Certificate No:
TAS00003KC

TYPE APPROVAL CERTIFICATE

This is to certify:

That the ISO Freight Container

with type designation(s)
20ft ISO/CSC container for 9 cylinders – drawing ref. 4314 rev. B

Issued to
Umoe Advanced Composites AS
Kristiansand S, **Norway**

is found to comply with
ISO 1496, Part 1: General Cargo Containers for General Purposes
International Convention for Safe Containers, 1972 (CSC)

Application :

Max. gross mass (kg)	**20700**
Max. payload (kg)	**18730**
Net. cubic cap. (m³)	**N/A**
Stacking cap. (kg)	**41400**

Issued at **Høvik** on **2022-12-05**
This Certificate is valid until **2027-12-04** .
DNV local unit: **Kristiansand S**

Approval Engineer: **Nina Thorvaldsen Moberg**

for **DNV**

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.

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.

Manufactured by

Remprodex sp. z o.o.,
Człuchów, Poland

DNV local office: Gdansk

Umoe Advanced Composites AS takes responsibility that production is in compliance with the Rules, Standards and/or Regulations listed on page 1 of this Type Approval Certificate.

Product description

20ft freight container

Size code	: 20
Type code	: VA
ISO designation	: 1CCC
Maximum external dimensions (LxWxH)	: 6058 x 2438 x 2894 mm
Stacking test load per corner	: 18630 kg
Transverse racking test force	: 150 kN
Tare mass[1)]	: 1970 kg

[1)] Tare mass, including fixed installations, is to be confirmed by weighing. The sum of the tare mass and the payload shall never exceed the Max. Gross Mass as it is stated on the front page of this certificate.

This type approval certificate covers two variants of wall thickness, 1.6mm and 2mm.

Application/Limitation

CSC approval reference number	: N-NV/636/08/22
Allowable stacking load for 1.8g	: 41400 kg

Production tests to be carried out as required by DNV surveyor.

DNV surveyor to witness important production and test events and issue Form no. CTF 301 for all containers. Each certificate can cover a batch of containers.

Containers have reduced stacking capacity, and this has to be marked on the unit and specified on CSC data plate and included in each container certificate.

This approval does not apply to the gas cylinders to be installed in this container. When gas cylinders are installed and connected by manifolds, the unit as a whole will become a Multiple Element Gas Container, MEGC, and must be approved and certified as such in accordance with the ADR and/or RID codes by an authorised certifying body.

Note that the ISO Type Code is not applicable for MEGCs and will have to be changed if the container is certified as MEGC.

Type Approval documentation

Tests carried out

Prototype 308 strength tests (except as noted above) performed and witnessed by DNV according to CSC (ISO 1496-1).

Marking of product

Each container to be marked with:

- Data Plate shall be in accordance with CSC requirements, include allowable stacking and racking values
- External marking shall be in accordance with ISO 6346 requirements
- DNV decal for freight containers
- NV mark to be hard stamped on frame

Periodical assessment

In order to maintain the validity of the type approval certificate, periodical assessments should be carried out according to DNVGL-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

END OF CERTIFICATE