

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Offshore Tank Container**with type designation(s)
2000usg offshore tank container

Issued to

ACORN INDUSTRIES LLC
Sharjah, United Arab Emirates

is found to comply with

DNV GL standard DNVGL-ST-E271 – 2.7-1 Offshore containers, January 2021
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)	13700
Max. payload (kg)	8900
Tank cap. (L)	7570
MAWP/test pr. (bar)	1.79 / 2.69
Eq. shell thk (mm)	8.1

Issued at **Høvik** on **2021-02-23**This Certificate is valid until **2026-02-22** .for **DNV GL**DNV GL local unit: **Dubai**Approval Engineer: **Igor Antonijevic**

Zeinab Sharifi
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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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 2018 Amdt. 39-16.

Max.external dimensions (LxWxH): 2440 x 2440 x 3050 mm
Tare mass¹⁾: 4800 kg
Pressure vessel code, tank: ASME VIII Div.1 Ed. 2019
Tank diameter (Outer): 2320 mm
Nominal wall thickness shell/ends: 8.0/10.0 (min 8.5mm after forming)
Tank material: SA-516 gr.70

¹⁾ tare mass must 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/621/07/20
Metallurgical design temperature for tank: -40°C to +70°C
Design temperature for framework: -20°C
Min. shackle bolt diameter: 30.1 mm
Max angle of legs from vertical: 45°
Enhancement factor: 1.337
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 must 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

Tests carried out

Prototype AC200201087648 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



Job Id: **262.1-033510-1**
Certificate No: **TAS00002W1**

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