



Certificate no.:
TAS00004NA

TYPE APPROVAL CERTIFICATE

This is to certify:
that the Anchor Shackle

with type designation(s)
QAC241211AS-00 & QAC241211ASN-00

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 **2025-02-12**
This Certificate is valid until **2030-02-11**.
DNV local unit: **Qingdao**

for **DNV**

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

R4 grade anchor shackles, with short or long bolts secured by nut.

R4 grade anchor shackles, with short bolt secured by welding instead of nut.

Shackle diameter (mm)		R4 chain max diameter (mm)	MBL (kN)
Bow	Pin		
50	52	35	1 383
60	68	43	2 055
65	72	48	2535
75	80	50	2 740
80	90	58	3 628
90	95	65	4 492
100	110	72	5 432
110	120	79	6 443
120	130	86	7 522
130	140	93	8 664
140	150	100	9 864
141*	154*	105*	10 754*
150	160	108	11 301
160	170	115	12 610
170	180	122	13 964
180	190	129	15 357
190	205	136	16 785
200	215	143	18 243
210	225	150	19 728
220	235	158	21 451
230	245	165	22 976

* note : Only valid for the anchor shackles version with bolts secured by nuts.

Application/Limitation

The anchor shackle is to be used in Temporary, Mobile and Long Term Mooring lines as defined in Offshore Standard DNV-OS-E301 Position Mooring Dec 2024.

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

The approval is conditional that manufacturer is holding an Approval of Manufacturer DNV Certificate.

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 July 2022 Ch2 Sec2 §1.4 & §3.9.



Job ID: **262.1-043320-1**
Certificate no.: **TAS00004NA**

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 Street, Jimo District, Qingdao City,
Shandong Province, China