STCW-F (Fishing) Chapter II

Appendix to STCW-F Chapter II Regulation 5

Minimum Knowledge Required for Certification of Chief Engineer Officers and Second Engineer Officers of Fishing Vessels Powered by Main Propulsion Machinery of 750 kW Propulsion Power and More

Ref: https://www.edumaritime.net/stcwf Source: IMO

1. The syllabus given below is compiled for examination of candidates for certification as chief engineer officer or second engineer officer of fishing vessels powered by main propulsion machinery of 750 kW propulsion power or more. Bearing in mind that a second engineer officer will be in a position to assume the responsibilities of the chief engineer officer at any time, examination in these subjects shall be designed to test that the candidate has assimilated properly all available information that affects the safe operation of the fishing vessel's machinery.

2. With respect to paragraphs 3.4 and 4.1 below, the Party may omit knowledge requirements for types of propulsion machinery other than machinery installations for which the certificate to be awarded is to be valid. A certificate awarded on such a basis shall not be valid for any category of machinery installation which has been omitted until the engineer officer proves to be competent in these items to the satisfaction of the Party. Any such limitation shall be stated in the certificate.

3. Every candidate shall possess sufficient elementary theoretical knowledge to understand the basic principles involved in the following subjects:
   3.1. combustion processes;
   3.2. heat transmission;
   3.3. mechanics and hydromechanics,
   3.4. as appropriate:

3.4.1. marine diesel engines;
3.4.2. marine steam propulsion plant;
3.4.3. marine gas turbines;
3.5. steering gear systems;
3.6. properties of fuels and lubricants;
3.7. properties of materials;
3.8. fire-extinguishing agents;
3.9. marine electrical equipment;
3.10. automation, instrumentation and control systems;
3.11. fishing vessel construction, including stability and damage control;
3.12. auxiliary systems; and
3.13. refrigeration systems.

4. Every candidate shall possess adequate practical knowledge in at least the following subjects:
4.1. operation and maintenance of, as appropriate:
4.1.1. marine diesel engines;
4.1.2. marine steam propulsion plant;
4.1.3. marine gas turbines;
4.2. operation and maintenance of auxiliary machinery systems, including steering gear systems;
4.3. operation, testing and maintenance of electrical and control equipment;
4.4. maintenance of catch handling equipment and deck machinery;
4.5. detection of machinery malfunction, location of faults and action to prevent damage;
4.6. organization of safe maintenance and repair procedures;
4.7. methods of, and aids for, fire prevention, detection and extinction;
4.8. regulations to be observed regarding operational or accidental pollution of the marine environment and methods and aids to prevent such pollution;
4.9. first aid related to injuries which might be expected in machinery spaces and use of first-aid equipment;
4.10. functions and use of life-saving appliances;
4.11. methods of damage control with specific reference to action to be taken in the event of flooding of seawater into the engine-room; and
4.12. safe working practices.

5. Every candidate shall possess a knowledge of international law as embodied in international agreements and conventions as they affect the specific obligations and responsibilities of the engine department, particularly those concerning safety and the protection of the marine environment. The extent of knowledge of national maritime legislation is left to the discretion of the Party, but shall include arrangements for implementing international agreements and conventions.

6. Every candidate shall possess a knowledge of personnel management, organization and training aboard fishing vessels.
