§ 170.185 Stability test preparations.

The following preparations must be made before conducting a stability test:

(a) The vessel must be as complete as practicable at the time of the test.
(b) Each tank vessel must be empty and dry, except that a tank may be partially filled or full if the Coast Guard Marine Safety Center or the ABS determines that empty and dry tanks are impracticable and that the effect of filling or partial filling on the location of the center of gravity and on the displacement can be accurately determined.
(c) All dunnage, tools, and other items extraneous to the vessel must be removed.
(d) The water depth at the mooring site must provide ample clearance against grounding.
(e) Each mooring line must be arranged so that it does not interfere with the inclination of the unit during the test.
(f) The draft and axis of rotation selected for testing a mobile offshore drilling unit must be those that result in acceptable accuracy in calculating the center of gravity and displacement of the unit.
(g) The stability test procedure required by §170.085 must include the following:
(1) Identification of the vessel to be tested.
(2) Date and location of the test.
(3) Inclining weight data.
(4) Pendulum locations and lengths.
(5) Approximate draft and trim of the vessel.
(6) Condition of each tank.
(7) Estimated items to be installed, removed, or relocated after the test, including the weight and location of each item.
(8) Schedule of events.
(9) Person or persons responsible for conducting the test.

§ 170.190 Stability test procedure modifications.

The authorized Coast Guard or ABS representative present at a stability test may allow a deviation from the requirements of §§170.180 and 170.185 if the representative determines that the deviation would not decrease the accuracy of the test results.

§ 170.200 Estimated lightweight vertical center of gravity.

(a) Each tank vessel that does not carry a material listed in either Table 1 of part 153 or Table 4 of part 154 of this chapter may comply with this section in lieu of §170.175 if it—
(1) Is 150 gross tons or greater;
(2) Is of ordinary proportions and form;
(3) Has a flush weather deck, one or more longitudinal bulkheads, and no independent tanks; and
(4) Is designed not to carry cargo above the freeboard deck.
(b) When doing the calculations required by §§170.170 and 172.065, the vertical center of gravity of a tank vessel in the lightweight condition must be assumed to be equal to the following percentage of the molded depth of the vessel measured from the keel amidship:
(1) For a tank ship—70%.
(2) For a tank barge—60%.
(c) As used in this section, molded depth has the same meaning that is provided for the term in §42.13–15(e) of this chapter.

§ 170.235 Fixed ballast.

(a) Fixed ballast, if used, must be—
(1) Installed under the supervision of the OCMI; and
(2) Stowed in a manner that prevents shifting of position.
(b) Fixed ballast may not be removed from a vessel or relocated unless approved by the Coast Guard Marine Safety Center or the ABS. However, ballast may be temporarily moved for
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§ 170.245 Foam flotation material.

(a) Installation of foam must be approved by the OCMI.

(b) If foam is used to comply with §171.070(d), §171.085(c), or §173.063(e) of this subchapter, the following applies:

(1) Foam may be installed only in void spaces that are free of ignition sources.

(2) The foam must comply with NPFC MIL–P–21929B (incorporated by reference; see 46 CFR 170.015), including the requirements for fire resistance.

(3) A submergence test must be conducted for a period of at least 7 days to demonstrate whether the foam has adequate strength to withstand a hydrostatic head equivalent to that which would be imposed if the vessel were submersed to its margin line.

(4) The effective buoyancy at the end of the submergence test must be used as the buoyancy credit; however, in no case will a credit greater than 55 lbs per cubic foot (881 kilograms per cubic meter) be allowed.

(5) The structure enclosing the foam must be strong enough to accommodate the buoyancy of the foam.

(6) Piping and cables must not pass through foamed spaces unless they are within piping and cable trunks accessible from both ends.

(7) Sample specimens must be prepared during installation and the density of the installed foam must be determined.

(8) Foam may be installed adjacent to fuel tanks if the boundary between the tank and space has double continuous fillet welds.

(9) MIL–P–21929B is incorporated by reference into this part.

(10) The results of all tests and calculations must be submitted to the OCMI.

(11) Blocked foam must—

(i) Be used in each area that may be exposed to water; and

(ii) Have a protective cover approved by the OCMI.

§ 170.248 Applicability.

(a) Except as provided in paragraph (b) or paragraph (c) of this section, this subpart applies to vessels with watertight doors in bulkheads that have been made watertight to comply with the flooding or damage stability regulations in this subchapter.

(b) A watertight door on a MODU must comply with §174.100 of this subchapter.

(c) A watertight door on a self-propelled hopper dredge with a working freeboard must comply with §174.355 of this subchapter.

§ 170.250 Types and classes.

(a) Watertight doors, except doors between cargo spaces, are classed as follows:

(1) Class 1—Hinged door.

(2) Class 2—Sliding door, operated by hand gear only.

(3) Class 3—Sliding door, operated by power and by hand gear.

(b) The following types of watertight doors are not permitted:

(1) A plate door secured only by bolts; and

(2) A door required to be closed by dropping or by the action of dropping weights.

(c) Whenever a door of a particular class is prescribed by these regulations, a door of a class bearing a higher number may be used.

§ 170.255 Class 1 doors; permissible locations.

(a) Except as provided in paragraphs (b) and (c) of this section, Class 1 doors within passenger, crew, and working spaces are permitted only above a deck, the molded line of which, at its lowest point at side, is at least 7 feet

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