Purpose:

The e-learning module is designed for theoretical training of ratings as able seafarer deck in accordance with Chapter II of the STCW Convention in the part concerning of shipboard maintenance and repair.

The ELM is included in the *"Able seaman"* library.

What is an e-learning module?

E-learning module is the electronic textbook on one or more sections. Theoretical materials can be accompanied by drawings, diagrams, photos, animations and videos. There is a test for assessment of knowledge gained at the end of each section.

Contents:

- Maintenance of the main part of the ship
- Painting work on ships
- Ropes, chains and rigging equipment
- Rigging
- Carpentry work
- Ship's work safety

Target groups

Deck - Support

Ship types

Generic

Regulations

Table A-II/5 STCW Code

| Competence: | Contribute to shipboard maintenance and repair |

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SHIPBOARD MAINTENANCE AND REPAIR
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Section 1. Maintenance of the main part of the ship

Work organization

Ship works are performed in accordance with the planned maintenance system (PMS). A planned maintenance system on ships is mandatory according to the International Safety Management Code (ISM). An effective planned maintenance system helps meet safety and environmental objectives laid out in the ISM Code.

The "Planned Maintenance System" shall be under the supervision of the "Onboard Management & Maintenance Committee."

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Section 1. Maintenance of the main part of the ship

It is forbidden to carry out simultaneous work at height of two or more people who are one above the other, if there is no solid flooring between them.

Tools for workers should be lifted and lowered in bags.

Separate tools (pneumatic hand tools, etc.) should be lifted (lowered) using a line.

Small tools should be fastened with a lanyard to the worker's safety belt.

It is not allowed to lay out loose tools in the workplace or leave the tool.

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Section 1. Maintenance of the main part of the ship

Work in confined spaces

- Entry and work in confined, hard-to-reach and poorly ventilated rooms are allowed under the direct supervision of the chief engineer or chief mate, each in his own department (except for degassed tanks).

- In urgent cases and when there is no certainty that the composition of the air is harmless to people sent to closed spaces, work in them must be carried out in breathing apparatus.

- One person, under no circumstances, should enter such a room, unless he is observed by a second person who is outside this room (at the entrance to it). The entering person must put on helmet, safety belt with straps and a safety rope, the other end of which must be at the observer outside the room.

Persons in these rooms and observers must use the

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Section 1. Maintenance of the main part of the ship

Chipping and painting work

- Painting with turpentine varnish should be done using a brush on a long handle. It is not allowed to use turpentine varnish at the presence of solar lighting at the workplace.

- All types of preparatory work (removing old paint, scale, rust, degreasing, etc.), as well as painting work, are carried out with the mechanisms stopped.

- When working with chemical paints in enclosed spaces, supply and exhaust ventilation must be provided with at least 15 air changes.

- During painting work, it is not allowed to leave portholes open for ventilation of spaces unattended.

- If signs of indisposition (dizziness or nausea) appear, the worker must immediately stop work, give an alarm signal and leave the room being painted. All other

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Section 3. Ropes, chains and rigging equipment

Synthetic ropes are made from artificial fibers having a different base, so their physical and mechanical properties can vary widely.

Polymeric materials from which fibers (threads) for the production of ropes are made can be divided into four groups: polyamide, polypropylene, polyvinyl, polyester.

In different countries, the same fibers made from these materials have different names:

- polyamide – amilan, dederon, capron, nylon, perlon, stilon;

- polypropylene – moplen, polyprop, pylen, ulstron;

- polyvinyl – vinylon, cremona, curolon, saran, teviron;

- polyester – dacron, lavsan, tergal, terylene, teteron, lanon.

Synthetic fiber can be in the form of thick threads

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Test tasks

Question text

What is the name of the paint brushes marked with the letter "c" in the figure?

Choose the correct answer

- Offtake brushes.
- Trimmers.
- Flywheels.
- Marking brushes.
- Hand brushes.
- Flat brushes.
- Finishing brushes.

Attempt: 1

COMMENT

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