Instructions for the safe use of: Chemical Tanks

The information in this leaflet should be passed to the user of the equipment.

This document is issued in accordance with the requirements of DNV 2.7-1/EN 12079 & IMDG. It outlines the care and safe use of CHEMICAL TANKS and is based on the Oil & Gas UK "Best Practice for the Safe Packing & Handling of Cargo to & from Offshore Locations". It should be read in conjunction with the instructions for the safe use of Wire Rope Slings.

This information is of a general nature only covering the main points for the safe use of CHEMICAL TANKS. It may be necessary to supplement this information for specific operations.

Always

Ensure operators wear appropriate personal protective equipment (PPE) e.g. gloves, hard hat, safety glasses, and safety footwear.

Ensure operators are trained and competent.

Ensure dangerous goods are shipped in compliance with the requirements of the IMDG Code.

Never

Use equipment without carrying out a pre-use inspection.

Use equipment that has not been periodically inspected and certified.

Replace lifting sets without the approval of a competent person.

Use equipment out with its intended purpose.

Pre-use Inspection

Ensure earth points are in place and fit for purpose, should be clean and corrosion free.

Ensure gratings are secured where applicable.

Ensure the data plate is legible and demonstrates sufficient certification.

Ensure the safety, identification, and information markings are clear and legible.

Ensure the lifting set is correctly fitted with shackles and split pins fully engaged.

Ensure the lifting set is free of obvious signs of damage, e.g. abrasion, corrosion, wear, chemical attack, and mechanical damage.

Check capacity of tank including ullage is adequate.

Loading & Operation

Prior to operating the vessel ensure the frame is earthed using either earthling point, typically located diagonally at opposite ends of the frame where applicable.

The walkway hatch has to be fully open.

The sling legs have to be positioned such that they do not interfere with the walkway hatch or inadvertently cause the walkway hatch to close (e.g. slings shall hang on the opposite side of the hatch).

Ensure the contents do not exceed the vessel capacity excluding ullage. The ullage allows for thermal expansion.

Filling can be carried out via the outlet valve or man lid, ensure the tank is adequately vented first.

The pressure relief valve is set to relieve the internal pressure of approximately 5/6th of the test pressure. When operating the vessel ensure the working pressure does not exceed what is stated on the tank plate/unit decals.

To obtain a level reading either visually inspect the level gauge, located at the front of the vessel or alternatively access the dipstick via the front ladder ensuring that the vessel has been vented before unscrewing the dipstick cap.

Chemical tanks are designed for transportation services and must not be left as a storage tank for a prolonged period of time.

Once the vessel has been emptied of its contents the vessel and tank fittings must be cleaned.



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Movement & Transport

Ensure all signs and placards are in place and in compliance with the IMDG Code.

Ensure roof, forklift pockets, frame, etc., is free of potential dropped objects.

Ensure the total consignment weight does not exceed the maximum gross weight of the unit.

Ensure all lifting is performed with carried out through the forklift pockets or dedicated lifting set.

Lifting must be carried out by competent persons in accordance with an appropriate lifting plan.

Maintenance & Inspection

Moving parts such as valves, relief devices, hinges, shackles, etc., must be regularly checked to ensure the components are free from any damage or corrosion. Ensure moving parts are free moving. Swing bolts should be lubricated and hand tight only.

Paintwork damage must be regularly treated to combat corrosion.

Lifting sets shall be subjected to as a minimum:

- Thorough examination at intervals not exceeding 12 months.
- Non-destructive examination, and visual examination of components and joining links at intervals not exceeding 48 months.
- Non-destructive examination, and visual examination of chain sling legs at intervals not exceeding 48 months.

Containers shall be subjected to as a minimum:

- Visual examination at intervals not exceeding 12 months.
- Non-destructive examination, and visual examination at intervals not exceeding 48 months.
- Proof load test, non-destructive examination, and visual examination after substantial repair or alteration.

Tanks shall be subjected to:

- 2.5 year visual examination and pneumatic test.
- 5 year Visual examination and hydrostatic test.



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Chemical Tank

Note. Design may not be wholly representative of the actual Chemical Tank.







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Standard Offshore Chemical Tank

Chemical compatibility with the below specified materials shall be checked with the chemical supplier. It is the responsibility of the tank operator to ensure the chemical contents are compatible with the vessel and all other tank components.





