



Certificate No:
TAS00003E2

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cargo Securing Devices

with type designation(s)
Twistlock LSTL-2

Issued to

Mercantile Shipping Agencies
Mumbai, Maharashtra, India

is found to comply with
DNV rules for classification – Ships

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 **2022-04-25**

This Certificate is valid until **2027-03-25**.

DNV local station: **Mumbai NB & CMC**

Approval Engineer: **Daniel Abt**

for **DNV**

.....
Andree Orth
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.



Form code: TA 251

Revision: 2021-03

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Product description

Twistlock LSTL-2

Application/Limitation

Load	Tension [•kN]	Shear [kN]	Compression [kN]
Test load	313	263	1375
Breaking load	500	420	2200

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 are to be included energy testing at -20°C, with the impact energy requirements acc. to DNV-CP-0068. The material shall be according to the approved drawings. Maternal certificates shall be 3.1 acc. to DIN EN 10204.

Type Approval documentation

Drawing No.	Rev.	Title
LSTL-2	4	Twistlock
LSTL-2-1		Cone with handle for twistlock
LSTL-2-2		Housing
LSTL-2-3	2	M10 Bolt
LSTL-2-4	2	Spring

Tests carried out

The prototype test was carried out in Yixing, China, dated 2022-03-15 in accordance with the DNV-CP-0068.

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.