

Questions and answers to Crew Evaluation System test for Juniors on the Reefer

Welcome to the website where you can find answers for the *CES* test to the «*Junior specialists on Reefer*». This site will help you as a marine specialist improve your knowledge with the help of open information, where you can find questions as well as answers for them. *CES* based on practical information and marine specialists experience.

CES tests developed for evaluating seaman basic knowledge by *Seagull Company* (rebranded as «*OTG*»), is an evaluating online-tool, used for revealing any professional preparation needed in specific fields of knowledge, defined by *STCW*.

- Version: 6.0.0.
- Test type: *STCW*.
- Duty: Junior Specialist.
- Vessel type: Reefer.

CES tests have proven themselves as good tools for the selection and recruitment process, as well as advancing the level of knowledge of the current officers and crew. *Ocean Technologies Group* use various subjects for question creation, which includes:

- Crowd and Crisis Management;
- Integrated Navigation System (*INS*);
- Ballast water management;
- Handling and Stowage;
- Vessel operation management and safety;
- Marine engineering;
- Maintenance and repair, etc.

Test for juniors includes theoretical and practical information about safety working with

electrical equipment. Knowledge of this information directly shows employee's competence who holds a relevant post on a vessel. A sailor on a refrigerated cargo ship is responsible for maintaining and monitoring the refrigeration systems, ensuring that the required temperature conditions for transported goods are met. Additionally, they need to oversee the equipment's condition and perform maintenance as necessary, as well as address any cooling system issues that may arise during the voyage. This role requires technical problem-solving skills and strict adherence to safety regulations and procedures.

This page contains answers to *Seagull CES (Crew Evaluation System)* test about *Junior specialists on Reefer*, and serve as a database of questions and answers, using which seafarer can prepare to exams for getting certificate of competence, or just to challenge yourself with knowledge in this theme.

Use the search below to find question.

Amount of questions: **25**.

Right answers marked with this sign .

Code: BDYA08 An electrical power emergency source on ship is required because:

- It satisfies the *SOLAS* (and other) requirement for the ship safety. ✓
- The main diesel generator(s) can be taken out of service for overhaul of repair.
- The ship's total load can be shared between main and emergency generators.

Code: EDWY51 Why is precooling of cargo is important?

- Reefer cannot be used to reach the desired temperature, cargo of a reefer container has to be brought to the desired temperature prior to loading. ✓
- If no precooling done cargo inside of container can be out of order already.

Its save fuel. After loading onboard, vessel will not spend own fuel to bring temperature on required level.

Code: XWUR53 How does a reefer container work?

The generator, placed on one side of the container, blows air into the container.

Two generators from both side of the container blows air into the container.

Code: ONZM01 What is the reason for the superheat in reefer system?

Low quantity of refrigerant in evaporator.

Too much refrigerant in the system leading to overheat of the compressor.

Code: INAK67 Which of the following should be used on an electrical fire (2 answers are correct).

CO₂ extinguisher.

Dry powder extinguisher.

Water extinguisher.

Foam extinguisher.

Code: DUIE89 Which parameters of the reefer container you should check after loading?

Serial number, stowage position, set point, ventilation position, humidity set point, supply temperature, return temperature, active alarms, visual damages of refrigerated plant.

Serial number, set point, gas level in receiver, compressor current, supply voltage, evaporator temperature, superheat, suction temperature, discharge temperature.

Serial number, stowage position, set point.

Code: Rli18 How to test dielectric gloves before work?

Before use, the gloves should be inspected, paying attention to the absence of mechanical damage and fill gloves with hot fresh water.

Dielectric gloves do not need to be tested before work, if there is a "test stamp" from manufacturer.

Before use, the gloves should be inspected, paying attention to the absence of mechanical damage, dirt and moisture, and also check for punctures by twisting the gloves towards the fingers.

Code: JQVR63 What is the reason between dry and reefer container?

The major difference between normal dry container and reefer container is that the temperature condition controlling system is available in reefer container.

Difference in types of cargo it loaded.

It is the same, just different names for containers in different countries.

Code: SHKX90 What is Reefer container used for?

Reefers are essential for worldwide trade of food.

Reefers are essential for worldwide trade of food. Storage of the wood.

Storage of food.

Code: ARPC01 What is the superheat in a refrigerated system?

This is the difference between the boiling point temperature of refrigerant in the evaporator coil and the actual temperature of the refrigerant gas as it leaves the evaporator.

This is the compressor overheat temperature.

This is the difference between the supply and return temperatures.

Code: VAKL55 According to the requirements of the SOLAS 74 convention, Emergency Diesel Generator (EDG) must take full rated load no more than:

45 sec.

35 sec.

50 sec.

Code: OIQ43 What is a Reefer Container?

Container is a type of shipping container that maintains its cargo at a regulated cool temperature.

Container for Cargo.

Container is a type of shipping container that remains its cargo safe.

Container for transportation of different types of food.

Code: XWRA89 Which of these does not affect the temperature rise of the compressor discharge gases?

Malfunction one of two return air sensors.

Insufficient freon level in the system.

Malfunction of expansion valve.

Compressor malfunction.

Code: JNZA59 What is the first action if you find a reefer container in not working condition?

Check main circuit breaker position (on/off) and the presence of power supply on each incoming phase with multimeter.

Make sure the serviceability of the main transformer.

Verify presence of "freon gas" in the system.

Call service engineer.

Code: TMVQ96 What is the correct stowage of the reefer on deck of container vessel?

Motor to forward.

Motor to alt.

Code: PRUC70 On a container vessel, what must be done as soon as reefer containers have been loaded?

- It must be connected to the ship power supply and their setting temperature verified. ✓
- Stowage position must be reported to the duty officer.
- Setting temperatures must be verified.

Code: ZXDA17 What is the purpose of the Oil in the refrigerated systems?

- To lubricate the moving parts of the compressor. ✓
- To help the refrigerant absorb the heat in the process.
- To lubricate the TXV as sometimes it works hard to maintain cooling capacity.
- To ease the travel of the refrigerated thru the piping.

Code: YMX879 What is the main signs of an insufficient freon gas level in the refrigerated system that we can easily see on the evaporator coil?

- The evaporator coil is frozen after the thermostatic valve at the beginning of the coil. ✓

- Insufficient level of freon does not affect the evaporator coil.
- The evaporator coil is frozen after the thermostatic valve at the end of the coil.
- The pipe before the thermostatic valve is frozen but the evaporator coil is clean.

Code: UOIK61 Based on pressure measurements, how to determine that the compressor is out of order?

- The suction pressure is less than the discharge pressure. ✓
- The suction pressure equal to discharge pressure.
- The suction pressure greater than the discharge pressure.
- Compressor failure will not affect to the system pressure.

Code: HRF39 What is the normal suction pressure for compressor?

- Depend on the reefer container working mode and ambient temperature. Technical standards from the manufacturer that are specified in manual. ✓
- Depend on the freon gas level in receiver.
- No more than 5 *bar*.
- Not less than 5 *bar*.

Code: VHAX11 What is means "Ambient Temperature"?

- Outside temperature. ✓

Maximum possible temperature.

Required temperature for transportation of cargo in reefer container.

Code: ATQV48 How to prepare reefer container system for safely welding work on the gas pipe?

Switch off power supply and collect freon to the recovery balloon. ✓

Switch off power supply and collect freon to receiver.

Switch off power supply and discharge freon to atmosphere.

Disconnect power supply cable and collect freon to the recovery balloon.

Code: KGIF52 What is the function of a thermistor in the winding of an evaporator fan electric motor?

Interrupt the operation of the electric motor in case of overheating. ✓

Reads the motor current.

Measures the temperature of the electric motor in case of overheating.

Designed to start the electric motor. It serves to maintain the current on the auxiliary winding of the motor and goes into a shutdown state when the motor is running.

Code: ODNE18 How will a faulty capacitor of a single phase electrical motor affect its operation?

Motor will not start. ✓

Motor will start and stop periodically.

The insulation resistance of the motor will decrease.

The electric motor of condenser fan will burn out on start.

Code: DRGO62 What is means "Set Point"?

Required temperature for transportation of cargo in reefer container. ✓

Port of destination.

Required temperature of Chief Officer/Planner.

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