Certificate no.:
TAS00004C8

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Offshore Tank Container

with type designation(s)
50BBL acid storage offshore tank container

issued to
Rapid Solutions Engineering LLC
Abu Dhabi, **United Arab Emirates**

is found to comply with
DNV standard DNV-ST-E271 – 2.7-1 Offshore containers, March 2023
ISO 10855:2018 Offshore containers and associated liftings sets – Design, manufacture, testing, inspection and marking
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: T14

Max. gross mass (kg)	**13500**
Max. payload (kg)	**9000**
Tank cap. (L)	**8270**
MAWP/test pr. (bar)	**4/6**
Eq. shell thk (mm)	**see page 2**

Issued at **Høvik** on **2024-06-25**

This Certificate is valid until **2029-06-24**.

for **DNV**

DNV local unit: **VMC UAE**

Approval Engineer: **Nina Thorvaldsen Moberg**

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

Designs approved according to IMDG Code, Edition 2022 Amdt. 41-22.

Max.external dimensions (L x W x H):	2991 x 2450 x 2591 mm
Tare mass [1]:	4500 kg
Pressure vessel code, tank:	ASME VIII Div.1
Tank diameter (Internal):	2080 mm
Nominal tank thickness, shell:	6.0 mm
Nominal tank thickness, ends:	8.0 mm
Minimum required thickness after forming:	5.1 mm
Tank material:	SA 516 Gr.70N

[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 stated on the front page of this certificate.

Application/Limitation

IMDG/ADR/RID design approval number[2]: N-NV/665/03/24
[2] Rapid Solutions Engineering LLC is responsible for proper using of the number.

Metallurgical design temperature for tank:	-40°C to +50°C
Design temperature for framework:	-20°C
Setting of relief valve:	4.4 bar
Setting of frangible disc:	4.84 bar
Vacuum settings:	-0.4 bar
Min. shackle bolt diameter:	31.02 mm
Lifting slings Max angle of legs from vertical:	45°
Enhancement factor:	1.346

Products accepted for carriage:

- Liquids with the following Tank Instructions in the IMDG and ADR/RID code: T1, T2, T3, T4, T5, T6, T7 T8, T9, T10, T11, T12 and T13.

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-ST-E271 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-ST-E271.

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

Items of equipment shall be arranged, protected and marked per the requirements of IMDG code section 6.7.2.5. Verification shall be carried out by the surveyor.

Type Approval documentation

Tests carried out

Prototypes 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 / ISO requirements
- External marking according to IMDG / DNV / ISO 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. This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com

END OF CERTIFICATE