Certificate no.:
TAS000052J

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Special D-Shackle

with type designation(s)
QAC250825R484SDS

issued to
Qingdao Anchor Chain Co., Ltd.
Qingdao,, Shandong, **China**

is found to comply with

DNV-OS-E302 – Offshore mooring chain, Edition July 2022

Application:

**to be used for Temporary, Mobile and Long Term Mooring,
as defined in DNV-OS-E301, Position Mooring, Dec 2024**

Issued at **Høvik** on **2025-11-12**

This Certificate is valid until **2030-11-11**.

for **DNV**

DNV local unit: **Qingdao**

Approval Engineer: **Pierre-Eric Moulia**

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.

Product description

Material grade R4 special D-Shackle to be used in mooring chain up to 7208 kN MBL.

Application/Limitation

The approval is conditional that the manufacturer is approved by DNV for R4 grade material.

The swivel is to be used in connection with chains for Temporary, Mobile and Long Term Mooring as defined in Offshore Standard DNV-OS-E301 “Position Mooring” Dec 2024.

The shackle shall be manufactured and tested in accordance with Offshore Standard DNV-OS-E302 “Offshore Mooring Chain” July 2022.

Individual Product Certificate is to be issued for each delivery.

Type Approval documentation

Tests carried out

For every order testing shall be carried out according to DNV-OS-E302 July 2022.

Marking of product

Each shackle shall be marked according to Offshore Standard DNV-OS-E302 “Mooring Chain” July 2022 Ch 2 Sec 2 §1.4 & §3.9

Periodical assessment

For retention of this Type Approval, a DNV surveyor shall perform a periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days). The objective of the periodical assessment is to verify that the conditions for the Type Approval have not been altered. (Ref DNV-CP-0338 Type Approval Scheme).
Validity of this certificate can be checked at https://approvalfinder.dnv.com/

Manufactured by:

Qingdao Anchor Chain Co., Ltd.
No.6 Lingshan Road,Lingshan Sub-District (Town), Jimo District, Qingdao Shandong
China