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(b) SOLAS Certificates may be in the official language of the flag administration.

§ 154.40 Right of appeal.

Any person directly affected by a decision or action taken under this part, by or on behalf of the Coast Guard, may appeal therefrom in accordance with subpart 1.03 of this chapter.

[CGD 88–033, 54 FR 50381, Dec. 6, 1989]

Subpart B—Inspections and Tests

EXAMINATION REQUIREMENTS FOR FOREIGN FLAG VESSELS

§ 154.150 Examination required for a Certificate of Compliance.

Before a vessel receives an initial or reissued Certificate of Compliance endorsed with the name of a cargo from Table 4 of this part, the vessel must call at a United States port for an examination, during which the Officer in Charge, Marine Inspection, determines whether or not the vessel meets the requirements of this chapter.

[CGD 81–052, 50 FR 8734, Mar. 5, 1985]

§ 154.151 Procedures for having the Coast Guard examine a vessel for a Certificate of Compliance.

To have the Coast Guard examine the vessel for a Certificate of Compliance, as required in § 154.150, the owner of a foreign flag vessel must proceed as follows:

(a) After submitting an application under § 154.22, await notification by the Commanding Officer, Marine Safety Center that review of the vessel's plans or IMO Certificate and supporting documents is complete.

(b) Except when paragraph (c) of this section applies,

(1) After receiving notification from Commanding Officer, Marine Safety Center that review is complete and the application is acceptable, dispatch the vessel to a United States port;

(2) Notify the Officer in Charge, Marine Inspection, for the port where the vessel is to be inspected at least seven days before the vessel arrives and arrange the exact time and other details of the examination. This notification is in addition to any other pre-arrival notice to the Coast Guard required by other regulations and must include:

(i) The name of the vessel's first U.S. port of call;

(ii) The date the vessel is scheduled to arrive;

(iii) The name and telephone number of the owner's local agent; and

(iv) The names of all cargoes listed in Table 4 of this part that are on board the vessel;

(3) Make sure that the following items are available on board the vessel for the use of the Marine Inspector before beginning the examination required by § 154.150:

(i) A general arrangement (including the location of firefighting, safety, and lifesaving gear); and

(ii) The cargo manual required by § 154.1810.

(c) If the vessel was accepted for U.S. service on the basis of Coast Guard plan review under § 154.5(b), the vessel owner must notify Commanding Officer, Marine Safety Center fourteen days prior to the vessel's arrival at a U.S. port. This notification must include:

(1) The name of the vessel's first U.S. port of call;

(2) The date the vessel is scheduled to arrive;

(3) The name and telephone number of the owner's local agent; and

(4) The names of all cargoes listed in Table 4 of this part that are on board the vessel.

[CGD 81–052, 50 FR 8734, Mar. 5, 1985; 50 FR 15895, Apr. 23, 1985; CGD 77–069, 52 FR 31630, Aug. 21, 1987; CGD 95–072, 60 FR 50466, Sept. 29, 1995; 60 FR 54106, Oct. 19, 1995]

Subpart C—Design, Construction and Equipment

HULL STRUCTURE

§ 154.170 Outer hull steel plating.

(a) Except as required in paragraph (b) of this section, the outer hull steel plating, including the shell and deck plating must meet the material standards of the American Bureau of Shipping published in ''Rules for Building and Classing Steel Vessels'' 1981.

(b) Along the length of the cargo area, grades of steel must be as follows:

(1) The deck stringer and sheer strake must be at least Grade E steel or a grade of steel that has equivalent chemical properties, mechanical properties, and heat treatment, and that is specially approved by the Commandant (G–MSO).

(2) The strake at the turn of the bilge must be Grade D, Grade E, or a grade of steel that has equivalent chemical properties, mechanical properties, and heat treatment, and that is specially approved by the Commandant (G–MSO).

(3) The outer hull steel of vessels must meet the standards in § 154.172 if the hull steel temperature is calculated to be below −5° C (23°F) assuming:

(i) For any waters in the world, the ambient cold conditions of still air at 5°C (41°F) and still sea water at 0°C (32°F);

(ii) For cargo containment systems with secondary barriers, the temperature of the secondary barrier is the design temperature; and

(iii) For cargo containment systems without secondary barriers, the temperature of the cargo tank is the design temperature.

[CGD 74–289, 44 FR 26009, May 3, 1979, as amended by CGD 82–063b, 48 FR 4782, Feb. 3, 1983; CGD 77–069, 52 FR 31630, Aug. 21, 1987]

§ 154.172 Contiguous steel hull structure.

(a) Except as allowed in paragraphs (b) and (c) of this section, plates, forgings, forged and rolled fittings, and rolled and forged bars and shapes used in the construction of the contiguous steel hull structure must meet the thickness and steel grade in Table 1 for the temperatures under §§ 154.174(b) and 154.176(b).

(b) for a minimum temperature, determined under §§ 154,174(b) and 154.176(b), below −25°C (−13°F), the contiguous steel hull structure must meet § 54.25–10 for that minimum temperature.

(c) If a steel grade that is not listed in Table 1 has the equivalent chemical properties, mechanical properties, and heat treatment of a steel grade that is listed, the steel grade not listed may be specially approved by the Commandant (G–MSO), for use in the contiguous hull structure.

Table 1—MINIMUM TEMPERATURE, THICKNESS, AND STEEL GRADES IN CONTIGUOUS HULL STRUCTURES

Minimum temperature	Steel thickness	Steel[1] grade
0°C (32°F)	All	Standards of the American Bureau of Shipping published in ''Rules for Building and Classing Steel Vessels'', 1981
−10°C (14°F)	T≤112.5 mm (½ in.).	B
	12.5< t≤25.5 mm (1 in.).	D
	t;gt;25.5 mm (1 in.)	E
−25°C (−13°F).	t≤112.5 mm (½ in.)	D
	t>12.5 mm (½ in.)	E

[1] Steel grade of the American Bureau of Shipping published in ''Rules for Building and Classing Steel Vessels'', 1981.

[CGD 74–289, 44 FR 26009, May 3, 1979, as amended by CGD 82–063b, 48 FR 4782, Feb. 3, 1983; CGD 77–069, 52 FR 31630, Aug. 21, 1987]

§ 154.174 Transverse contiguous hull structure.

(a) The transverse contiguous hull structure of a vessel having cargo containment systems without secondary barriers must meet the standards of the American Bureau of Shipping published in ''Rules for Building and Classing Steel Vessels'', 1981.

(b) The transverse contiguous hull structure of a vessel having cargo containment systems with secondary barriers must be designed for a temperature that is:

(1) Colder than the calculated temperature of this hull structure when:

(i) The temperature of the secondary barrier is the design temperature, and

(ii) The ambient cold condition under § 154.176(b)(1)(ii) and (iii) are assumed; or

(2) Maintained by the heating system under § 154.178.

[CGD 74–289, 44 FR 26009, May 3, 1979, as amended by CGD 77–069, 52 FR 31630, Aug. 21, 1987]

§ 154.176 Longitudinal contiguous hull structure.

(a) The longitudinal contiguous hull structure of a vessel having cargo containment systems without secondary

barriers must meet the standards of the American Bureau of Shipping published in ''Rules for Building and Classing Steel Vessels'', 1981.

(b) The longitudinal contiguous hull structure of a vessel having cargo containment systems with secondary barriers must be designed for a temperature that is:

(1) Colder than the calculated temperature of this hull structure when:

(i) The temperature of the secondary barrier is the design temperature; and

(ii) For any waters in the world except Alaskan waters, the ambient cold condition of:

(A) Five knots air at −18°C (0°F); and

(B) Still sea water at 0°C (32°F); or

(iii) For Alaskan waters the ambient cold condition of:

(A) Five knots air at −29°C (−20°F); and

(B) Still sea water at −2°C (28°F); or

(2) Maintained by the heating system under §154.178, if, without heat, the contiguous hull structure is designed for a temperature that is colder than the calculated temperature of the hull structure assuming the:

(i) Temperature of the secondary barrier is the design temperature; and

(ii) Ambient cold conditions of still air at 5°C (41°F) and still sea water at 0°C (32°F).

[CGD 74–289, 44 FR 26009, May 3, 1979, as amended by CGD 77–069, 52 FR 31630, Aug. 21, 1987]

§154.178 Contiguous hull structure: Heating system.

The heating system for transverse and longitudinal contiguous hull structure must:

(a) Be shown by a heat load calculation to have the heating capacity to meet §154.174(b)(2) or §154.176(b)(2);

(b) Have stand-by heating to provide 100% of the required heat load and distribution determined under paragraph (a); and

(c) Meet Parts 52, 53, and 54 of this chapter.

§154.180 Contiguous hull structure: Welding procedure.

Welding procedure tests for contiguous hull structure designed for a temperature colder than −18°C (0°F) must meet §54.05–15 and subpart 57.03 of this chapter.

§154.182 Contiguous hull structure: Production weld test.

If a portion of the contiguous hull structure is designed for a temperature colder than −34°C (−30°F) and is not part of the secondary barrier, each 100m (328 ft.) of full penetration butt welded joints in that portion of the contiguous hull structure must pass the following production weld tests in the position that the joint is welded:

(a) Bend tests under §57.06–4 of this chapter.

(b) A Charpy V-notch toughness test under §57.06–5 of this chapter on one set of 3 specimens alternating the notch location on successive tests between the center of the weld and the most critical location in the heat affected zone.[2]

(c) If the contiguous hull structure does not pass the test under paragraph (b) of this section, the retest procedures under §54.05–5(c) must be met.

§154.188 Membrane tank: Inner hull steel.

For a vessel with membrane tanks, the inner hull plating thickness must meet the deep tank requirements of the American Bureau of Shipping published in ''Rules for Building and Classing Steel Vessels'', 1981.

[CGD 74–289, 44 FR 26009, May 3, 1979, as amended by CGD 77–069, 52 FR 31630, Aug. 21, 1987]

§154.195 Aluminum cargo tank: Steel enclosure.

(a) An aluminum cargo tank and its dome must be enclosed by the vessel's hull structure or a separate steel cover.

(b) The steel cover for the aluminum cargo tank must meet the steel structural standards of the American Bureau of Shipping published in ''Rules for Building and Classing Steel Vessels'', 1981.

(c) The steel cover for the aluminum tank dome must be:

[2] The most critical location in the heat affected zone of the weld is based on procedure qualification results, except austenitic stainless steel need have notches only in the center of the weld.

(1) At least 3.2 mm (⅛ in.) thick;
(2) Separated from the tank dome, except at the support points; and
(3) Thermally isolated from the dome.

[CGD 74–289, 44 FR 26009, May 3, 1979, as amended by CGD 77–069, 52 FR 31630, Aug. 21, 1987]

SHIP SURVIVAL CAPABILITY AND CARGO TANK LOCATION

§ 154.200 Stability requirements: General.

Each vessel must meet the applicable requirements in subchapter S of this chapter.

[CGD 79–023, 48 FR 51009, Nov. 4, 1983]

§ 154.235 Cargo tank location.

(a) For type IG hulls, cargo tanks must be located inboard of:
(1) The transverse extent of damage for collision penetration specified in Table 172.180 of this chapter;
(2) The vertical extent of damage for grounding penetration specified in Table 172.180 of this chapter; and
(3) 30 inches (760 mm) from the shell plating.
(b) For type IIG, IIPG, and IIIG hulls, cargo tanks must be located inboard of:
(1) The vertical extent of damage for grounding penetration specified in Table 172.180 of this chapter; and
(2) 30 inches (760 mm) from the shell plating.
(c) In vessels having membrane and semi-membrane tanks, the vertical and transverse extents of damage must be measured to the inner hull.
(d) For type IIG, IIPG, and IIIG hulls, cargo tank suction wells may penetrate into the area of bottom damage specified as the vertical extent of damage for grounding penetration in Table 172.180 of this chapter if the penetration is the lesser of 25% of the double bottom height or 13.8 in. (350 mm).

[CGD 74–289, 44 FR 26009, May 3, 1979, as amended by CGD 79–023, 48 FR 51010, Nov. 4, 1983]

SHIP ARRANGEMENTS

§ 154.300 Segregation of hold spaces from other spaces.

Hold spaces must be segregated from machinery and boiler spaces, accommodation, service and control spaces, chain lockers, potable, domestic and feed water tanks, store rooms and spaces immediately below or outboard of hold spaces by a:
(a) Cofferdam, fuel oil tank, or single gastight A–60 Class Division of all welded construction in a cargo containment system not required by this part to have a secondary barrier;
(b) Cofferdam or fuel oil tank in a cargo containment system required by this part to have a secondary barrier; or
(c) If there are no sources of ignition or fire hazards in the adjoining space, single gastight A–O Class Division of all welded construction.

§ 154.305 Segregation of hold spaces from the sea.

In vessels having cargo containment systems required by this part to have a secondary barrier, hold spaces must be segregated from the sea by:
(a) A double bottom if the cargo tanks meet this part for design temperatures colder than −10°C (14°F); and
(b) Wing tanks if the cargo tanks meet this part for design temperatures colder than −55°C (−67°F).

§ 154.310 Cargo piping systems.

Cargo liquid or vapor piping must:
(a) Be separated from other piping systems, except where an interconnection to inert gas or purge piping is required by § 154.901(a);
(b) Not enter or pass through any accommodation, service, or control space;
(c) Except as allowed under § 154.703, not enter or pass through a machinery space other than a cargo pump or compressor room;
(d) Be in the cargo area except:
(1) As allowed under § 154.703;
(2) Bow and stern loading piping; and
(3) Emergency jettisoning piping.
(e) Be above the weather deck except:
(1) As allowed under § 154.703;
(2) Pipes in a trunk traversing void spaces above a cargo containment system; and
(3) Pipes for draining, venting, or purging interbarrier and hold spaces;
(f) Connect into the cargo containment system above the weather deck except: