

**WAC 296-304-17011 Proof tests—Loose gear.** (1) Chains, rings, shackles and other loose gear (whether accessory to a machine or not) must be tested with a proof load equal to that shown against the article in the following table:

<b>Article of gear</b>	<b>Proof load</b>
Chain, ring, hook, shackle or swivel. ....	100 percent in excess of the safe working load.
<b>Blocks:</b>	
Single sheave block. ....	300 percent in excess of the safe working load. <sup>1</sup>
Multiple sheave block with safe working load up to and including 20 tons. ....	100 percent in excess of the safe working load.
Multiple sheave block with safe working load over 20 tons up to and including 40 tons. ....	20 tons in excess of the safe working load.
Multiple sheave block with safe working load over 40 tons. ....	50 percent in excess of the safe working load.
Pitched chains used with hand-operated blocks and rings, hooks, shackles or swivels permanently attached thereto. ....	50 percent in excess of the safe working load.
Hand-operated blocks used with pitched chains and rings, hooks, shackles or swivels permanently attached thereto. ....	50 percent in excess of the safe working load.

<sup>1</sup> The proof load applied to the block is equivalent to twice the maximum resultant load on the eye or pin of the block when lifting the nominal safe working load defined in WAC 296-304-17011 (1)(a) below. The proof load is, therefore, equal to four times the safe working load as defined in WAC 296-304-17011 (1)(a) below or twice the safe working load as defined in WAC 296-304-17011 (1)(b) below.

(a) The nominal safe working load of a single-sheave block should be the maximum load which can be safely lifted by the block when the load is attached to a rope which passes around the sheave of the block.

(b) In the case of a single-sheave block where the load is attached directly to the block instead of to a rope passing around the sheave, it is permissible to lift a load equal to twice the nominal safe working load of the block as defined in WAC 296-304-17011 (1)(a) above.

(c) In the case of a lead block so situated that an acute angle cannot be formed by the two parts of the rope passing over it (i.e., the angle is always 90° or more), the block need not have a greater nominal safe working load than one-half the maximum resultant load which can be placed upon it.

(2) In cases where persons accredited to carry out loose gear tests may be retained to conduct tests of special stevedoring gear as described in WAC 296-56-60098 (8)(e), which does not form part of a

vessel's equipment, such tests must adhere to the requirements set forth in WAC 296-56-60098 (8)(e).

(3) After being tested as required by WAC 296-304-17011(1), and before being taken into use, all chains, rings, hooks, shackles, blocks or other loose gear, except as noted in WAC 296-304-17013, must 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 must be securely locked upon reassembly. Defective loose gear components must be replaced before the certificate is issued.

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

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 17-18-075, § 296-304-17011, filed 9/5/17, effective 10/6/17; WSR 07-03-163, § 296-304-17011, filed 1/24/07, effective 4/1/07; Order 74-25, § 296-304-17011, filed 5/7/74.]