

TYPE APPROVAL DESIGN CERTIFICATE

This is to certify:
that the offshore container

with type designation(s)
34 ft cargo basket
37 ft cargo basket
40 ft cargo basket
44 ft cargo basket
47 ft cargo basket

issued to
VG Offshore Containers International (M) Sdn Bhd
Pelabuhan Klang,, Selangor, Malaysia

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)	14700
Max. payload (kg)	MGW-Tare
Max. sling leg angle	30
Enhancement factor	1.293

Issued at **Aberdeen** on **2024-02-13**

This Certificate is valid until **2029-02-12**.

DNV local unit: **Kuala Lumpur**

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

Tare (maximum)	:	3200 kg (34 ft)
		3425 kg (37 ft)
		3650 kg (40 ft)
		3875 kg (44 ft)
		4100 kg (47 ft)
Length (maximum)	:	10300 to 14300 mm
Width (maximum)	:	1200 mm
Height (maximum)	:	1430 mm
Design temperature	:	-20 °C
Number of sling legs	:	4
Shackle size	:	8.5 t

Primary structure material specification (DNV-ST-E271 section 3)

Material grade	Minimum Yield Strength	Charpy
S355	355MPa for $0 < t \leq 16\text{mm}$	36J @ -10°C for $6 \leq t \leq 12\text{mm}$
(or equivalent)	345MPa for $16 < t \leq 40\text{mm}$	36J @ -20°C for $12 < t \leq 25\text{mm}$
	335MPa for $40 < t \leq 63\text{mm}$	36J @ -40°C for $t > 25\text{mm}$

Application/Limitation

Minimum lifting set requirements (DNV-ST-E271 section 8)

[Symmetrical]	WLL (t)	Fibre core (mm)	Steel core (mm)	Chain (mm)
Master link (quad assembly), Forerunner (if applicable)	19.01	40	40	25
Shackles and sling leg components	7.32	26	24	16
Minimum required breaking load (forerunner)		1036 kN		
Minimum required breaking load (sling legs)		399 kN		
Minimum shackle pin diameter		27.8 mm		

The above lifting set requirements have been provided for information purposes only. This type approval is not valid for the design, manufacture and certification of lifting sets.

Conditions

1. This type approval certificate is not valid for designs, components, equipment, systems or products which are subject to classification by DNV.
2. This type approval covers design(s) only. i.e. the type approval is not valid for the final product, but may be used as basis for obtaining a product certificate.
3. DNV surveyor shall witness production and testing event and issue a certificate for each container. The certificate is only valid when the container is fitted with a DNV certified lifting set.

Type Approval documentation

Tests carried out

To be carried out in accordance with DNV-ST-E271 section 4.6 and Table 5-4.

The fork pocket lift test shall be performed for all sizes of unit, in accordance with section 4.6.5.

Marking of product

- 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.
- The container shall be clearly marked near the inner fork lift pockets with the words "Empty Lift Only" in accordance with section 6.1.

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>