

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Offshore Tank Container**with type designation(s)
5000 usg. Offshore tank container

Issued to

**Al Shirawi Equipment Co (L.L.C.)
Dubai, United Arab Emirates**

is found to comply with

DNV GL standard DNVGL-ST-E271 – 2.7-1 Offshore containers, August 2017**ISO 10855-1:2018 Offshore containers and associated liftings sets – Part 1: Design,
manufacture and marking of offshore containers****IMO/MSC Circular 860****International Maritime Dangerous Goods Code (IMDG)****European Agreement Concerning the International Carriage of Dangerous Goods by Road
(ADR)****Regulations Concerning the International Carriage of Dangerous Goods by Rail (RID)****Application :****UN Portable Offshore Tank, Tank Instruction T4**

Max. gross mass (kg)	25000
Max. payload (kg)	15000
Tank cap. (L)	18927
MAWP/test pr. (bar)	1.79 / 2.65
Eq. shell thk (mm)	6.07

Issued at **Høvik** on **2020-01-16**This Certificate is valid until **2025-01-15**.for **DNV GL**DNV GL local station: **Dubai**Approval Engineer: **Igor Antonijevic**

.....
Inger-Helene Hals
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Product description

Design approved according to IMDG Code, Edition 2018 Amdt. 39-16.

Max.external dimensions (LxWxH): 6232 x 2520 x 3340 mm
Tare mass¹⁾: 10000 kg
Pressure vessel code, tank: ASME VIII Div.1
Tank diameter (Internal): 2180 mm
Tank material: SA-516 gr. 70(N)

¹⁾ tare mass has to be confirmed by weighing. The sum of the tare mass and the payload shall never exceed the max. gross mass as listed above.

Application/Limitation

IMDG/ADR/RID design approval number: N-NV/613/10/19
Metallurgical design temperature for tank: -40°C to +50°C
Design temperature for framework: -20°C
Min. shackle bolt diameter: 40.6 mm
Lifting slings Max angle of legs from vertical: 45°
Enhancement factor: 1.104
Setting of relief valve: 2.2 bar
Design vacuum: -0.21 bar

Products accepted for carriage:

- Liquids with the following Tank Instructions in the IMDG code: T1, T2, T3 and T4.

The goods accepted for carriage should have no adverse effect on any part of the tank and meet applicable tank special provision.

Foldable handrails must be folded/removed during lifting/transport operation.

DNV GL surveyor has to witness important production and test events and issue Form no. 71.08a "Certificate for Offshore Container" and Form no. CTT101 "Tank Container Certificate" for each container.

Production strength tests (All point lifting) to be carried out according to DNV GL 2.7-1 and after agreement with the DNV GL surveyor.

The certificates are only valid when the containers are fitted with a lifting set certified according to DNV GL 2.7-1.

Each tank should be subjected to a hydraulic pressure test to the specified test pressure.

Type Approval documentation

Job Id: **262.1-032304-1**
Certificate No: **TAS00002D0**

Tests carried out

Prototype OSFE0600031 tested according to the requirements.

Marking of product

Each container to be marked with:

- Data plates for UN tanks according to IMDG Code Ch. 6.7.2.20. Design approval number according to Application/Limitation above
- Data plates according to DNV GL / ISO requirements
- External marking according to IMDG / DNV GL / ISO requirements
- DNV GL decal for offshore containers
- ∇ mark to be hard stamped on frame
- Manufacturer's Serial Number to be welded on frame

Periodical assessment

In order to maintain the validity of the type approval certificate, periodical assessments should be carried out according to DNVGL-SE-0284 at 2 and 3.5 year intervals. Periodical assessments will, when possible, be harmonised with other surveys and audits carried out

END OF CERTIFICATE