

MSC Guidelines for Review of Oil & Chemical Tankship Structures

Procedure Number: T1-24

Revision Date: 02/04/00

References

- a. 1995 Rules for Building and Classing Steel Vessels, Part 3 and Part 5
 - b. 46 CFR Subchapter D
 - c. 46 CFR Subchapter O
 - d. 46 CFR 31.10-1(c), Acceptance of structural plans approved by ABS or other recognized classification society
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Disclaimer

These guidelines were developed by the Marine Safety Center staff as an aid in the preparation and review of vessel plans and submissions. They were developed to supplement existing guidance. They are not intended to substitute or replace laws, regulations, or other official Coast Guard policy documents. The responsibility to demonstrate compliance with all applicable laws and regulations still rests with the plan submitter. The Coast Guard and the U. S. Department of Transportation expressly disclaim liability resulting from the use of this document.

Contact Information

If you have any questions or comments concerning this document, please contact the Marine Safety Center by e-mail or phone. Please refer to the Procedure Number: **T1-24**

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General Review Guidance

- If the vessel is new and not a sister vessel, has the Application for Inspection been submitted? In general, no plan review will occur until receipt of a copy of the Application.
 - Is it clearly stated what is desired from the MSC? Are all plans requiring Coast Guard review and/or approval submitted in triplicate? Are there any special or unusual requests involved?
 - Is the vessel being reviewed by ABS under NVIC 10-82 or 2-95? If **Yes**, the MSC will not normally review the structural plans. These plans may be reviewed by the MSC under ABS oversight procedures. If vessel was reviewed by SAFEHULL, ABS approval will also be accepted without further review.
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- Is the vessel being classed by ABS? If **Yes**, the submitter should provide the MSC with a copy of the ABS approval letter and approved drawings. Per reference (d), the USCG considers ABS structural review for class as acceptable for demonstrating compliance with US regulations.

- For vessels, over 190 m (623 feet), receiving a loadline, only.
 - Calculate the vessel definitions: Part 3, Section 1.
 - Check and validate the information in Introduction: Part 5, Section 2A.1.
 - Calculate the scantlings for the bottom shell: Part 5, Section 2A.4.3.2
 - Calculate and check long. and trans. bulkheads: Part 5, Section 2A.4.5.
 - Check the scantlings of main supporting members: Part 5, Section 2A.4.5.5.
 - Check buckling and ultimate strength calcs.: Part 5, Section 2A.5.2.2.

- For vessels, under 190 m (623 feet), receiving a loadline, only.
 - Calculate the vessel definitions: Part 3, Section 1.
 - Check and validate the gen. information: Part 5, Section 2 Part B.1-.15.
 - Calculate and check shell plating scantlings: Part 5, Section 2B.19.
 - Calculate and check bulkhead plating: Part 5, Section 2B.23.
 - Calculate the scantlings for bottom structure: Part 5, Section 2B.26.
 - Check the scantlings of supporting members: Part 5, Section 2B.27.
 - Check the scantlings of frames, beams, and bulkhead stiffeners: Part 5, Section 2B.29.

- For unclassified, non-loadlined vessels over 190 m (623 feet)
 - Calculate the vessel definitions: Section 1.
 - Check and validate the information in Introduction: Part 5, Section 2A.1.
 - Calculate and check the design considerations: Part 5, Section 2A.2.
 - Calculate and check load criteria calcs.: Part 5, Section 2A.3
 - Calculate the scantlings for bottom structure: Part 5, Section 2A.4.3.
 - Calculate and check side shell and deck plating: Part 5, Section 2A.4.4.
 - Calculate and check long. and trans. bulkheads: Part 5, Section 2A.4.5.1.
 - Validate corrugated bulkhead scantling, as applicable: Part 5, Section 2A.4.5.4.
 - Check the scantlings of main supporting members: Part 5, Section 2A.4.5.5.
 - Calculate/check total strength assessment: Part 5, Section 2A.5.

- For unclassified, non-loadlined vessels under 190 m (623 feet)

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- Calculate the vessel definitions: Section 1.
- Check and validate the inform. in Introduction: Part 5, Section 2B.1-.15.
- Calculate/check hull-girder strength: Part 5, Section 2B.17.
- Calculate and check the shell plating: Part 5, Section 2B.19.
- Calculate and check deck plating: Part 5, Section 2B.21.
- Calculate and check bulkhead plating: Part 5, Section 2B.23.
- Calculate the scantlings for bottom structure: Part 5, Section 2B.26.
- Check the scantlings of supporting members: Part 5, Section 2B.27.
- Check the scantlings of frames, beams, and bulkhead stiffeners: Part 5, Section 2B.29.