

**§ 1919.32**

(b) In cases where persons accredited to carry out loose gear tests may be retained to conduct tests of special stevedoring gear as described in §1918.61(b) of this chapter, which does not form part of a vessel's equipment, such tests shall adhere to the requirements set forth in §1918.61(b) (1), (2), and (3) of this chapter.

(c) After being tested as required by paragraph (a) of this section, and before being taken into use, all chains, rings, hooks, shackles, blocks or other loose gear, except as noted in §1919.32, shall be thoroughly examined, the sheaves and pins of the blocks being removed for this purpose, to determine whether any part has been injured or permanently deformed by the test. Shell bolt nuts shall be securely locked upon reassembly. Defective loose gear components shall be replaced before the certificate is issued.

(d) Any certificate relating to shackles, swivels or strength members of single-sheave blocks which have been restored to original dimensions by welding shall state this fact.

**§ 1919.32 Specially designed blocks and components.**

(a) Blocks and connecting components of an unusual nature which are specially designed and constructed as an integral part of a particular lifting unit and are either permanently affixed or of such design that two or more components must be tested together need not be considered as loose gear for purposes of §1919.31.

(b) In lieu of the loose gear proof test required by §1919.31(a), design data shall be submitted to an accredited certification agency indicating design and material specifications and analysis whereby the designed strength of such gear may be determined.

(c) Subsequent to the test of the lifting unit as a whole, a thorough visual examination shall be made of disassembled parts and an electronic, ultrasonic, or other equally efficient non-destructive examination shall be made of those parts not dismantled to ensure the safe condition of such parts.

**29 CFR Ch. XVII (7-1-10 Edition)**

**§ 1919.33 Proof tests—wire rope.**

Wire rope, except as provided in §1919.14(b), shall be tested by sample, a piece being tested to destruction, and the safe working load of running ropes, unless otherwise acceptable to the Administration on the basis of design, shall not exceed one-fifth of the breaking load of the sample tested. In the case of running ropes used in gear with a safe working load exceeding 10 tons, the safe working load shall not exceed one-fourth of the breaking load of the sample tested.

**§ 1919.34 Proof tests after repairs or alterations.**

When proof loads are applied after repairs or alterations, all parts of the assembled gear shall be examined as required in §§1919.30, 1919.31(c), or 1919.32(c), whichever is applicable.

**§ 1919.35 Order of tests.**

When both unit and loose gear proof load tests are required, the loose gear test may be carried out after completion of the unit test.

**§ 1919.36 Heat treatment.**

(a) The annealing of wrought iron gear required by this part shall be accomplished at a temperature between 1100° and 1200 °F. and the exposure shall be of between 30 and 60 minutes duration. After being annealed, the gear shall be allowed to cool slowly and shall then be carefully inspected. All annealing shall be carried out in a closed furnace.

(b) When heat treatment of loose gear made of other than wrought iron or steel is recommended by the manufacturer, it shall be carried out in accordance with the specifications of the manufacturer.

**§ 1919.37 Competent persons.**

All gear certification functions shall be performed by competent persons as set forth in the following table:

Functions	Competent person
Any testing, examination, inspection, or heat treatment required in United States ports.	Responsible individual, surveyor or other authorized agent of a person accredited by the Administration under the regulations contained in this part.