Certificate no.:
TAS00004KK

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Offshore Container

with type designation(s)
16 CYLINDER OFFSHORE BUNDLE AGSB-16-GBR

issued to
All Gases Sdn. Bhd.
Kemaman, Terengganu, Malaysia

is found to comply with
DNV standard DNV-ST-E271 – 2.7-1 Offshore containers, March 2023 (Amended December 2024)
ISO 10855-1:2024 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)
ISO 10961 - Gas cylinders-Cylinder bundles-Design, manufacture, testing and inspection

Application:

This offshore container is a gas cylinder bundle for different gasses as specified in Application/Limitation

Max. gross mass (kg)	**2500**
Max. payload (kg)	**350**
Max. sling leg angle	**45**
Enhancement factor	**2.880**

Issued at **Høvik** on **2025-02-07**
This Certificate is valid until **2030-02-06**.
DNV local unit: **Kuala Lumpur**

for **DNV**

Approval Engineer: **Igor Antonijevic**

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

This offshore container is a gas cylinder bundle according to IMDG/ADR/RID Chapter 6.2, with cylinders connected through a manifold. The container is approved for transport of gases as specified under Application/Limitation.

Max. external dimensions (LxWxH) : 1042 x 1042 x 2082 mm
Tare mass[1)] : 2150 kg
[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

Products accepted for carriage:

UN number	Proper Shipping name (PSN)
UN1066	NITROGEN, COMPRESSED
UN1006	ARGON, COMPRESSED
UN1072	OXYGEN, COMPRESSED
UN1013	CARBON DIOXIDE
UN1046	HELIUM, COMPRESSED
UN1002	AIR, COMPRESSED

Design temperature : -20 °C
Min. shackle bolt diameter : 21.6 mm
MAWP/test pr. (bar) [2)] : 200 / 300
[2)]maximum allowable working pressure for the cylinder bundle shall not be higher than the maximum allowable working pressure for the cylinders.

Cylinders
Height : 1520 mm
Diameter (external) : 234 mm
Volume : 50 l
Weight : 65 kg

The DNV surveyor to witness important production and test events and issue Form no. 71.08a “Certificate for Offshore Container” for each container, and any additional certificate as required by the competent authority.

Production strength tests (All point lifting) to be carried out according to DNV 2.7-1 and after agreement with the DNV surveyor.

Each manifold shall be proof pressure tested, each bundle should be leak tested, according to ISO 10961:2019 Section. 7.3.

The certificates are only valid when the containers are fitted with a lifting set certified according to DNV 2.7-1.

Only certified gas bottles of the proper size and type are to be use in this frame.

Service equipment shall be type approved according to one of the referenced standards in ADR/RID section 6.2.4.1 and bear the Π mark.

Type Approval documentation

Tests carried out

Prototype tested according to the requirements.

Marking of product

Each container to be marked with:
- Data plates according to DNV / ISO requirements
- Container marking according to DNV / ISO requirements
- Bundle marking according to ISO 10961, Chapter 6 and IMDG Code ref. 6.2.2.10 (certification marks, operational marks and manufacturing marks)
- DNV emblem for offshore containers
- VL 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 harmonised with other surveys and audits carried out. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com

END OF CERTIFICATE