



Certificate no.:
TAS00004ER

TYPE APPROVAL CERTIFICATE

This is to certify:

that the **Cargo Securing Device**

with type designation(s)
Fully Automatic Twistlock LA-1MAX

issued to

Cargo Care Solutions B.V.
Barendrecht, Netherlands

is found to comply with

DNV class programme DNV-CP-0068 – General – Certification of container securing devices

Application:

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

SWL, tension (kN) 250
SWL, shear (kN) 210
SWL, compr. (kN) 1100

Issued at **Hamburg** on **2024-09-19**

This Certificate is valid until **2029-09-18**.

for **DNV**

DNV local unit: **Netherlands CMC**

Approval Engineer: **Daniel Abt**

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 USD 300 000.



Form code: TA 251

Revision: 2023-09

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Product description

Fully Automatic Lock LA-1MAX

Application/Limitation

Load	Tension [kN]	Shear [kN]
Test load	313	263
Breaking load	500	420

Tests to be carried out:

- Production testing: At least 2% of the items delivered are to be selected and subjected to the test load
- Material tests shall include energy testing at -20°C, with the impact energy requirements acc. to DNV CP-0068. The material grade shall be according to the approved drawings. Maternal certificates shall be 3.1 acc. to ISO 10474:2013.

Type Approval documentation

Drawing No.	Rev.	Title
LA-1MAX		Fully Automatic Lock sheets 1/3-3/3

Tests carried out

The prototype test was carried out in Yixing, China, dated 2024-08-28 in accordance with the DNV CP-0068. The operational test for fully automatic locks required by DNV CP-0068 has been carried at Drehtainer GmbH on 2024-09-19. The applicable vertical twistlock clearance in container lashing calculations according to DNV-rules is 20mm.

Marking of product

Each item shall be marked by manufacturer for traceability.

Periodical assessment

For retention of type approval, a DNV-surveyor shall perform a survey after 2 and 3.5 years, to verify that the type approval is complied with.