Certificate No:
TAS00003S7

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Offshore Tank Container

with type designation(s)
1500L offshore tank container

Issued to
Vesseltech Engineering Sdn. Bhd.
Seri Kembangan, Selangor Darul Ehsan, Malaysia

is found to comply with
DNV standard DNV-ST-E271 – 2.7-1 Offshore containers, January 2021 (Amended October 2021)
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 T11

Max. gross mass (kg)	**4850**
Max. payload (kg)	**2750**
Tank cap. (L)	**1500**
MAWP/test pr. (bar)	**4.0 / 6.0**
Eq. shell thk (mm)	**7.9**

Issued at **Høvik** on **2023-01-19**
This Certificate is valid until **2028-01-18** .
DNV local unit: **Kuala Lumpur**

Approval Engineer: **Igor Antonijevic**

for **DNV**

Bosman van der Merwe
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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description

Design approved according to IMDG Code, Edition 2020 Amdt. 40-20.

Max.external dimensions (LxWxH):	1700 x 1700 x 1800 mm
Tare mass:	2100 kg
Tank diameter (Internal):	1450 mm
Tank material:	SA-240M Gr. 316
Pressure vessel code, tank:	ASME VIII Div. 1
Nominal wall thickness, shell/ends:	6.0 / 6.0 mm

Application/Limitation

IMDG/ADR/RID design approval number	N-NV/634/04/22
Setting of relief valve:	4.40 bar
Metallurgical design temperature for tank:	-40°C to +75°C
Design temperature for framework:	0°C
Design vacuum:	-0.42 bar
Max. sling angle from vertical:	45°
Min. shackle bolt diameter:	28.2 mm
Enhancement factor:	1.992

Products accepted for carriage:

- Liquids with the following Tank Instructions in the IMDG and ADR/RID code: T1, T2, T3, T4, T6, T7 and T11

This Offshore Container design is only for use in temperate climate and shall follow the restrictions and marking requirements according to DNV-ST-E271 Section 10. Area restriction, “Only to be used between 36º North and 36º South and in Australian Waters”, is to be included in the product certificate
DNV 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 2.7-1 and after agreement with the DNV surveyor.
The certificates are only valid when the containers are fitted with a lifting set certified according to DNV 2.7-1.
Each tank should be subjected to a hydraulic pressure test to the specified test pressure.

Type Approval documentation

Tests carried out

Prototype VESB-V2708 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 requirements
- External marking according to IMDG / DNV / requirements
- DNV decal for offshore containers
- NV 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 DNV-SE-0284 at 2 and 3.5 year intervals. Periodical assessments will, when possible, be harmonized with other surveys and audits carried out.

END OF CERTIFICATE