

46 C.F.R. PART 31—INSPECTION AND CERTIFICATION

§ 31.10-21a Periodic gauging of tank vessel midbodies more than 30 years old that carry certain oil cargoes—TB/ALL.

(a) As used in this section, the term “midbody” means the 40-percent midship length (0.40L) of the tank vessel. The age of the midbody is determined from its year of original construction.

(b) Midbodies of all tank vessels certificated to carry a pollution category I oil cargo listed in 46 CFR Table 30.25–1 must undergo an initial gauging survey and periodic regauging surveys as follows:

(1) An initial midbody gauging survey must be accomplished no later than the next drydocking inspection after the midbody becomes 30 years old.

(2) Regaugings:

(i) Midbodies of double hull tank vessels, or single hull tank vessels with independent tanks, that operated in fresh water at least 6 months in every 12-month period since the last drydock examination must be regauged at intervals not exceeding 10 years;

(ii) Midbodies of all other tank vessels must be regauged at intervals not exceeding 5 years.

(c) The midbody gauging survey must be comprised of at least three transverse (girth) belts of deck, bottom, side, inner hull, trunk, and longitudinal bulkhead plating and attached longitudinal members. The number and specific locations of the gauging points shall be to the satisfaction of the Officer in Charge of Marine Inspection (OCMI).

(d) Except as provided in paragraph (f) of this section, within 60 days of the vessel's required compliance date the owner or operator shall submit the following to the OCMI that issued the vessel's current Certificate of Inspection:

(1) The gauging survey results.

(2) An engineering analysis signed by a registered Professional Engineer licensed by any state of the United States or the District of Columbia, or signed by a Coast Guard-approved organization, that—

(i) Certifies the vessel's compliance with the minimum section modulus and plating thickness requirements of subpart 32.59 of this chapter; or

(ii) Proposes structural repairs and/or modifications that will bring the vessel up to the required strength standards.

(e) The vessel owner or operator shall keep a permanent copy of the Coast Guard-approved gauging report available for inspection by the OCMI.

(f) Instead of the submittals required by paragraphs (c) and (d) of this section, current classification with the American Bureau of Shipping or another recognized classification society, or a load line certificate issued in accordance with the International Convention on Load Lines or the International Voyage Load Line Act, may be submitted as evidence of compliance with the requirements of this section.

[CGD 91–209, 58 FR 52602, Oct. 8, 1993]

Subpart 32.59—Minimum Longitudinal Strength and Plating Thickness Requirements for Unclassed Tank Vessels That Carry Certain Oil Cargoes—TB/ALL

§ 32.59-1 Minimum section modulus and plating thickness requirements—TB/ALL.

(a) As used in this section, *Rule* means the current Rules of the American Bureau of Shipping or other recognized classification society, as appropriate for the vessel's present service and regardless of the year the vessel was constructed.

(b) The requirements of this section apply to all in-service, unclassified tank vessels certificated to carry a pollution category I oil cargo listed in 46 CFR Table 30.25-1.

(c) For all vessels except those limited on their Certificate of Inspection to river routes only, the minimum midship section modulus must be—

(1) At least 90 percent of that required by Rule; or

(2) Where there is no specific Rule requirement, at least 100 percent of that which is necessary to meet the bending moment developed under a full load condition in still water, using a permissible bending stress of 12.74 kN/cm^2 (1.30 t/cm^2 , 8.25 Ltf/in^2).

(d) Within the 40-percent midship length, the average flange and web thicknesses of each longitudinal stiffener must be as follows:

(1) For deck and bottom stiffeners: at least 85 percent of Rule thickness, unless a buckling analysis demonstrates that lesser thicknesses can be safely tolerated. However, the average thickness must never be less than 80 percent of Rule thickness; and

(2) For side stiffeners: at least 75 percent of Rule thickness.

(e) Within the 40-percent midship length, the average thickness for longitudinal strength plating must be at least as follows:

(1) Weather deck: 75 percent of Rule thickness;

(2) Hatch: 70 percent of Rule thickness;

(3) Trunk: 75 percent of Rule thickness;

(4) Sheer strake: 75 percent of Rule thickness;

(5) Outer sideshell: 75 percent of Rule thickness;

(6) Inner sideshell: 75 percent of Rule thickness;

(7) Outer bottom: 75 percent of Rule thickness;

(8) Inner bottom: 70 percent of Rule thickness;

(9) Keel: 75 percent of Rule thickness;

(10) Bulkheads: 75 percent of Rule thickness.

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