Certificate No:
TAS00003T6

TYPE APPROVAL CERTIFICATE

This is to certify:

That the offshore container

with type designation(s)
18 cylinder gas rack frame - JN9046G

Issued to
David Ritchie (Implements) Ltd.
Forfar, **United Kingdom**

is found to comply with
DNV standard DNV-ST-E271 – 2.7-1 Offshore containers, January 2021 (Amended October 2021)
ISO 10855:2018 Offshore containers and associated liftings sets – Design, manufacture, testing, inspection and marking
IMO/MSC Circular 860

Application :

Max. gross mass (kg)	**2000**
Max. payload (kg)	**1440**
Max. sling leg angle	**45**
Enhancement factor	**3.500**

Issued at **Aberdeen** on **2023-02-24**
This Certificate is valid until **2028-02-23** .
DNV local unit: **Aberdeen**

Approval Engineer: **Elisabeth Legg**

for **DNV**

Satya Shyamala Kuppili
Team Lead - Containers

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

Maximum external dimensions (LxWxH) : 1442 x 1020 x 2002 mm
Tare mass* : 560 kg

*) Tare mass is to be confirmed by weighing. The sum of payload and tare shall never exceed the maximum gross mass stated on the front page of this certificate.

Application/Limitation

Design temperature : -20 °C
Minimum shackle pin diameter : 21.7 mm

The DNV surveyor shall witness all important production and testing events and issue a certificate for each container. The certificate is only valid when the container is fitted with a DNV-ST-E271 certified lifting set.

This approval does not apply to the gas cylinders to be transported by this frame. If gas cylinders are to be installed and connected to manifolds, the unit as a whole (frame and payload) shall be approved and certified in accordance with IMDG Chapter 6.2 by an authorised certifying body.

Type Approval documentation

Tests carried out

Prototype tested in accordance with DNV-ST-E271

Marking of product

Each container to be marked in accordance with DNV / ISO requirements, including:

- Data and inspection plates
- DNV emblem for offshore containers
- NV mark to be hard stamped on the data plate
- 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 harmonised 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