Course: NR-33 – Periodical Training of Confined Spaces For Authorized Entrants, Watchmen and Entry Supervisors

SCOPE AND APPLICABILITY:

Establish the minimum requirements for identifying confined spaces and recognition, evaluation, monitoring and controlling the risks in order to permanently ensure the safety and health of worker that Interact directly or indirectly in these spaces.

REGULATIONS & STANDARDS

- NBR 14606 & NBR 16577;
- NR 33;

- OSHA 1910.146;
- IMO Resolution A.1050(27).

COURSE CONTENT:

- 1. Confined Spaces Definitions;
- Identification, evaluation and Manage of Operational Risks
 - Mechanical Ventilation;
- Equipment Operation;
- 4. Entry Permit Procedures;
- 5. Confined Spaces Identification;
- 6. Choose criteria for Risks Control Equipment;
 - 7. Safe Behavior involving Confined Spaces
- Illumination Systems and other equipment for hazardous areas;
- 8. Safety and Health Regulations;
 - Applicability of NBR 16.577;
- 9. Respiratory Protection Program;
- 10. Hazardous Areas;
- 11. First Aid and Rescue Operations.

COURSE DESIGN:

Theoretical – 4 hours **TOTAL:** 8 hours

Practical - 4 hours

Prerequisite(s):

Previous training: NR33 Supervisors (40h) or NR33 for Watchman and authorized workers (16h).

MINIMUM/MAXIMUM NUMBER OF DELEGATES

This course requires a minimum of 1, and a maximum number of 12 trainees.

To offshore trainings, the course number of attendees will comply with the vessels/rig necessity. According to the previous certificate presented this refresh course can be fitted on Supervisors or Authorized Works and Watchman's roles.

SPECIFICATION ABOUT POSSIBLE TASKS DEVELOPED ACCORDING TO THIS COURSE

The Works That can be Carried out in Confined Spaces Will be According to the Qualification and Training Required for the Function of the Member, Such as: Repairs, Cleaning, Maintenance, Hot Work, Electricity Services, Cold Work, Inspections, Rescue/Salvage, Among Others.

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SPECIFICATION ABOUT POSSIBLE TYPES OF CONFINED SPACES EXISTENT IN THIS COURSE

- Silos:
- Oil Contaminated Tanks;
- Marine Diesel Tanks;
- Water Tanks;
- Sewage Tanks;
- Mud Tanks;
- Ballast Tanks;
- Drain Tanks;
- Chan Lockers:
- Crane Pedestal;
- Empty Spaces with or Without Particulate Materials;
- Empty Spaces with or Without Synthetic Fluids;
- Other Confined Spaces Registered in the Company Units.

MAIN SAFETY ISSUES:

- Task Planning;
- Strict Communication;
- The watchman never enters in the confined space;
- Continuous gas testing into and around the confined space;
- Rescue Equipment ready to be used in surroundings of the confined spaces;
- Certified and calibrated Explosion proof equipment;
- Correct use of each equipment mentioned during the training and available on site;
- Strictly fulfill the work permit;

REQUIRED EQUIPMENT FOR PRACTICAL EXERCISES:

- Gas Tester;
- Safety Harness;
- Tripod;
- Rescue Winch compatible with the tripod;
- Stop shout device;
- Self-Contained Breathing Apparatus;
- · Scape masks and cylinders;
- Radio communicator;

P.S.: All applicable equipment must be Ex, according to NBR16577 and NR33.

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PROCEDURE FOR PRACTICAL EXERCISES:

- Reinforce with the students the safety procedures adopted by the company/contractor;
- It is totally forbidden to perform practical exercises in real confined spaces. The training must be performed in a safe environment.
- Fulfillment of the work permit used onboard;
- · Test the atmosphere around and in three levels before entering the confined spaces;
- Isolation of the simulated area of the confined spaces;
- Positioning of the teams (supervisor, watchman and authorized workers);
- · Show how to use each equipment correctly: Harness, the importance of gloves, etc;
- Show how to perform a positive and negative fit test on the mask;
- Test and demonstrate the use of SCBA;
- · Simulate an entry using the guide cable and tripod
- Test the rescue situation and procedures with the watchman;
- The watchman will perform the simulated rescue using the tripod and rescue winch;
- The rescue team will make moves using the stretcher while using SCBA and will transfer the simulated victims to another place, showing techniques to keep the victim safe during the transport.

CERTIFICATION:

Training certificate signed by responsible Engineer accredited by Brazilian CREA.

CERTIFICATE VALIDITY PERIOD:

1 year.

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