§ 58.01–30 Trial-trip observance.

The operation of main and auxiliary engines, boilers, steering gear, and auxiliaries shall be observed on the trial trip of each new vessel and all deficiencies which affect the safety of the vessel shall be corrected to the satisfaction of the Officer in Charge, Marine Inspection.

§ 58.01–35 Main propulsion auxiliary machinery.

Auxiliary machinery vital to the main propulsion system must be provided in duplicate unless the system served is provided in independent duplicate or otherwise provides continued or restored propulsion capability in the event of a failure or malfunction of any single auxiliary component.

NOTE: Partial reduction of normal propulsion capability as a result of malfunction or failure is acceptable if the reduced capability is not below that necessary for the vessel to run ahead at 7 knots or half speed, whichever is less, and is adequate to maintain control of the ship.

§ 58.01–40 Machinery, angles of inclination.

(a) Propulsion machinery and all auxiliary machinery essential to the propulsion and safety of the vessel must be designed to operate when the vessel is upright, when the vessel is inclined under static conditions at any angle of list up to and including 15°, and when the vessel is inclined under dynamic conditions (rolling) at any angle of list up to and including 22.5° and, simultaneously, at any angle of trim (pitching) up to and including 7.5° by bow or stern.

(b) Deviations from these angles of inclination may be permitted by the Commanding Officer, Marine Safety Center, considering the type, size, and service of the vessel.

§ 58.01–45 Machinery space, ventilation.

Each machinery space must be ventilated to ensure that, when machinery or boilers are operating at full power in all weather including heavy weather, an adequate supply of air is maintained for the operation of the machinery and for the safety, efficiency, and comfort of the crew.

§ 58.01–50 Machinery space, noise.

(a) Each machinery space must be designed to minimize the exposure of personnel to noise in accordance with IMO A.468(XII) (incorporated by reference, see 46 CFR 58.03–1). No person may encounter a 24-hour effective noise level greater than 82 dB(A) when noise is measured using a sound-level meter and an A-weighting filter.

(b) Except as allowed by paragraph (c) of this section, no machinery space may exceed the following noise levels:

1. Machinery control room—75 dB(A)
2. Manned machinery space—90 dB(A)
3. Unmanned machinery space—110 dB(A)
4. Periodically unattended machinery space—110 dB(A)
5. Workshop—85 dB(A)
6. Any other work space around machinery—90 dB(A)

(c) If adding a source of noise would cause a machinery space to exceed the noise level permitted by paragraph (b) of this section, the new source must be suitably insulated or isolated so that the space does not exceed that noise level. If the space is manned, a refuge from noise must be provided within the space.

(d) Ear protection must be provided for any person entering any space with a noise level greater than 85 dB(A).

(e) Each entrance to a machinery space with a noise level greater than 85 dB(A) must have a warning sign stating that each person entering the space must wear ear protection.

§ 58.01–55 Tanks for flammable and combustible oil.

(a) For the purposes of this section, a machinery space of category A is a space that contains any of the following:

1. Internal-combustion machinery used for main propulsion.
2. Internal-combustion machinery used for other than main propulsion,
whose power output is equal to or greater than 500 HP (375 kW).

(3) Any oil-fired boiler.

(4) Any equipment used to prepare fuel oil for delivery to an oil-fired boiler, or equipment used to prepare heated oil for delivery to an internal-combustion engine, including any oil-pressure pumps, filters, and heaters dealing with oil pressures above 26 psi.

(b) As far as practicable, each fuel-oil tank must be part of the vessel’s structure and be located outside a machinery space of category A.

(c) If a fuel-oil tank, other than a double-bottom tank, must be located adjacent to or within a machinery space of category A—

(1) At least one of its vertical sides must be contiguous to the boundary of the machinery space;

(2) The tank must have a common boundary with the double-bottom tanks; and

(3) The area of the tank boundary common with the machinery spaces must be kept as small as practicable.

(d) If a fuel-oil tank must be located within a machinery space of category A, it must not contain fuel oil with a flashpoint of less than 60 °C (140 °F).

(e) In general, no freestanding fuel-oil tank is permitted in any machinery space of Category A on a passenger vessel. A freestanding fuel-oil tank is permitted in other spaces only if authorized by the Commanding Officer, Marine Safety Center. If so authorized, each freestanding fuel-oil tank must—

(i) Comply with Subpart 58.50 of this subchapter; and

(ii) Be placed in an oil-tight spill tray with a drain pipe leading to a spill-oil tank.

(f) No fuel-oil tank may be located where spillage or leakage from it can constitute a hazard by falling on heated surfaces. The design must also prevent any oil that may escape under pressure from any pump, filter, or heater from coming into contact with heated surfaces.

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