Certificate no.:
TAS000048M

TYPE APPROVAL CERTIFICATE

This is to certify:

that the offshore container

with type designation(s)
16 cylinder gas rack frame (MGWRJ44)

issued to
HARGEN OFFSHORE CONTAINERS LTDA
CARAPEBUS, RJ, Brazil

is found to comply with
DNV standard DNV-ST-E271 – 2.7-1 Offshore containers, March 2023
ISO 10855-1:2018 Offshore containers and associated liftings sets – Part 1: Design, manufacture and marking of offshore containers
IMO/MSC Circular 860

Application:

Max. gross mass (kg)	**2200**
Max. payload (kg)	**1800**
Max. sling leg angle	**45**
Enhancement factor	**3.218**

Issued at **Aberdeen** on **2024-04-12**
This Certificate is valid until **2029-04-11**.
DNV local unit: **Macae**

for **DNV**

Approval Engineer: **Elisabeth Legg**

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

Type	Maximum external dimensions (L x W x H)	Tare mass*
16 cylinder gas rack frame (MGWRJ44)	1100 x 1100 x 2155 mm	400 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 transported in 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 the IMDG Code Ch. 6.2 by an authorised certifying body.

The connecting pins associated with the removable door shall be checked for damage prior to transportation and lifting activities. Should any signs of significant wear or damage be evident, these items shall be replaced with equivalent fasteners. The connecting items shall be permanently secured to the structure by means of a chain or equivalent. This information shall be transferred to the DNV offshore container certificate.

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.
- Removable door shall be marked with frame's serial number.
- The frame shall be stencilled with words to the effect of "removable door shall be fitted during all lifting and transportation activities”.

Periodical assessment

In order to maintain the validity of the type approval certificate, periodical assessments should be carried out in accordance with 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