

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Offshore Tank Container**

with type designation(s)

64 Cylinder MEGC Offshore Unit with Rack J8986G/DNV**64 Cylinder MEGC Offshore Unit with Rack GAS64-000-000**

Issued to

AGA AS**OSLO, Norway**

is found to comply with

DNV 2.7-1 Offshore Containers (2013)**EN 12079 Offshore containers-Design, construction, testing, inspection and marking****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 :****Multiple-Element Gas Container (MEGC) for compressed gases**

Type	Max. gross mass (kg)	Max. payload (kg)	Tank cap. (L)	MAWP/test pr. (bar)	Eq. shell thk (mm)
64 Cylinder MEGC Offshore Unit with Rack J8986G/DNV	8010	1760	3200	300/450	N/A
64 Cylinder MEGC Offshore Unit with Rack GAS64-000-000	8090	1640	3200	300/450	N/A

This Certificate is valid until **2019-12-31**.Issued at **Høvik** on **2016-05-03**for **DNV GL**DNV GL local station: **Oslo**Approval Engineer: **Igor Antonijevic**

Inger-Helene Hals
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.

Job Id:
Certificate No: **TAS00000F2**

Manufactured by

DNV GL id number 121534

DNV GL id number 10304554

Sub-suppliers

DNV GL id number 134187

DNV GL id number 10095629

DNV GL id number 108678

AGA AS takes responsibility that both design and production are in compliance with the Rules, Standards and/or Regulations listed on page 1 of this Type Approval Certificate.

Product description

Offshore container and Multiple-Element Gas Container (MEGC) according to IMDG Chapter 6.7.5 with 64 bottles connected through a manifold. The frame is manufactured either by David Ritchie Implements Ltd. or SMR PLUS, s.r.o..

Type	Max. external dimensions (LxWxH)	Tare mass ¹⁾
64 Cylinder MEGC Offshore Unit with Rack J8986G/DNV	2165 x 1890 x 2440 mm	6250 kg
64 Cylinder MEGC Offshore Unit with Rack GAS64-000-000	2174 x 1910 x 2418 mm	6000 kg

¹⁾ Due to varying weights of the content, the Tare mass can differ from the stated value. The sum of the Tare mass and the Payload shall never exceed the Rating stated on page 1.

Application/Limitation

IMDG/ADR/RID approval ref. no. : N-NV/463/05/11
Working temperature (°C) : -20 / +65
Min. shackle bolt diameter (mm) : 24.9
Enhancement factor – J8986G/DNV : 1.632
Enhancement factor – GAS64-000-000 : 1.627

Dangerous goods that can be transported:

UN No.	Class	Gas, Compressed
1066	2.2	Nitrogen, Compressed
1046	2.2	Helium, Compressed
1006	2.2	Argon, Compressed

Cargo to be handled and inspected according to packing instruction P200.

The removable guard must be securely fitted during all lifting and transportation activities.



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DNV GL surveyor has to witness important production and test events and issue Form no. 49.07a "Certificate for Offshore Container" and "Tank Container Certificate" Form no. 49.04a for each container. Production strength tests (All point lifting) to be carried out according to DNV 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 2.7-1.

Each tank container should be leak tested after assembly.

Type Approval documentation

Tests carried out

Prototype no. AGA 7753 and AGA 330803 tested according to rules.

Marking of product

Each container to be marked with:

- IMDG code requirements; approval ref. no. according to Application/Limitation above
- Data plates according to DNV/EN requirements



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- External marking according to DNV/EN requirements
- DNV GL decal for offshore containers
- NV mark to be hard stamped on frame
- Manufacture's Serial Number to be welded on frame
- Frame to be stencilled with words to the effect of "Removable guard to be fitted during lifting and transportation activities"

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform an assessment every 2nd year and before the expiry date of this certificate to verify that the type approval is complied with.

END OF CERTIFICATE