DNV·GL

Certificate No:
TAS00002RR

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Cargo Securing Devices

with type designation(s)
Removable D-Ring AL-L1/36T, Removable D-Ring AL-L1/50T

Issued to
General Lashing System (China) Co., Ltd.
Ningbo, China

is found to comply with
DNV GL rules for classification – Ships

Application :

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

Type	SWL, tension (kN)
Removable D-Ring AL-L1/36T	180
Removable D-Ring AL-L1/50T	250

Issued at **Hamburg** on **2020-10-22**
This Certificate is valid until **2025-10-21**.
DNV GL local station: **Ningbo FIS**

Approval Engineer: **Mark-Oliver Wobig**

for **DNV GL**

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 GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") 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.

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Product description

Removable D-Ring

Application/Limitation

Load	36T Version Tension [kN]	50T Version Tension [kN]
Test Load	270	375
Breaking Load	360	500

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 DNVGL-CP-0068. The material shall be according to the approved drawings. Material certificates shall be 3.1 acc. to ISO 10474:2013.

Type Approval documentation

Drawing No.	Rev.	Title
AL-L1	A	Removable D-Ring
AL-A1/01	A	D-Ring (50T)
AL-C1/01	A	D-Ring (36T)
AL-L1/02	A	Clamp 50t
AL-L1/02	A	Clamp 36t
AL-L1/03	A	D-Ring Foundation
AL-L1/04	A	Pin
AL-L1/05	A	Screw

Drawing approval No. 261.1-033915-1 Date: 2020-09-03

Tests carried out

The prototype test was carried out in Ningbo, P.R. China, dated 2020-08-27 in accordance with the DNVGL-CP-0068.

Marking of product

Each item shall be marked by manufacturer for traceability.

Periodical Assessment

For retention of the Type Approval, a DNVGL surveyor shall perform a survey after 2 and 3.5 years, to verify that the Type Approval is complied with.