

**PART II RULES FOR THE CONSTRUCTION
AND CLASSIFICATION OF SHIPS
IDENTIFIED BY THEIR MISSIONS**

TITLE 47 SUPPLY VESSELS

SECTION 5 ENGINES AND MECHANICS

CHAPTERS

- A APPROACH
- B TECHNICAL DOCUMENTATION
- C MATERIALS AND WORKMANSHIP
 – See Part II, Title 11, Section 5
- D PRINCIPLES OF INSTALLATION
- E INTERNAL COMBUSTION ENGINES
 – See Part II, Title 11, Section 5
- F OTHER ENGINES
 – See Part II, Title 11, Section 5
- G SHAFT LINES AND TRANSMISSION
 – See Part II, Title 11, Section 5
- H GEAR BOXES AND COUPLINGS
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- I THRUSTERS AND PROPELLERS
 – See Part II, Title 11, Section 5
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CHAPTER A APPROACH

CHAPTER CONTENTS

A1. APPLICATION

A1. APPLICATION

100. Scope

101. The requirements in the present Title 47, Section 5 are additional to those in Part II, Title 11, Section 5 and apply to machinery, main engines and auxiliaries installations of the vessels covered by Title 47, in particular those assigned the service notation "Chemicals" and "Petroleum products."

CHAPTER B SCOPE

CHAPTER CONTENTS

B2. SPECIFIC DOCUMENTATION FOR SHIPS VESSELS COVERED BY TITLE 47

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100. Additional documentation

101. In addition to the requirements of Part II, Title 11, Section 5, the following documents are to be submitted for the approval of RBNA for supply vessels:

- a. Diagram of the systems of cargo handling including:
 - a.1. Powdered products as cement, barite, etc.
 - a.2. Liquid mud;
 - a.3. Petroleum products (1);
 - a.4. Chemicals (2)
- b. Diagram of the venting pipes of the cargo and storage tanks (1) and (2);
- c. Diagram of the systems of measurement in the cargo and storage tanks (2) (3);

- d. Diagram of systems of bilge wells in the cargo pump compartment and other compartments under gas risks (2) (3);
- e. Diagram of pumping systems in dry spaces adjacent to cargo tanks and storage (2) (3);
- f. Diagram of pumping systems supporting non-dry spaces adjacent to cargo and storage tanks (2) (3);
- g. Construction plan of automatic cutting devices installed in the connections of the cargo hoses (2);
- h. Plan of the cargo heating system.

Notes:

- (1) For ships with service notation "petroleum products"
- (2) For ships with service notation "chemicals"
- (3) The diagrams are to include, where applicable, remote and local controls as well as the monitoring and automation systems.

CHAPTER D PRINCIPLES OF INSTALLATION

CHAPTER CONTENTS

- D1. SPECIFIC CONDITIONS
 - D2. MACHINERY ARRANGEMENT
 - D3. ORDER TRANSMISSION
– See Part II, Title 11, Section 5
 - D4. MACHINERY IDENTIFICATION
– See Part II, Title 11, Section 5
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D1. SPECIFIC CONDITIONS

100. Marine installations
– See Part II, Title 11, Section 5

200. Inclination
– See Part II, Title 11, Section 5

300. Design temperatures

301. The design of installations of auxiliaries and equipment is to be based on a temperature of 45° C in the engine room and 32° C temperature raw water suctioned, from the inside or from the sea.

302. Surface temperatures of engine parts used in loading or unloading cargo operations are not to exceed the temperature of 200° C.

400. Fuels

401. For the present Rules, the conditions specified in NORMAM 01 apply, i.e fuels with flash point less than 60° C (such as alcohol or gasoline) are not permitted.

500. Cargo area

- See Part II, Title 32, Section 1, sub-chapter A.2.

D2. MACHINERY ARRANGEMENT

100. General arrangement

101. Engine rooms with internal combustion engines operating cargo pumps, or during cargo or tank handling, are to be located outside of cargo area.

102. Cargo pump driven by internal combustion engines are to be located outside of the cargo area. The RBNA may authorize, upon analysis, the use of hydraulic motors or explosion-proof electrical motors, in the cargo area.

103. Spark generating equipment or device is not allowed in the cargo area.

104. Heating, cooking or cooling appliances are permitted only in accommodation spaces and shall not use liquid fuel, solid or liquefied gas. Equipment of heating, air conditioning or climatization systems employing liquid fuel with a flash point greater than 55° C are permitted in the Engine Room.

105. The engines will have provided that they are stopped, from outside the compartment in which they are.

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