

(z) *Pilot ladder fittings.* The bottom of the rigid ladder or lift platform on a pilot hoist must have fittings to attach a pilot ladder of the type that meets the requirements of subpart 163.003 of this chapter. The fittings must be arranged so that—

(1) The distance between the top of the highest step on the pilot ladder and the surface of the lift platform or top of the bottom rung on the rigid ladder is between 300 and 350 millimeters (12 and 13¾ inches);

(2) The steps of the pilot ladder are directly below and in line with the steps of the rigid ladder or edge of the lift platform; and

(3) The pilot ladder can bear on the side of the vessel when in use.

(aa) *Emergency stop switch.* Each pilot hoist must have an emergency stop switch that can be operated by a person on the ladder or lift platform.

(bb) *Fasteners.* Each fastening device securing a part of a pilot hoist must have a means to prevent the device from loosening.

(cc) *Gears.* Each gear must be keyed to its shaft.

(dd) *Welding.* Each weld must be made using automatic welding equipment or be made by a welder who is qualified by the U.S. Coast Guard, U.S. Navy, American Bureau of Shipping, American Welding Society, American Society of Mechanical Engineers, or other organization that has similar procedures for welder qualifications that are acceptable to the Commandant.

#### § 163.002-15 Performance.

(a) Each pilot hoist must have sufficient performance capability to pass the approval tests in § 163.002-21.

(b) [Reserved]

#### § 163.002-17 Instructions and marking.

(a) *Instruction plates or placards.* Each pilot hoist must have instructions that show its method of operation and lubrication of its working parts. The instructions must be on one or more corrosion-resistant plates, or must be weatherproof placards. The instructions must be attached to the hoist. Each instruction must be in English or must have understandable symbols or pictograms. The operator of the hoist

must be able to see and read the operating instructions when operating the hoist control lever. The lubricating instructions must state the recommended lubricants for the temperature range in which the hoist is designed to operate. The temperature range must be stated in both degrees Celsius and Fahrenheit.

(b) *Marking of controls.* Each control on a pilot hoist and each position of the control must be identified by a marking on the hoist.

(c) *Marking of gauges.* Each gauge on a pilot hoist must be marked with its normal operating range.

(d) *Manual.* Each pilot hoist must have a manual of installation instructions, operating instructions, maintenance and repair instructions, a lubrication chart, a parts list, a list of sources of repair parts, and a log for keeping maintenance records. Each manual must be in English.

#### § 163.002-21 Approval tests.

(a) *General.* If a pilot hoist fails one of the tests in this section the cause of the failure must be identified and any needed design changes made. After a test failure and any design change, the failed test, and any other previously completed tests affected by the change, must be rerun.

(b) *Visual examination.* Before starting the tests described in this section an assembled pilot hoist is examined for evidence of noncompliance with the requirements in §§ 163.002-11 and 163.002-13.

(c) The following approval tests must be conducted:

(1) *Rung strength.* If the pilot hoist has a rigid ladder a static load of 900 kilograms (2000 pounds) is applied to the center of a ladder rung for one minute. The load must be uniformly distributed over a 100 millimeter (4 inch) wide contact surface. The test must be repeated using a second ladder rung. The rungs must not break or crack during these tests.

(2) *Platform strength.* If the pilot hoist has a lift platform, the platform is lifted to a level where it is supported only by its suspension components. A static load of 900 kilograms (2000 pounds) is then applied to the center of the platform for one minute. The load must be