 1917.2) and also corrects the existing definition in § 1917.2 by adding language that was inadvertently omitted but was in the definition that was in § 1917.124. The scope section's incorporation by reference of OSHA's general industry standard on the servicing of multi-piece and single-piece rim wheels makes the inclusion of the text of these requirements in this Part unnecessary. Amendment #12 adds a reference to the scope section of Part 1917 that cross-references the servicing of multi-piece and single-piece rim wheels in Part 1910.

The fifth category, correcting mandatory language where illustrative language was intended, includes the first part of amendment #15 and the third part of amendment #51. This change involves language in a Note that was intended merely to provide an example of what would be acceptable, but was inadvertently expressed in mandatory language. The amendments address parallel sections in both Parts (Part 1917 and Part 1918, Marine Terminals and Longshoring Operations) that require the use of high visibility vests.

The sixth category, clarifying regulatory text to better reflect regulatory intent, includes five amendments. The first and second part of amendment #18 and amendment #57 make it clear that any Personal Flotation Devices used must be marked for use as work vests, for commercial use, or for use on vessels. Amendment #44 replaces the term "gypsy head" with the more appropriate term "winch head." The third part of amendment #46 replaces the word "moused" with the more appropriate term "positively secured." Amendment 59 rearranges the chart in mandatory Appendix IV titled "Special Cargo Gear and Container Spreader Test Requirements." The reference to the charts' applicability to § 1917.50 has been deleted and the actual chart has been added to the end of Part 1917 (see amendment #31). The symbol ">" is replaced by the words "greater than" to avoid confusion, the table heading is rearranged for clarity, and a Note to Appendix IV is added to clarify how special gear that was in use prior to the publication of the current rule is assumed to have been tested.

The seventh category, technical drafting corrections, includes four amendments. The first part of amendment #26 deletes two definitions that were moved to the definitions section (§ 1917.2) and reserves the paragraph that the definitions were in. The first part of amendment #51 and amendment #52, which contained a footnote explaining the term "Ro-Ro" operations," is replaced by a reference to the definitions section. The third part of amendment #34 adds the term "Ro-Ro operations" and a definition of these operations to the definition section of the Longshoring rule.

The eighth category includes corrections of errors that were made when converting from English units to metric units. This includes errors in conversion calculations, changes to different units for the purpose of consistency, and changing from one decimal place to two decimal places for the purpose of consistency. The

amendments are: the second parts of #3; #7; the first, third, and fourth parts of amendment #10; the first and third parts of #11; #13; the second, third, fourth, fifth, sixth and seventh parts of #14; the third part of #15; the first, second, third, and fourth parts of #19; the first, second, and third parts of #20; #21; #22; #23; #24; #25; the second parts of #26; #27; #28; #29; #30; #31; the first and second parts of #34; #35/36; #37; #38; #39; the first and second parts of #40; #41; the first and second parts of #43; #45; #47; the second and third parts of #50, and the first and second parts of #53.

The ninth, and final category, corrects numerical errors in the Safe Working Load Tables and Charts. This includes amendments #10 and the first and third parts of #57.

**Authority:** This document has been prepared under the direction of Charles N. Jeffress, Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, D.C. 20210. These technical amendments are made pursuant to sections 4, 6 and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657), section 41 of the Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941), Secretary of Labor's Order No. 6-96 (62 FR 111), and 29 CFR Part 1911.

## List of Subjects

### 29 CFR Part 1917

Freight, Hazardous substances, Incorporation By Reference, Longshore and harbor workers, Occupational safety and health, Reporting and recordkeeping requirements.

### 29 CFR Part 1918

Freight, Hazardous substances, Longshore and harbor workers, Occupational safety and health, Reporting and recordkeeping requirements, Vessels.

### 29 CFR Part 1919

Freight, Longshore and harbor workers, Occupational safety and health, Reporting and recordkeeping requirements, Vessels.

Signed at Washington, DC this 19th day of June, 2000.

**Charles N. Jeffress,**  
Assistant Secretary of Labor.

Accordingly, we are making the following technical amendments to 29 CFR Parts 1917, 1918, and 1919 as set forth below:

## PART 1917—MARINE TERMINALS

1. The authority citation for Part 1917 continues to read in part as follows:

**Authority:** Sec. 41, Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941);

Secs. 4, 6, 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), or 6-96 (62 FR 111), as applicable; 29 CFR Part 1911.

\* \* \* \* \*

2. In § 1917.1, revise paragraph (a) introductory text to read as follows:

**§ 1917.1 Scope and applicability.**

(a) The regulations of this part apply to employment within a marine terminal as defined in § 1917.2, including the loading, unloading, movement or other handling of cargo, ship's stores or gear within the terminal or into or out of any land carrier, holding or consolidation area, any other activity within and associated with the overall operation and functions of the terminal, such as the use and routine maintenance of facilities and equipment. All cargo transfer accomplished with the use of shore-based material handling devices shall be regulated by this part.

\* \* \* \* \*

3. In § 1917.2, revise the definition of *Confined space*, remove the definition of *Dockboard*, and add definitions of *Dockboards* and *Ramps* in alphabetical order to read as follows:

**§ 1917.2 Definitions.**

\* \* \* \* \*

*Confined space* means:

(1) A space having all of the following characteristics:

- (i) Small size;
- (ii) Severely limited natural ventilation;
- (iii) Capability to accumulate or contain a hazardous atmosphere;
- (iv) Exits that are not readily accessible; and
- (v) A design not meant for continuous human occupancy.

(2) Examples of confined spaces are intermodal tank containers, barge water tanks and portable tanks.

\* \* \* \* \*

*Dockboards* (car and bridge plates) mean devices for spanning short distances between rail cars or highway vehicles and loading platforms that do not expose employees to falls greater than 4 feet (1.22 m).

\* \* \* \* \*

*Ramps* mean other flat-surface devices for passage between levels and across openings not covered under "dockboards."

4. In § 1917.3, revise paragraph (b) to read as follows:

**§ 1917.3 Incorporation by reference.**

\* \* \* \* \*

(b) The following material is available for purchase from the American National Standards Institute (ANSI), 11 West 42nd St., New York, NY 10036:

(1) ANSI A14.1-1990, Safety Requirements for Portable Wood Ladders; IBR approved for § 1917.119(c).

(2) ANSI A14.2-1990, Safety Requirements for Portable Metal Ladders; IBR approved for § 1917.119(c).

(3) ANSI A14.5-1992, Safety Requirements for Portable Reinforced Plastic Ladders; IBR approved for § 1917.119(c).

(4) ANSI Z-87.1-1989, Practice for Occupational and Educational Eye and Face Protection; IBR approved for § 1917.91(a)(1).

(5) ANSI Z-89.1-1986, Personnel Protection-Protective Headwear for Industrial Workers-Requirements; IBR approved for § 1917.93(b).

(6) ANSI Z-41-1991, American National Standard for Personal Protection-Protective Footwear; IBR approved for § 1917.94(b).

(7) ASME B56.1, 1959, Safety Code for Powered Industrial Trucks, pages 8 and 13; IBR approved for § 1917.50(j)(1).

5. In § 1917.23, revise the section heading and paragraph (a) to read as follows:

**§ 1917.23 Hazardous atmospheres and substances (see also § 1917.2 Hazardous cargo, material, substance or atmosphere).**

(a) *Purpose and scope.* This section covers areas in which the employer is aware that a hazardous atmosphere or substance may exist, except where one or more of the following sections apply: § 1917.22 Hazardous cargo; § 1917.24 Carbon monoxide; § 1917.25 Fumigants, pesticides, insecticides and hazardous preservatives; § 1917.73 Terminal facilities handling menhaden and similar species of fish; § 1917.152 Welding, cutting, and heating (hot work); and § 1917.153 Spray painting.

\* \* \* \* \*

6. The section heading to § 1917.25 is revised to read as follows:

**§ 1917.25 Fumigants, pesticides, insecticides and hazardous preservatives (see also § 1917.2 Hazardous cargo, material, substance or atmosphere).**

\* \* \* \* \*

7. In § 1917.26, revise paragraph (f) to read as follows:

**§ 1917.26 First aid and lifesaving facilities.**

\* \* \* \* \*

(f) A U.S. Coast Guard approved 30-inch (76.2 cm) life ring, with at least 90 feet (27.43m) of line attached, shall be available at readily accessible points at

each waterside work area where the employees' work exposes them to the hazard of drowning. Employees working on any bridge or structure leading to a detached vessel berthing installation shall wear U.S. Coast Guard approved personal flotation devices except where protected by railings, nets, or safety belts and lifelines. A readily available portable or permanent ladder giving access to the water shall also be provided within 200 feet (61 m) of such work areas.

8. In § 1917.27, revise the Note to paragraph (a)(2) to read as follows:

**§ 1917.27 Personnel.**

(a) \* \* \*

(2) \* \* \*

**Note to paragraph (a)(2):** OSHA is defining suddenly incapacitating medical ailments consistent with the Americans with Disabilities Act (ADA), 42 U.S.C. 12101 (1990). Therefore, employers who act in accordance with the employment provisions (Title I) of the ADA (42 U.S.C. 12111-12117), the regulations implementing Title I (29 CFR Part 1630), and the Technical Assistance Manual for Title I issued by the Equal Employment Opportunity Commission (Publication number: EEOC-M1A), will be considered as being in compliance with this paragraph.

\* \* \* \* \*

9. In § 1917.30, revise paragraph (a)(1), and add footnote 3a to read as follows:

**§ 1917.30 Emergency action plans.**

(a) *Emergency action plans.* (1) *Scope and application.* This paragraph (a) requires all employers to develop and implement an emergency action plan.<sup>3a</sup> The emergency action plan shall be in writing (except as provided in paragraph (a)(5)(iv) of this section) and shall cover those designated actions employers and employees must take to ensure employee safety from fire and other emergencies.

\* \* \* \* \*

10. In § 1917.42, revise TABLE C-1 in paragraph (b)(4), paragraph (d)(2), TABLE C-3 in paragraph (i)(2), and paragraph (k)(3) to read as follows:

**§ 1917.42 Miscellaneous auxiliary gear.**

\* \* \* \* \*

(b) \* \* \*

(4) \* \* \*

<sup>3a</sup> When an employer directs his employees to respond to an emergency that is beyond the scope of the Emergency Action Plan developed in accordance with this section, then § 1910.120(q) of this chapter shall apply.

TABLE C-1.—NUMBER AND SPACING OF U-BOLT WIRE ROPE CLIPS

Improved plow steel, rope diameter (inches/(cm))	Minimum number of clips		Minimum spacing (inches/(cm))
	Drop forged	Other material	
1/2 or less (1.3) .....	3	4	3 (7.6)
5/8 (1.6) .....	3	4	3 3/4 (9.5)
3/4 (1.9) .....	4	5	4 1/2 (11.4)
7/8 (2.2) .....	4	5	5 1/4 (13.3)
1 (2.5) .....	5	7	6 (15.2)
1 1/8 (2.9) .....	6	7	6 3/4 (17.1)
1 1/4 (3.2) .....	6	8	7 1/2 (19.1)
1 3/8 (3.5) .....	7	8	8 1/4 (21.0)
1 1/2 (3.8) .....	7	9	9 (22.9)

\* \* \* \* \*

(d) \* \* \*

(2)(i) Unless otherwise recommended by the manufacturer, when synthetic fiber ropes are substituted for fiber ropes of less than three inches (7.62 cm) in circumference, the substitute shall be of equal size. Where substituted for fiber rope of three inches or more in circumference, the size of the synthetic rope shall be determined from the formula:

$$C = \pm \sqrt{0.6C_s^2 + 0.4C_m^2}$$

Where C = the required circumference of the synthetic rope in inches, Cs = the circumference to the nearest one-quarter inch of a synthetic rope having a breaking strength not less than that of the size fiber rope that is required by paragraph (c) of this section and Cm = the circumference of the fiber rope in inches that is

required by paragraph (c) of this section.

(ii) In making such substitution, it shall be ascertained that the inherent characteristics of the synthetic fiber are suitable for hoisting.

\* \* \* \* \*

(i) \* \* \*

(2) \* \* \*

TABLE C-3.—SAFE WORKING LOADS FOR SHACKLES

Material size		Pin diameter		Safe working load in 2,000 lb tons
Inches	(cm)	Inches	(cm)	
1/2 .....	(1.3)	5/8	(1.6)	1.4
5/8 .....	(1.6)	3/4	(1.9)	2.2
3/4 .....	(1.9)	7/8	(2.2)	3.2
7/8 .....	(2.2)	1	(2.5)	4.3
1 .....	(2.5)	1 1/8	(2.9)	5.6
1 1/8 .....	(2.9)	1 1/4	(3.2)	6.7
1 1/4 .....	(3.2)	1 3/8	(3.5)	8.2
1 3/8 .....	(3.5)	1 1/2	(3.8)	10.0
1 1/2 .....	(3.8)	1 5/8	(4.1)	11.9
1 3/4 .....	(4.4)	2	(5.1)	16.2
2 .....	(5.1)	2 1/4	(5.7)	21.2

\* \* \* \* \*

(k) *Pallets.* \* \* \*

(3) Reusable wing or lip-type pallets shall be hoisted by bar bridles or other suitable gear and shall have an overhanging wing or lip of at least three inches (7.62cm). They shall not be hoisted by wire slings alone.

\* \* \* \* \*

11. In § 1917.43, revise paragraphs (b)(3), (e)(1)(ii), (e)(6)(vi), and (g)(2)(i)(C) to read as follows:

**§ 1917.43 Powered industrial trucks.**

\* \* \* \* \*

(b) *General.* \* \* \*

(3) When a powered industrial truck is left unattended, load-engaging means shall be fully lowered, controls neutralized and brakes set. Unless the truck is in view and within 25 feet (7.62

m) of the operator, power shall be shut off. Wheels shall be blocked or curbed if the truck is on an incline.

\* \* \* \* \*

(e) *Fork lift trucks.* (1) *Overhead guards.* \* \* \*

(ii) Overhead guards shall not obstruct the operator's view, and openings in the top of the guard shall not exceed six inches (15.24 cm) in one of the two directions, width or length. Larger openings are permitted if no opening allows the smallest unit of cargo being handled to fall through the guard.

\* \* \* \* \*

(6) *Lifting of employees.* \* \* \*

(vi) When the truck has controls elevated with the lifting carriage, means shall be provided for employees on the

platform to shut off power to the vehicle.

\* \* \* \* \*

(g) *Straddle trucks.* \* \* \*

(2) \* \* \*

(C) The drive chain shall be enclosed to a height of eight feet (2.44 m) except for that portion at the lower half of the lower sprocket.

\* \* \* \* \*

12. In § 1917.44, revise paragraph (o) introductory text to read as follows:

**§ 1917.44 General rules applicable to vehicles.<sup>4</sup>**

\* \* \* \* \*

(o) *Servicing multi-piece and single piece rim wheels.* Servicing of multi-

<sup>4</sup> The United States Coast Guard at 33 CFR 126.15(d) and (e) has additional regulations applicable to vehicles in terminals.

piece and single piece rim wheels is covered by § 1910.177 of this chapter. (See § 1917.1(a)(2)(xii)).

\* \* \* \* \*

13. In § 1917.45, revise paragraphs (g)(8), (i)(5)(i)(A), (i)(5)(i)(B), (i)(5)(i)(C), and (j)(8) to read as follows:

**§ 1917.45 Cranes and derricks (See also § 1917.50).**

\* \* \* \* \*

(g) \* \* \*

(8) *Pedestrian clearance.* If the track area is used for employee passage or for work, a minimum clearance of three feet (.91 m) shall be provided between trucks or the structures of rail-mounted cranes and any other structure or obstruction. When the required clearance is not available on at least one side of the crane's trucks, the area shall not be used and shall be marked and identified.

\* \* \* \* \*

(i) \* \* \*

(5) \* \* \*

(i) \* \* \*

(A) For lines rated 50 kV or below, minimum clearance between the lines and any part of the crane or load shall be 10 feet (3.05 m);

(B) For lines rated over 50 kV, minimum clearance between the lines

and any part of the crane or load shall be either 10 feet (3.05 m) plus 0.4 inch (10.16 mm) for each 1 kV over 50 kV, or twice the length of the line insulator, but never less than 10 feet; and

(C) In transit with no load and boom lowered, the clearance shall be a minimum of 4 feet (1.22 m).

\* \* \* \* \*

(j) \* \* \*

(8) When intermodal container spreaders are used to transfer employees to or from the tops of containers, the spreaders shall be equipped with a personnel platform equipped with fixed railings, provided that the railings have one or more openings for access. The openings shall be fitted with a means of closure, such as chains with hooks. Existing railings shall be at least 36 inches (0.91 m) in height. New railings installed after October 3, 1983 shall be 42 inches (1.07 m), plus or minus 3 inches (7.62 cm), in height. The provisions of paragraphs (j)(1)(iii)(C), (j)(1)(iii)(D), and (j)(1)(iii)(F) of this section also apply to personnel platforms when such container spreaders are used.

\* \* \* \* \*

14. In § 1917.50, revise the section heading and paragraphs (c)(5)(i),

(c)(5)(ii), (c)(5)(iv), (i)(2), (j)(1), (j)(2); and add new paragraph (j)(3) to read as follows:

**§ 1917.50 Certification of marine terminal material handling devices (See also mandatory appendix I, of this part).**

\* \* \* \* \*

(c) \* \* \*

(5) *Special gear.* (i) 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 (c)(5)(ii) 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.

(ii) 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 (c)(5)(ii)).

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.

\* \* \* \* \*

(iv) 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 of this section every 4 years in accordance with paragraph (b) of this section or by a designated person.

\* \* \* \* \*

(i) \* \* \*

(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.

(j) \* \* \*

(1) Small industrial crane trucks as described on page 8 and illustrated on page 13 of ASME B56.1, 1959, "Safety Code for Powered Industrial Trucks", and powered industrial trucks;

(2) Any straddle truck not capable of straddling two or more intermodal containers 16 feet (4.88 m) in width; and

(3) Gear used only for handling or holding hoses, handling ship's stores or handling the gangway.

15. In § 1917.71, revise the note to paragraph (e), paragraph (f) introductory text, and paragraph (f)(1)(i)(F) to read as follows:

**§ 1917.71 Terminals handling intermodal containers or roll-on roll-off operations.**

\* \* \* \* \*

(e) \* \* \*

**Note to paragraph (e):** High visibility vests or equivalent protection means high visibility/retro-reflective materials which are intended to make the user clearly visible by day through the use of high visibility (fluorescent) material and in the dark by vehicle headlights through the use of retro-reflective material. For example, an acceptable area of material for a vest or equivalent protection is .5 m<sup>2</sup> (760 in.<sup>2</sup>) for fluorescent (background) material and .13m<sup>2</sup> (197 in.<sup>2</sup>) for retro-reflective material. Vests or equivalent protection, such as high visibility/retro-reflective coveralls, that are

available for industrial use, may also be acceptable.

(f) Containers shall be handled using lifting fittings or other arrangements suitable and intended for the purpose as set forth in paragraphs (f)(1) through (f)(4) of this section, unless damage to an intermodal container makes special means of handling necessary.

(1) \* \* \*

(i) \* \* \*

(F) The length of the spreader beam is at least 16.3 feet (5 m) for a 20-foot container, and at least 36.4 feet (11.1 m) for a 40-foot container.

\* \* \* \* \*

16. In § 1917.73, revise the section heading, paragraphs (a)(1), (b), and (e) to read as follows:

**§ 1917.73 Terminal facilities handling menhaden and similar species of fish (see also § 1917.2, definition of hazardous cargo, material, substance or atmosphere).**

(a)(1) Tanks in terminal areas used for receiving or storing bailwater for

recirculating into vessel holds in discharging operations shall be opened or ventilated to minimize contamination of water circulated to the vessel. Bailwater tanks shall be thoroughly drained upon completion of each day's operations and shall be left open to the air. Drainage is unnecessary when bailwater has been treated to remove hydrogen sulfide-producing contaminants and the efficiency of such treatment has been established by the employer.

\* \* \* \* \*

(b) Pipelines and hoses on the dock or terminal used for receiving and circulating used bailwater shall be completely drained upon completion of each day's operation and left open to the air.

\* \* \* \* \*

(e) Supervisory personnel shall be on hand at dockside to supervise discharging of bailwater from vessels.

17. Revise § 1917.92, to read as follows:

**§ 1917.92 Respiratory protection.**

(See § 1917.1(a)(2)(x)).

18. In § 1917.95, add a heading to paragraph (b) and revise paragraphs (b)(1) introductory text and (b)(2) to read as follows:

**§ 1917.95 Other protective measures.**

\* \* \* \* \*

(b) *Personal flotation devices (PFDs).*

(1) The employer shall provide, and shall direct the wearing of PFDs for those employees, such as line handlers, who are engaged in work in which they may be pulled into the water:

\* \* \* \* \*

(2) PFDs (life preservers, life jackets, or work vests) worn by each affected employee must be United States Coast Guard (USCG) approved pursuant to 46 CFR part 160 (Type I, II, III, or V PFD) and marked for use as a work vest, for commercial use, or for use on vessels.

\* \* \* \* \*

19. In § 1917.112, revise paragraphs (c)(3), (c)(4), (d) and (e) introductory text to read as follows:

**§ 1917.112 Guarding of edges.**

\* \* \* \* \*

(c) \* \* \*

(3) The top surface of guardrails installed before October 3, 1983, shall be at least 36 inches (0.91 m) high. Those installed after October 3, 1983, shall be 42 inches (1.07 m), plus or minus 2 inches (5.1 cm), high.

(4) Any non-rigid railing such as chain or wire rope shall have a maximum sag limit at the mid-point

between posts of not more than 6 inches (15.24 cm).

\* \* \* \* \*

(d) *Toeboards.* Toeboards shall be provided when employees below could be exposed to falling objects such as tools. Toeboards shall be at least 3½ inches (8.9 cm) in height from top edge to floor level, and be capable of withstanding a force of 50 pounds (222 N) applied in any direction. Drainage clearance under toeboards is permitted.

(e) *Stair railings.* Stair railings shall be capable of withstanding a force of at least 200 pounds (890 N) applied in any direction, and shall not be more than 36 inches (0.91 m) nor less than 32 inches (0.81 m) in height from the upper top rail surface to the tread surface in line with the leading edge of the tread. Railings and midrails shall be provided at any stairway having four or more risers, as follows:

\* \* \* \* \*

20. In § 1917.117, revise paragraphs (i), (j)(4), and (n) to read as follows:

**§ 1917.117 Manlifts.**

\* \* \* \* \*

(i) *Emergency ladder.* A fixed emergency ladder accessible from any position on the lift and in accordance with the requirements of § 1917.118(d) shall be provided for the entire run of the manlift.

(j) \* \* \*

(4) Landings shall be of sufficient size and strength to support 250 pounds (1,112 N).

\* \* \* \* \*

(n) *Top clearance.* A clearance of at least 11 feet (3.35 m) shall be provided between the top landing and the ceiling.

\* \* \* \* \*

21. In § 1917.118, revise paragraphs (d)(1)(i), (d)(1)(ii), (d)(2)(ii), (d)(4), (e)(2)(iii), (e)(3)(ii), (e)(5)(iii), (e)(5)(iv), and (f)(2) to read as follows:

**§ 1917.118 Fixed ladders.**

\* \* \* \* \*

(d) *Ladder specifications.* (1)(i) Ladders installed before October 3, 1983, shall be capable of withstanding without damage a minimum concentrated load, applied uniformly over a 3½ inch (8.9 cm) width at the rung center, of 200 pounds (890 N).

(ii) Ladders installed after October 3, 1983 shall be capable of withstanding 250 pounds (1,112 N) applied as described in paragraph (d)(1)(i) of this section. If used by more than one employee simultaneously, the ladder as a unit shall be capable of simultaneous additional loading in 250 pound (1,112 N) increments for each additional employee, applied to a corresponding

number of rungs. The unit shall have a safety factor of four (4), based on ultimate strength, in the designed service.

(2) \* \* \*

(ii) Ladders installed after October 3, 1983 shall have rungs evenly spaced from 12±2 inches (30.5±5.08 cm) apart, center to center.

\* \* \* \* \*

(4) The minimum distance between the rung center line and the nearest permanent object behind the rung shall be 4 inches (10.16 cm), except that in ladders installed after October 3, 1983, the minimum distance shall be 7 inches (17.78 cm) unless physical limitations make a lesser distance, not less than 4½ inches (11.43 cm), necessary.

\* \* \* \* \*

(e) *Protection against falls.* \* \* \*

(2) \* \* \*

(iii) A landing platform capable of supporting a load of 100 pounds per square foot (4.79 kPa) and fitted with guardrails complying with Sec. 1917.112(c) shall be provided at least every 30 feet (9.14 m), except as specified in paragraph (e)(2)(iv) of this section.

\* \* \* \* \*

(3) \* \* \*

(ii) Located at intervals of 150 feet (45.7 m) or less; and

\* \* \* \* \*

(5) \* \* \*

(iii) Extend at least 36 inches (0.91 m) above landings; and

(iv) Extend to within 8 feet (2.44 m) above the ground or base, except that a maximum of 20 feet (6.1 m) is permitted where the cage or well would extend into traffic lanes.

\* \* \* \* \*

(f) \* \* \*

(2) Form a continuous ladder, uniformly spaced vertically from 12 inches to 16 inches (30.5 to 40.6 cm) apart, with a minimum width of 10 inches (25.4 cm) and projecting at least 4½ inches (11.43 cm) from the wall;

\* \* \* \* \*

22. In § 1917.119, revise paragraphs (b)(4), (d)(1), (d)(2), and (d)(3) to read as follows:

**§ 1917.119 Portable ladders.**

\* \* \* \* \*

(b) \* \* \*

(4) Width between side rails at the base of the ladder shall be at least 12 inches (30.48 cm) for ladders 10 feet (3.05 m) or less in overall length, and shall increase at least ¼ inch (0.64 cm) for each additional 2 feet (0.61 m) of ladder length.

\* \* \* \* \*

(d) \* \* \*

(1) Have a minimum and uniform distance between rungs of 12 inches (30.48 cm), center to center;

(2) Are capable of supporting a 250-pound (1,112 N) load without deformation; and

(3) Have a minimum width between side rails of 12 inches (30.48 cm) for ladders 10 feet (3.05 m) in height. Width between rails shall increase at least 1/4 inch (0.64 cm) for each additional 2 feet (0.61 m) of ladder length.

\* \* \* \* \*

23. In § 1917.120, revise paragraphs (b)(1), (b)(2), (b)(4), and (b)(5)(ii) to read as follows:

**§ 1917.120 Fixed stairways.**

\* \* \* \* \*

(b) *New installations.* (1) Fixed stairs installed after October 3, 1983 shall be

positioned within the range of 30 degrees to 50 degrees to the horizontal with uniform riser height and tread width throughout each run and be capable of a minimum loading of 100 pounds per square foot (445 N) and a minimum concentrated load of 300 pounds (1,334 N) at the center of any treadspan. Riser height shall be from 6 to 7.5 inches (15.24 to 19.05 cm), stair width a minimum of 22 inches (55.88 cm) between vertical barriers, tread depth a minimum of 12±2 inches (30.48±5.08 cm), and tread nosing shall be straight leading edges.

(2) Stair landings shall be at least 20 inches (50.8 cm) in depth. Where doors or gates open on a stairway, a landing platform shall be provided. Door swing shall not reduce effective standing area

on the landing to less than 18 inches (45.72 cm) in depth.

\* \* \* \* \*

(4) Railing height from tread surface at the riser face shall be 33±3 inches (83.82 cm ±7.62 cm).

(5) \* \* \*

(ii) Have open treads at least 4 inches (10.16 cm) in depth and 18 inches (45.72 cm) in width with a uniformly spaced vertical rise between treads of 6 to 9.5 inches (15.24 to 24.13 cm); and

\* \* \* \* \*

24. In § 1917.121, revise the Table following Figure F-1 in paragraph (b)(1), paragraphs (b)(2) and (b)(4) to read as follows:

**§ 1917.121 Spiral stairways.**

\* \* \* \* \*

(b) \* \* \*

(1) \* \* \*

**SPIRAL STAIRWAY—MINIMUM DIMENSIONS**

	A (half-tread width)	B
Normal use by employees .....	11 inches (27.94 cm) .....	6 inches (15.24 cm).
Limited access .....	9 inches (22.86 cm) .....	5 inches (12.7 cm).

(2) Stairway risers shall be uniform and shall range from 6½ to 10½ inches (16.5 to 26.67 cm) in height;

\* \* \* \* \*

(4) Railings shall conform to the requirements of § 1917.112(c)(1). If balusters are used, there shall be a minimum of one per tread. Handrails shall be a minimum of 1¼ inches (3.18 cm) in outside diameter; and

\* \* \* \* \*

25. In § 1917.122, revise paragraph (d) to read as follows:

**§ 1917.122 Employee exits.**

\* \* \* \* \*

(d) The minimum width of any employee exit shall be 28 inches (71.12 cm).

26. In § 1917.124, remove and reserve paragraph (b), and revise paragraph (d)(2) to read as follows:

**§ 1917.124 Dockboards (car and bridge plates).**

\* \* \* \* \*

(b) [Reserved]

\* \* \* \* \*

(d) \* \* \*

(2) Ramps shall be equipped with a guardrail meeting the requirement of § 1917.112(c)(1) if the slope is more than 20 degrees to the horizontal or if employees could fall more than 4 feet (1.22 m).

\* \* \* \* \*

27. In § 1917.151, revise paragraphs (g)(4) and (h)(1) to read as follows:

**§ 1917.151 Machine guarding.**

\* \* \* \* \*

(g) \* \* \*

(4) Work rests shall be used on fixed grinding machines. Work rests shall be rigidly constructed and adjustable for wheel wear. They shall be adjusted closely to the wheel with a maximum opening of 1/8-inch (3.18 mm) and shall be securely clamped. Adjustment shall not be made while the wheel is in motion.

\* \* \* \* \*

(h) *Rotating parts, drives and connections.* (1) Rotating parts, such as gears and pulleys, that are located 7 feet (2.13 m) or less above working surfaces shall be guarded to prevent employee contact with moving parts.

\* \* \* \* \*

28. In § 1917.152, revise paragraphs (d)(1)(xvi), (d)(3)(ii), and (g)(3) to read as follows:

**§ 1917.152 Welding, cutting and heating (hot work)<sup>12</sup> (See also § 1917.2, definition of Hazardous cargo, materials, substance or atmosphere).**

\* \* \* \* \*

(d) \* \* \*

<sup>12</sup> The U.S. Coast Guard, at 33 CFR 126.15(c), requires prior permission of the Captain of the Port if welding or other hot work is to be carried out at a facility where dangerous cargoes as defined by 33 CFR 126.07 are located or being handled.

(1) \* \* \*

(xvi) Shall be stored so that oxygen cylinders are separated from fuel gas cylinders and combustible materials by either a minimum distance of 20 feet (6.1 m) or a barrier having a fire-resistance rating of 30 minutes; and

\* \* \* \* \*

(3) \* \* \*

(ii) When oxygen and fuel gas hoses are taped together, not more than four (4) of each 12 inches (10.16 cm) of each 30.48 cm) shall be taped.

\* \* \* \* \*

(g) \* \* \*

(3) Surfaces covered with preservative coatings shall be stripped for at least 4 inches (10.16 cm) from the area of heat application or employees shall be protected by supplied air respirators in accordance with the requirements of § 1910.134 of this chapter.

\* \* \* \* \*

29. In § 1917.153, revise paragraphs (c)(4)(i), (d)(12), and (d)(13) to read as follows:

**§ 1917.153 Spray painting (See also § 1917.2, definition of Hazardous cargo, materials, substance or atmosphere).**

\* \* \* \* \*

(c) \* \* \*

(4)(i) No open flame or spark-producing equipment shall be within 20 feet (6.1 m) of a spraying area unless it

is separated from the spraying area by a fire-retardant partition.

\* \* \* \* \*

(d) \* \* \*

(12) Wiring, motors and equipment in a spray booth shall be of approved explosion-proof type for Class I, Group D locations and conform to subpart S of Part 1910 of this chapter for Class I, Division 1, Hazardous Locations.

Wiring, motors and equipment within 20 feet (6.1m) of any interior spraying area and not separated by vapor-tight

partitions shall not produce sparks during operation and shall conform to the requirements of subpart S of Part 1910 of this chapter for Class I, Division 2, Hazardous Locations.

(13) Outside electrical lights within 10 feet (3.05m) of spraying areas and not separated from the areas by partitions shall be enclosed and protected from damage.

\* \* \* \* \*

30. In § 1917.156, revise paragraph (a)(7)(i) to read as follows:

**§ 1917.156 Fuel handling and storage.**

(a) \* \* \*

(7) \* \* \*

(i) Dispensing hoses do not exceed 50 feet (15.24 m) in length; and

\* \* \* \* \*

31. At the end of Part 1917, add Appendix I, to read as follows:

**Appendix I to Part 1917—Special Cargo Gear and Container Spreader Test Requirements (Mandatory) [see § 1917.50(c)(5)]**

Type gear	Test requirement	Tested by	Proof test	
A. ALL SPECIAL CARGO HANDLING GEAR PURCHASED OR MANUFACTURED ON OR AFTER JANUARY 21, 1998				
1. Safe Working Load—greater than 5 short tons (10,000 lbs./4.5 metric tons).	Prior to initial use	OSHA accredited agency only	Up to 20 short tons	125% SWL
	Prior to reuse after structural damage repair	OSHA accredited agency or designated person (40)(1) 125% SWL	From 20 to 50 short tons	5 short tons in excess of SWL
	Every four years after initial proof load test		Over 50 short tons	110% SWL
2. Safe Working Load—5 short tons or less.	Prior to initial use Prior to reuse after structural damage repair	OSHA accredited agency or designated person	125% SWL	
3. Intermodal container spreaders not part of vessel's cargo handling gear.	Prior to initial use	OSHA accredited agency only OSHA accredited agency or designated person	125% SWL	
	Prior to reuse after structural damage repair Every four years after initial proof load test			
B. ALL SPECIAL CARGO HANDLING GEAR IN USE PRIOR TO JANUARY 21, 1998				
1. Any Safe Working Load	Every four years starting on January 21, 1998	OSHA accredited agency or designated person	Up to 20 short tons	125% SWL
	Prior to initial use or prior to reuse after structural damage repair	OSHA accredited agency	From 20 to 50 short tons	5 short tons in excess of SWL
			Over 50 short tons	110% SWL
2. Intermodal container spreaders not part of ship's gear.	Every four years starting on January 21, 1998	OSHA accredited agency or designated person	125% SWL	
	Prior to initial use or prior to reuse after structural damage repair	OSHA accredited agency		

**PART 1918—SAFETY AND HEALTH REGULATIONS FOR LONGSHORING**

32. The authority citation for Part 1918 continues to read in part as follows:

**Authority:** Secs. 4, 6, and 8 of the Occupational Safety and Health Act, 29 U.S.C. 653, 655, 657; Walsh-Healey Act, 41 U.S.C. 35 *et seq.*; Service Contract Act of 1965, 41 U.S.C. 351 *et seq.*; Sec. 107, Contract Work Hours and Safety Standards Act (Construction Safety Act), 40 U.S.C. 333; Sec. 41, Longshore and Harbor Workers'

Compensation Act, 33 U.S.C. 941; National Foundation of Arts and Humanities Act, 20 U.S.C. 951 *et seq.*; Secretary of Labor's Order No. 6–96 (62 FR 111).

\* \* \* \* \*

33. In § 1918.1, revise the Note to paragraph (b)(7) to read as follows:

**§ 1918.1 Scope and application.**

\* \* \* \* \*

(b) \* \* \*

(7) \* \* \*

**Note to paragraph (b)(7):** Exposures to nonionizing radiation emissions from

commercial vessel radar transmitters are considered hazardous under the following situations: (a) Where the radar is transmitting, the scanner is stationary, and the exposure distance is 19 feet (5.79 m) or less; or (b) where the radar is transmitting, the scanner is rotating, and the exposure distance is 5 feet (1.52 m.) or less.

\* \* \* \* \*

34. In § 1918.2 revise the definitions for *Dockboards* (car and bridge plates) and *Fall hazard*, and add the following new definition for *Ro-Ro operations* in alphabetical order to read as follows:

**§ 1918.2 Definitions.**

\* \* \* \* \*

*Dockboards* (car and bridge plates) mean devices for spanning short distances between, for example, two barges, that is not higher than four feet (1.22m) above the water or next lower level.

\* \* \* \* \*

*Fall hazard* means the following situations:

(1) Whenever employees are working within three feet (.91 m) of the unprotected edge of a work surface that is 8 feet or more (2.44 m) above the adjoining surface and twelve inches (.3 m) or more, horizontally, from the adjacent surface; or

(2) Whenever weather conditions may impair the vision or sound footing of employees working on top of containers.

\* \* \* \* \*

*Ro-Ro operations* are those cargo handling and related operations, such as lashing, that occur on Ro-Ro vessels, which are vessels whose cargo is driven on or off the vessel by way of ramps and moved within the vessel by way of ramps and/or elevators.

\* \* \* \* \*

35–36. In § 1918.24, revise paragraphs (d), (f)(4), (h)(1), (h)(2), and (h)(3) to read as follows:

**§ 1918.24 Fixed and portable ladders.**

\* \* \* \* \*

(d) For vessels built after July 16, 2001, when six inches (15.24 cm) or more clearance does not exist behind the rungs of a fixed ladder, the ladder shall be deemed “unsafe” for the purposes of this section. Alternate means of access (for example, a portable ladder) must be used.

\* \* \* \* \*

(f) \* \* \*

(4) Width between side rails at the base of the ladder shall be at least 12 inches (30.48 cm) for ladders 10 feet (3.05 m) or less in overall length, and shall increase at least one-fourth inch (0.64 cm) for each additional two feet (0.61 m) of ladder length.

\* \* \* \* \*

(h) \* \* \*

(1) Have a uniform distance between rungs of at least 12 inches (30.48cm) center to center;

(2) Be capable of supporting a 250-pound (1,112 N) load without deformation; and

(3) Have a minimum width between side rails of 12 inches (30.48 cm) for ladders 10 feet (3.05 m) or less in height. Width between rails shall increase at least one-fourth inch (0.64 cm) for each

additional two feet (0.61 m) of ladder length.

\* \* \* \* \*

37. In § 1918.25, revise paragraph (b)(2) to read as follows:

**§ 1918.25 Bridge plates and ramps (See also § 1918.86).**

\* \* \* \* \*

(b) \* \* \*

(2) Be equipped with a railing meeting the requirements of § 1918.21(b), if the slope is more than 20 degrees to the horizontal or if employees could fall more than four feet (1.22 m);

\* \* \* \* \*

38. In § 1918.37, revise paragraph (a) to read as follows:

**§ 1918.37 Barges.**

(a) Walking shall be prohibited along the sides of covered lighters or barges with coamings or cargo more than five feet (1.52 m) high unless a three-foot (.91 m) clear walkway or a grab rail or taut handline is provided.

\* \* \* \* \*

39. In § 1918.41, revise paragraph (a) to read as follows:

**§ 1918.41 Coaming clearances.**

(a) *Weather decks.* If a deck load (such as lumber or other smooth sided deck cargo) more than five feet (1.52 m) high is stowed within three feet (.91 m) of the hatch coaming and employees handling hatch beams and hatch covers are not protected by a coaming at least 24-inch (.61 m) high, a taut handline shall be provided along the side of the deckload. The requirements of § 1918.35 are not intended to apply in this situation.

\* \* \* \* \*

40. In § 1918.42, revise paragraphs (b) and (d) to read as follows:

**§ 1918.42 Hatch beam and pontoon bridles.**

\* \* \* \* \*

(b) Bridles for lifting hatch beams shall be equipped with toggles, shackles, or hooks, or other devices of such design that they cannot become accidentally dislodged from the hatch beams with which they are used. Hooks other than those described in this section may be used only when they are hooked into the standing part of the bridle. Toggles, when used, shall be at least one inch (2.54 cm) longer than twice the largest diameter of the holes into which they are placed.

\* \* \* \* \*

(d) At least two legs of all strongback and pontoon bridles shall be equipped with a lanyard at least eight feet (2.44 m) long and in good condition. The

bridle end of the lanyard shall be of chain or wire.

41. In § 1918.43, revise paragraph (d) to read as follows:

**§ 1918.43 Handling hatch beams and covers.**

\* \* \* \* \*

(d) Hatch covers unshipped in an intermediate deck shall be placed at least three feet (.91 m) from the coaming or they shall be removed to another deck. Strongbacks unshipped in an intermediate deck shall not be placed closer than six inches (15.24 cm) from the coaming and, if placed closer than three feet (.91 m), shall be secured so that they cannot be tipped or dragged into a lower compartment. If such placement or securement is not possible, strongbacks shall be removed to another deck.

\* \* \* \* \*

42. In § 1918.51, revise paragraphs (d)(3) and (f) to read as follows:

**§ 1918.51 General requirements (See also § 1918.11 and appendix III of this part).**

\* \* \* \* \*

(d) \* \* \*

(3) Wire rope and wire rope slings exhibiting any of the defects or conditions specified in § 1918.62(b)(3)(i) through (vi) shall not be used.

\* \* \* \* \*

(f) Synthetic web slings exhibiting any of the defects or conditions specified in § 1918.62(g)(2)(i) through (vi) shall not be used.

\* \* \* \* \*

43. In § 1918.52, revise paragraphs (d) and (f) to read as follows:

**§ 1918.52 Specific requirements.**

\* \* \* \* \*

(d) *Heel blocks.* (1) When an employee works in the bight formed by the heel block, a preventer at least three-quarters of an inch (1.91 cm) in diameter wire rope shall be securely rigged, or equally effective means shall be taken, to hold the block and fall if the heel block attachments fail. Where physical limitations prohibit the fitting of a wire rope preventer of the required size, two turns of a one-half inch (1.27 cm) diameter wire rope shall be sufficient.

(2) If the heel block is not so rigged as to prevent its falling when not under strain, it shall be secured to prevent alternate raising and dropping of the block. This requirement shall not apply when the heel block is at least 10 feet (3.05 m) above the deck when at its lowest point.

\* \* \* \* \*

(f) *Cargo hooks.* Cargo hooks shall be as close to the junction of the falls as the

assembly permits, but never farther than two feet (.61 m) from it. Exception: This provision shall not apply when the construction of the vessel and the operation in progress are such that fall angles are less than 120 degrees. Overhaul chains shall not be shortened by bolting or knotting.

44. In § 1918.54, revise paragraph (f) to read as follows:

**§ 1918.54 Rigging gear.**

(f) *Bull wire.* (1) Where a bull wire is taken to a winch head for lowering or topping a boom, the bull wire shall be secured to the winch head by shackle or other equally strong method. Securing by fiber rope fastening does not meet this requirement.

(2) When, in lowering or topping a boom, it is not possible to secure the bull wire to the winch head, or when the topping lift itself is taken to the winch head, at least five turns of wire shall be used.

45. In § 1918.61, revise paragraphs (b)(2), (f), and (h) to read as follows:

**§ 1918.61 General (See also appendix IV of this part).**

(b) *Safe working load.* \* \* \*

(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.

(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)).

Safe working load	Proof load
Up to 20 short tons (18.1 metric tons).	25 percent in excess.

Safe working load	Proof load
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

\* \* \* \* \*

(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.

\* \* \* \* \*

46. In § 1918.62, revise the Note to paragraph (a), paragraph (d)(3) and paragraphs (i)(2) and (j)(1) to read as follows:

**§ 1918.62 Miscellaneous auxiliary gear.**

(a) \* \* \*

**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.

\* \* \* \* \*

(d) \* \* \*

(3)(i) Unless otherwise recommended by the manufacturer, when synthetic fiber ropes are substituted for fiber ropes of less than three inches (7.62 cm) in circumference, the substitute shall be of equal size. Where substituted for fiber rope of three inches or more in circumference, the size of the synthetic rope shall be determined from the formula:

$$C = \pm \sqrt{0.6C_s^2 + 0.4C_m^2}$$

Where C = the required circumference of the synthetic rope in inches, Cs = the circumference to the nearest one-quarter inch of a synthetic rope having a breaking strength not less than that of the size fiber rope that is required by paragraph (c) of this section and Cm = the circumference of the fiber rope in inches that is required by paragraph (c) of this section.

(ii) In making such substitution, it shall be ascertained that the inherent characteristics of the synthetic fiber are suitable for hoisting.

\* \* \* \* \*

(i) \* \* \*

(2) Screw pin shackles provided by the employer and used aloft, except in cargo hook assemblies, shall have their pins positively secured.

(j) *Hooks other than hand hooks.* (1) The manufacturer's recommended safe working loads for hooks shall not be exceeded. Hooks other than hand hooks shall be tested before initial use in accordance with the provisions of § 1919.31 (a), (c), and (d) of this chapter. *Exception:* Manufacturers' test certificates indicating performance to the criteria in § 1919.31 (a), (c) and (d) of this chapter shall be acceptable.

\* \* \* \* \*

47. In § 1918.65, revise paragraph (c)(2) to read as follows:

**§ 1918.65 Mechanically powered vehicles used aboard vessels.**

\* \* \* \* \*

(c) \* \* \*

(2) Overhead guards shall not obstruct the operator's view, and openings in the top of the guard shall not exceed six inches (15.24 cm) in one of the two directions, width or length. Larger openings are permitted if no opening allows the smallest unit of cargo being handled through the guard.

\* \* \* \* \*

48. In § 1918.66, remove "or" at the end of paragraph (a)(14)(iii)(A), remove the period at the end of paragraph (a)(14)(iii)(B) and add "; or" in its place, add a new paragraph (a)(14)(iii)(C), and revise the Note to paragraph (f)(1)(vi) to read as follows:

**§ 1918.66 Cranes and derricks other than vessel's gear.**

(a) \* \* \*

(14) \* \* \*

(iii) \* \* \*

(C) 100 percent when two holding brakes are provided.

\* \* \* \* \*

(f) \* \* \*

(1) \* \* \*

(iv) \* \* \*

**Note to paragraph (f)(1)(vi):** If the accuracy of the load indicating device is based on full scale loads and the device is arbitrarily set at plus or minus 10 percent, it would accept a reading between 90,000 and 110,000 lbs. at full capacity for a machine with a maximum rating of 100,000 lbs. but would also show a reading of between zero and 20,000 lbs. at that outreach (radius) at which the load would be 10,000 lbs.; this is clearly unacceptable. If, however, the accuracy of the device is based on actual applied loads under the same conditions, the acceptable range would remain the same with the 100,000-lb. load but would show a figure between 9,000 and 11,000 lbs. at the 10,000-lb. load; this is an acceptable reading.

\* \* \* \* \*

49. In § 1918.69, revise paragraph (b)(1) to read as follows:

**§ 1918.69 Tools.**

\* \* \* \* \*

(b) *Portable electric tools.* (1) Portable hand-held electric tools shall be equipped with switches of a type that must be manually held in a closed position in order to operate the tool.

\* \* \* \* \*

50. In § 1918.85, revise the introductory text of paragraph (f) and paragraphs (f)(1)(i)(F) and (f)(1)(ii) to read as follows:

**§ 1918.85 Containerized cargo operations.**

\* \* \* \* \*

(f) *Lifting fittings.* Containers shall be handled using lifting fittings or other arrangements suitable and intended for the purpose as set forth in paragraphs (f)(1) and (f)(2) of this section, unless damage to an intermodal container makes special means of handling necessary.

(1) \* \* \*

(i) \* \* \*

(F) The length of the spreader beam is at least 16.3 feet (5 m) for a 20-foot container, and at least 36.4 feet (11.1 m) for a 40-foot container.

(ii) When hoisting containers from bottom fittings, the hoisting connections shall bear on the fittings only, making no other contact with the container. The angles of the four bridle legs shall not be less than 30 degrees to the horizontal for 40-foot (12.19 m) containers; 37 degrees for 30-foot (9.14 m) containers; and 45 degrees for 20-foot (6.1 m) containers.

\* \* \* \* \*

51. In § 1918.86, revise the section heading, remove and reserve footnote 9, and revise paragraph (c), and the Note to paragraph (m) to read as follows:

**§ 1918.86 Roll-on roll-off (Ro-Ro) operations (see also § 1918.2, Ro-Ro operations, and § 1918.25).**

\* \* \* \* \*

(c) *Pedestrian traffic.* Bow, stern, and side port ramps also used for pedestrian access shall meet the requirements of § 1918.25. Such ramps shall provide a physical separation between pedestrian and vehicular routes. When the design of the ramp prevents physical separation, a positive means shall be established to prevent simultaneous use of the ramp by vehicles and pedestrians.

\* \* \* \* \*

(m) *Authorized personnel.* \* \* \*

**Note To Paragraph (m):** High visibility vests or equivalent protection means high

visibility/retro-reflective materials which are intended to make the user clearly visible by day through the use of high visibility (fluorescent) material and in the dark by vehicle headlights through the use of retro-reflective material. For example, an acceptable area of material for a vest or equivalent protection is .5 m<sup>2</sup> (760 in.<sup>2</sup>) for fluorescent (background) material and .13m<sup>2</sup> (197 in.<sup>2</sup>) for retro-reflective material. Vests or equivalent protection, such as high visibility/retro-reflective coveralls, that are available for industrial use, may also be acceptable.

\* \* \* \* \*

52. In § 1918.94, revise the section heading and remove and reserve footnote 12 in to paragraph (a)(1)(i) to read as follows:

**§ 1918.94 Ventilation and atmospheric conditions (See also § 1918.2, definitions of Hazardous cargo, materials, substance or atmosphere and Ro-Ro operations).**

\* \* \* \* \*

53. In 1918.97, revise paragraph (e) to read as follows:

**§ 1918.97 First aid and lifesaving facilities. (See appendix V of this part).**

\* \* \* \* \*

(e) *Life-rings.* (1) The employer shall ensure that there is in the vicinity of each vessel being worked at least one U.S. Coast Guard approved 30-inch (76.2 cm) life-ring with no less than 90 feet (27.43 m) of line attached, and at least one portable or permanent ladder that will reach from the top of the apron to the surface of the water.

(2) In addition, when working a barge, scow, raft, lighter, log boom, or carfloat alongside a ship, a U.S. Coast Guard approved 30-inch (76.2 cm) life-ring, with no less than 90 feet (27.43 m) of line shall be provided either on the floating unit itself or aboard the ship in the immediate vicinity of each floating unit being worked.

\* \* \* \* \*

54. In § 1918.98, revise the Note to paragraph (a)(2) to read as follows:

**§ 1918.98 Qualifications of machinery operators and supervisory training.**

(a) \* \* \*

(2) \* \* \*

**Note to paragraph (a)(2):** OSHA is defining suddenly incapacitating medical ailments consistent with the Americans with Disabilities Act (ADA), 42 U.S.C. 12101 (1990). Therefore, employers who act in

accordance with the employment provisions (Title I) of the ADA (42 U.S.C. 12111–12117), the regulations implementing Title I (29 CFR Part 1630), and the Technical Assistance Manual for Title I issued by the Equal Employment Opportunity Commission (Publication number: EEOC–M1A), will be considered as being in compliance with this paragraph.

\* \* \* \* \*

55. In § 1918.100, revise paragraph (a) and footnote 14 to read as follows:

**§ 1918.100 Emergency action plans.**

(a) *Scope and application.* This section requires all employers to develop and implement an emergency action plan.<sup>14</sup> The emergency action plan shall be in writing (except as provided in the last sentence of paragraph (e)(3) of this section) and shall cover those designated actions employers and employees must take to ensure employee safety from fire and other emergencies.

\* \* \* \* \*

56. Revise § 1918.102 to read as follows:

**§ 1918.102 Respiratory protection. (See § 1918.1(b)(8)).**

57. In § 1918.105, revise paragraph (b)(2) to read as follows:

**§ 1918.105 Other protective measures.**

\* \* \* \* \*

(b) \* \* \*

(2) PFDs (life preservers, life jackets, or work vests) worn by each affected employee must be United States Coast Guard (USCG) approved pursuant to 46 CFR part 160 (Type I, II, III, or V PFD) and marked for use as a work vest, for commercial use, or for use on vessels.

\* \* \* \* \*

58. In Part 1918, revise Table 1, Table 2, Table 4A, Table 4B, Table 5, and the three Wire Rope Tables in Appendix II to read as follows:

**Appendix II to Part 1918—Tables for Selected Miscellaneous Auxiliary Gear (Mandatory)**

\* \* \* \* \*

<sup>14</sup> When an employer directs his employees to respond to an emergency that is beyond the scope of the Emergency Action Plan, a plan developed in accordance with § 1910.120(q) of this chapter shall apply.

TABLE 1.—WIRE ROPE CLIPS

Improved plow steel, rope (Inches (cm))	Minimum number of clips		Minimum spacing (Inches (cm))
	Drop forged	Other material	
1/2 or less (1.3) .....	3	4	3 (7.6)
5/8 (1.6) .....	3	4	3 3/4 (9.5)
3/4 (1.9) .....	4	5	4 1/2 (11.4)
7/8 (2.2) .....	4	5	5 1/4 (13.3)
1 (2.5) .....	5	6	6 (15.2)
1 1/8 (2.9) .....	6	6	6 3/4 (17.1)
1 1/4 (3.2) .....	6	7	7 1/2 (19.1)
1 3/8 (3.5) .....	7	7	8 1/4 (21.0)
1 1/2 (3.8) .....	7	8	9 (22.9)

TABLE 2.—NATURAL FIBER ROPE AND ROPE SLINGS—LOAD CAPACITY IN POUNDS (LBS.) SAFETY FACTOR=5—EYE AND EYE SLING—BASKET HITCH

[Angle of rope to horizontal—90 deg. 60 deg. 45 deg. 30 deg.]

Rope diameter nominal inch	Vertical hitch	Choker hitch	Angle of rope to vertical			
			0 deg.	30 deg.	45 deg.	60 deg.
1/2 .....	550	250	1,100	900	750	550
9/16 .....	700	350	1,400	1,200	1,000	700
5/8 .....	900	450	1,800	1,500	1,200	900
3/4 .....	1,100	550	2,200	1,900	1,500	1,100
13/16 .....	1,300	650	2,600	2,300	1,800	1,300
7/8 .....	1,500	750	3,100	2,700	2,200	1,500
1 .....	1,800	900	3,600	3,100	2,600	1,800
1 1/16 .....	2,100	1,100	4,200	3,600	3,000	2,100
1 1/8 .....	2,400	1,200	4,800	4,200	3,400	2,400
1 1/4 .....	2,700	1,400	5,400	4,700	3,800	2,700
1 5/16 .....	3,000	1,500	6,000	5,200	4,300	3,000
1 1/2 .....	3,700	1,850	7,400	6,400	5,200	3,700
1 5/8 .....	4,500	2,300	9,000	7,800	6,400	4,500
1 3/4 .....	5,300	2,700	10,500	9,200	7,500	5,300
2 .....	6,200	3,100	12,500	10,500	8,800	6,200
2 1/8 .....	7,200	3,600	14,500	12,500	10,000	7,200
2 1/4 .....	8,200	4,100	16,500	14,000	11,500	8,200
2 1/2 .....	9,300	4,700	18,500	16,000	13,000	9,300
2 5/8 .....	10,500	5,200	21,000	18,000	14,500	10,500

## Endless Sling

1/2 .....	950	500	1,900	1,700	1,400	950
9/16 .....	1,200	600	2,500	2,200	1,800	1,200
5/8 .....	1,600	800	3,200	2,700	2,200	1,600
3/4 .....	2,000	950	3,900	3,400	2,800	2,000
13/16 .....	2,300	1,200	4,700	4,100	3,300	2,300
7/8 .....	2,800	1,400	5,600	4,800	3,900	2,800
1 .....	3,200	1,600	6,500	5,600	4,600	3,200
1 1/16 .....	3,800	1,900	7,600	6,600	5,400	3,800
1 1/8 .....	4,300	2,200	8,600	7,500	6,100	4,300
1 1/4 .....	4,900	2,400	9,700	8,400	6,900	4,900
1 5/16 .....	5,400	2,700	11,000	9,400	7,700	5,400
1 1/2 .....	6,700	3,300	13,500	11,500	9,400	6,700
1 5/8 .....	8,100	4,100	16,000	14,000	11,500	8,100
1 3/4 .....	9,500	4,800	19,000	16,500	13,500	9,500
2 .....	11,000	5,600	22,500	19,500	16,000	11,000
2 1/8 .....	13,000	6,500	26,000	22,500	18,500	13,000
2 1/4 .....	15,000	7,400	29,500	25,500	21,000	15,000
2 1/2 .....	16,500	8,400	33,500	29,000	23,500	16,500
2 5/8 .....	18,500	9,500	37,000	32,500	26,500	18,500

TABLE 4A.—RATED LOAD FOR GRADE 80 ALLOY STEEL CHAIN SLINGS<sup>1</sup> (CHAIN PER NACM)

Chain size nominal		Single leg sling-90 deg. to horizontal loading		Rated load double leg sling horizontal angle (note 2)					
				60 deg. Double at 60 deg.		45 deg. Double at 45 deg.		30 deg. Double at 30 deg.	
				lb	kg	lb	kg	lb	kg
inch	mm	lb	kg						
1/4 .....	7	3,500	1,570	6,100	2,700	4,900	2,200	3,500	1,590
3/8 .....	10	7,100	3,200	12,300	5,500	10,000	4,500	7,100	3,200
1/2 .....	13	12,000	5,400	20,800	9,400	17,000	7,600	1,200	5,400
5/8 .....	16	18,100	8,200	31,300	14,200	25,600	11,600	18,100	8,200
3/4 .....	20	28,300	12,800	49,000	22,300	40,000	18,200	28,300	12,900
7/8 .....	22	34,200	15,500	59,200	27,200	48,400	22,200	34,200	15,700
1 .....	26	47,700	21,600	82,600	37,900	67,400	31,000	47,700	21,900
1 1/4 .....	32	72,300	32,800	125,200	56,800	102,200	46,400	72,300	32,800

**Notes:**

(1) Other grades of proof tested steel chain include Proof Coil (Grade 28), Hi-Test (grade 43 Chain, and Transport (grade 70) Chain. These grades are not recommended for overhead lifting and therefore are not covered by this standard.

(2) Rating of multi-leg slings adjusted for angle of loading between the inclined leg and the horizontal plane of the load.

TABLE 4B.—MAXIMUM ALLOWABLE WEAR AT ANY POINT OF LINK

Nominal chain or coupling link size		Maximum allowable wear of cross-sectional diameter, in.
inch	mm	
1/4 .....	7	0.037
3/8 .....	10	0.052
1/2 .....	13	0.060
5/8 .....	16	0.084
3/4 .....	20	0.105
7/8 .....	22	0.116
1 .....	26	0.137
1 1/4 .....	32	0.169

**Note:** For other sizes, consult chain or sling manufacturer.

TABLE 5.—SAFE WORKING LOADS FOR SHACKLES

[In tons of 2,000 pounds]

Material size		Pin diameter		Safe working load in 2,000 lb tons
Inches	(cm)	Inches	(cm)	
1/2 .....	(1.3)	5/8	(1.6)	1.4
5/8 .....	(1.6)	3/4	(1.9)	2.2
3/4 .....	(1.9)	7/8	(2.2)	3.2
7/8 .....	(2.2)	1	(2.5)	4.3
1 .....	(2.5)	1 1/8	(2.9)	5.6
1 1/8 .....	(2.9)	1 1/4	(3.2)	6.7
1 1/4 .....	(3.2)	1 3/8	(3.5)	8.2
1 3/8 .....	(3.5)	1 1/2	(3.8)	10.0
1 1/2 .....	(3.8)	1 5/8	(4.1)	11.9
1 3/4 .....	(4.4)	2	(5.1)	16.2
2 .....	(5.1)	2 1/4	(5.7)	21.2

WIRE ROPE TABLE—RATE LOADS FOR SINGLE LEG SLINGS 6X19 OR 6X37 CLASSIFICATION IMPROVED PLOW STEEL GRADE ROPE WITH FIBER CORE (FC)

[Rated loads [note 1], tons (2,000 lb)]

Vertical				Choker
Rope diameter, inch	HT	MS	S	HT, MS&S
1/4 .....	0.49	0.51	0.55	0.38
5/16 .....	0.78	0.79	0.85	0.6
3/8 .....	1.1	1.1	1.2	0.85
7/16 .....	1.4	1.5	1.7	1.2
1/2 .....	1.8	2.0	2.1	1.5
9/16 .....	2.3	2.5	2.7	1.9
5/8 .....	2.8	3.1	3.3	2.3
3/4 .....	3.9	4.4	4.8	3.3

**WIRE ROPE TABLE—RATE LOADS FOR SINGLE LEG SLINGS 6X19 OR 6X37 CLASSIFICATION IMPROVED PLOW STEEL GRADE ROPE WITH FIBER CORE (FC)—Continued**

[Rated loads [note 1], tons (2,000 lb)]

Rope diameter, inch	Vertical			Choker
	HT	MS	S	HT, MS&S
7/8 .....	5.2	6.0	6.4	4.5
1 .....	6.7	7.7	4.8	5.9
1 1/8 .....	8.4	9.5	11	7.4
1 1/4 .....	10	12	13	9.0
1 3/8 .....	12	14	15	11
1 1/2 .....	15	17	18	13
1 5/8 .....	17	19	21	15
1 3/4 .....	20	22	25	17
2 .....	26	29	32	22

HT=Hand Tucked Splice.

For Hidden Tuck Splice (IWRC), use values in HT (FC) columns.

MS=Mechanical Splice.

S=Poured Socket or Swaged Socket.

**Note:** (1) These values are based on slings being vertical. If they are not vertical, the rated load shall be reduced. If two or more slings are used, the minimum horizontal angle between the slings shall also be considered.

**WIRE ROPE TABLE—RATED LOADS FOR SINGLE LEG SLINGS 6X19 OR 6X37 CLASSIFICATION EXTRA IMPROVED PLOW STEEL GRADE ROPE WITH INDEPENDENT WIRE ROPE CORE (IWRC)**

[Rated loads [note 1], tons (2,000 lb)]

Rope diameter, inch	Vertical			Choker	Vertical basket	
	HT	MS	S	HT, MS&S	[Note (2)] HT	[Note (3)] MS&S
1/4 .....	0.53	0.59	0.59	0.31	1.1	1.1
5/16 .....	0.82	0.87	0.92	0.64	1.6	1.7
3/8 .....	1.2	1.2	1.3	0.92	2.3	2.5
7/16 .....	1.5	1.7	1.8	1.2	3.1	3.4
1/2 .....	2.0	2.2	2.3	1.6	4.0	4.4
9/16 .....	2.5	2.8	2.9	2.0	1.9	5.5
5/8 .....	3.0	3.4	3.6	2.6	6.0	6.8
3/4 .....	4.2	4.9	5.1	3.6	8.4	9.7
7/8 .....	5.5	6.6	6.9	4.8	11	13
1 .....	7.2	8.5	9.0	6.3	14	17
1 1/8 .....	9.0	10	11	7.9	18	20
1 1/4 .....	11	13	14	9.7	22	26
1 3/8 .....	13	15	17	12	27	31
1 1/2 .....	16	18	20	14	32	37
1 5/8 .....	18	21	23	16	37	43
1 3/4 .....	21	25	27	19	43	49
2 .....	28	32	34	24	55	64

HT=Hand tucked Splice

For Hidden Tuck Splice (IWRC), use values in HT columns of Table 3.

MS=Mechanical Splice. S=Poured Socket or Swaged Socket.

**Notes:**

(1) These values are based on slings being vertical. If they are not vertical, the rated load shall be reduced. If they are not vertical, the rated load shall be reduced. If two or more slings are used, the minimum horizontal angle between the slings shall also be considered.

(2) These values only apply when the D/d ratio is 15 or greater.

(3) These values only apply when the D/d ratio is 25 or greater.

D=Diameter or curvature around which the body of the sling is bent. d=Diameter of rope.

**WIRE ROPE TABLE-RATED LOADS FOR SINGLE LEG SLINGS 6X19 OR 6X37 CLASSIFICATION EXTRA IMPROVED PLOW STEEL GRADE ROPE WITH INDEPENDENT WIRE ROPE CORE (IWRC)**

[Rated loads [note 1], tons (2,000 lb)]

Rope diameter	Vertical		Choker	Vertical basket
	MS	S	MS&S	[note (2)] MS&S
1/4 .....	0.65	0.68	0.48	1.3
5/16 .....	1.0	1.1	.074	2.0
3/8 .....	1.4	1.5	1.1	2.9
7/16 .....	1.9	2.0	1.4	3.9
1/2 .....	2.5	2.7	1.9	5.1
9/16 .....	3.2	3.4	2.4	6.4
5/8 .....	3.9	4.1	2.9	7.8

**WIRE ROPE TABLE-RATED LOADS FOR SINGLE LEG SLINGS 6X19 OR 6X37 CLASSIFICATION EXTRA IMPROVED FLOW  
STEEL GRADE ROPE WITH INDEPENDENT WIRE ROPE CORE (IWRC)—Continued**

[Rated loads [note 1], tons (2,000 lb)]

Vertical			Choker	Vertical basket [note (2)]
Rope diameter	MS	S	MS&S	MS&S
3/4 .....	5.6	5.9	4.1	11
7/8 .....	7.6	8.0	5.6	15
1 .....	9.8	10	7.2	20
1 1/8 .....	12	13	9.1	24
1 1/4 .....	15	16	11	30
1 3/8 .....	18	19	13	36
1 1/2 .....	21	23	16	42
1 5/8 .....	24	26	18	49
1 3/4 .....	28	31	21	57
2 .....	37	40	28	73

HT=Hand tucked Splice

For Hidden Tuck Splice (IWRC), use values in HT columns of Table 3.

MS=Mechanical Splice.

S=Poured Socket or Swaged Socket.

**NOTE:** (1) These values are based on slings being vertical. If they are not vertical, the rated load shall be reduced. If they are not vertical, the rated load shall be reduced. If two or more slings are used, the minimum horizontal angle between the slings shall also be considered.

(2) These values only apply when the D/d ratio is 25 or greater.

59. In Part 1918, revise Appendix IV to read as follows:

**Appendix IV to Part 1918—Special  
Cargo Gear and Container Spreader  
Test Requirements (Mandatory) [see  
§ 1918.61 (f), (g), (h)]**

Type gear	Test requirement	Tested by	Proof test	
A. All Special Cargo Handling Gear Purchased or Manufactured on or After January 21, 1998				
1. Safe Working Load—greater than 5 short tons (10,000 lbs./4.5 metric tons).	Prior to initial use .....	OSHA accredited agency only	Up to 20 short tons ..	125% SWL.
	Prior to reuse after structural damage repair.		From 20 to 50 short tons.	5 short tons in excess of SWL.
	Every four years after initial proof load test.	OSHA accredited agency or designated person.	Over 50 short tons ...	110% SWL.
2. Safe Working Load—5 short tons or less.	Prior to initial use .....	OSHA accredited agency or designated person.	125% SWL.	
	Prior to reuse after structural damage repair.			
3. Intermodal container spreaders not part of vessel's cargo handling gear.	Prior to initial use .....	OSHA accredited agency only	125% SWL.	
	Prior to reuse after structural damage repair.			
	Every four years after initial proof load test.	OSHA accredited agency or designated person.		
B. All Special Cargo Handling Gear in Use Prior to January 21, 1998 and Proof Load Tested Prior to Initial Use (See Note Below)				
1. Safe Working Load—greater than 5 short tons (10,000 lbs./4540 kg.).	Every four years starting on January 21, 1998.	OSHA accredited agency or designated person.	Up to 20 short tons ..	125% SWL.
	Prior to reuse after structural damage repair.	OSHA accredited agency .....	From 20 to 50 short tons.	5 short tons in excess of SWL.
			Over 50 short tons ...	110% SWL.
2. Safe Working Load—5 short tons or less.	Prior to reuse after structural damage repair.	OSHA accredited agency or designated person.	125% SWL.	
3. Intermodal container spreaders not part of vessel's cargo handling gear.	Every four years starting on January 21, 1998.	OSHA accredited agency or designated person.	125% SWL.	
	Prior to reuse after structural damage repair.	OSHA accredited agency. ....		

**Note to Appendix IV:** Special stevedoring gear in use prior to January 21, 1998 was covered by § 1918.61(b), in effect prior to January 21, 1998. (See 29 CFR Parts 1911 to 1925 revised as of July 1, 1997). The assumption is made that gear in use prior to January 21, 1998, has already been proof load tested, although not necessarily by an accredited agency. However, if the employer cannot certify that such gear was proof load tested under § 1918.61(b), in effect prior to January 21, 1998, (See 29 CFR Parts 1911 to 1925 revised as of July 1, 1997), than it must be proof load tested in accordance with § 1918.61 in effect on January 21, 1998, (See 29 CFR Parts 1911 to 1925 revised as of July 1, 1998.)

\* \* \* \* \*

## PART 1919—GEAR CERTIFICATION

60. The authority citation for part 1919 continues to read as follows:

**Authority:** Sec.41, Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941);

Secs. 4, 6, 8, Occupational safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736) or 1-90 (55 FR 9033); as applicable; 29 CFR 1911.

61. In § 1919.1, revise paragraphs (a) and (b)(2) to read as follows:

### § 1919.1 Purpose and scope.

(a) The regulations in this Part implement §§ 1915.115, 1917.50 and 1918.11 of this chapter. They provide procedures and standards governing accreditation of persons by the Occupational Safety and Health Administration, U.S. Department of Labor, for the purpose of certifying vessels' cargo gear and shore-based material handling devices, and the manner in which such certification shall be performed.

(b) \* \* \*

(2) When cargo gear certification is performed for shore-based material handling devices under standards established and enforced by the States wherein the devices are located, or by political subdivisions delegated this responsibility by the States, provided such standards meet the requirements of § 1917.50(b)(2) of this chapter.

\* \* \* \* \*

62. In § 1919.50, revise the section heading to read as follows:

**§ 1919.50 Eligibility for accreditation to certificate shore-based material handling devices covered by § 1917.50 of this chapter, safety and health regulations for marine terminals.**

\* \* \* \* \*

[FR Doc. 00-16545 Filed 6-29-00; 8:45 am]

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