

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Lifting Gear

with type designation(s)
MK-4D

Issued to

Container Technics NV
Wijnegem, Antwerpen, Belgium

is found to comply with

DNV GL standard DNVGL-ST-0377 – Standard for shipboard lifting appliances

Application :

Product(s) approved by this certificate is/are accepted DNVGL product certification and for installation on all vessels classed by DNV GL.

Issued at **Hamburg** on **2019-12-03**

This Certificate is valid until **2024-12-02**.

DNV GL local station: **Belgium CMC**

for **DNV GL**

Approval Engineer: **Stefan Heuer**

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Jörg Kallies
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.



Product description

Lifting Lug for hatch covers type MK-4D (MK-4DL = left execution); (MK-4DR = right execution)

Application/Limitation

Working conditions:

- Design temperature: -10°C
- SWL 22t (60°) / SWL 15.6t (45°)
- Hoist load coefficient (psi) $\leq 1,2$
- Position angle: 10° to 55° (top angle of wires from 60° to 90°)
- Load cycles: maximum 2000 load cycles

Workshop test (each piece):

- Load test with 2 x SWL and function test in presence of DNVGL

Periodical quality inspection

- One lug per annum shall be destructive tested
- Nondestructive material test (liquid penetration) each 50th piece

Maintenance:

Each single lifting lug shall be inspected by a qualified person before every use and shall be subjected to a thorough examination every 5 years in presence of our Surveyor. Nondestructive material tests (e.g. dye penetration) shall be carried out at 5 yearly inspections.

Manufacturer

Zakład Slusarski Burakowscy
UL.Pelczycka 19
74-320 Barlinek
Poland

Type Approval documentation

Tests carried out

Type test M-NP-CMC/A0743971-1 witnessed by DNVGL dated 2019-11-29

Marking of product

Each lifting lug shall be marked by the manufacturer with at least:

- name or trademark
- type of loose gear
- serial number
- year of construction
- nominal load(s) "SWL" in t or kg

Periodical assessment

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

END OF CERTIFICATE