Certificate no.:
**TAS00004YH**

# TYPE APPROVAL CERTIFICATE

## This is to certify:

**that the Cargo Securing Devices**

with type designation(s)
**Single Stacker CE1B**

issued to
**Dolphin Marine Engineering & Trading Co., Ltd.**
**Shanghai**, **China**

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, shear (kN) 210**

Issued at **Hamburg** on **2025-07-31**
This Certificate is valid until **2030-06-29**.
DNV local unit: **Shanghai**

for **DNV**

Approval Engineer: **Aadil Wafdi**

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**

Single Stacker

**Application/Limitation**

| Load | Shear [kN] |
|---|---|
| Test Load | 263 |
| Breaking Load | 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 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. Material certificates shall be 3.1 acc. to ISO 10474:2013.

**Type Approval documentation**

| Drawing No. | Rev. | Title |
|---|---|---|
| ZS- CE1B | | Single Stacker |

Drawing approval: Ref.No. 262.1-043564-1 dated 2025-05-28
Test report No.: ZS202503008, dated 2025-03-13

**Tests carried out**

The prototype test was carried out in Shanghai, P.R. China, dated 2025-03-13 in accordance with the DNV-CP-0068.

**Marking of product**

Each item shall be marked by manufacturer for traceability.

**Periodical Assessment**

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