Certificate no.:
TAS00004F4

TYPE APPROVAL CERTIFICATE

This is to certify:

that the Accommodation Ladder/Winch

with type designation(s)
16kN Electric Winch
16kN Pneumatic Winch
10kN Electric Winch
10kN Pneumatic Winch

issued to
Taizhou City Jingang Ship Machinery Co., Ltd.
100, **China**

is found to comply with
ISO 7364 Shipbuilding and marine structures - Deck machinery - Accommondation ladder winch

Application:

Approval of accommodation ladder winches incl. gears and brakes.

Issued at **Høvik** on **2024-12-17**
This Certificate is valid until **2029-12-16**.
DNV local unit: **Nantong**

for **DNV**

Approval Engineer: **Axel Janson**

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

Accommodation Ladder Winches in 4 variations:

Type	Drum Load	Holding Load	Wire Type	Wire MBL
10kN Electric	10 kN	15 kN	6x37m-FC-1770-13mm (ISO2408:2017)	88,2 kN
10kN Pneumatic	10 kN	15 kN	6x37m-FC-1770-13mm (ISO2408:2017)	88,2 kN
16kN Electric	16 kN	24 kN	6x37m-FC-1770-16mm (ISO2408:2017)	134 kN
16kN Pneumatic	16 kN	24 kN	6x37m-FC-1770-16mm (ISO2408:2017)	134 kN

Application/Limitation

Parameter	Value
Max. number of wire rope layers :	3
Min. Design Temperature:	-25 °C
Max. Design Temperature:	45 °C

Type Approval documentation

Testing

Prototype testing per ISO 7364 (2016) was carried out and witnessed by DNV Nantong 2024.12.10.

Onboard testing of the accommodation ladder winches shall be performed in accordance with ISO 7364 §6.5.

Marking of product

For traceability, the winches shall be marked in accordance with ISO 7363 §7.

Other conditions and comments

- This Type Approval covers design(s) only. i.e., the Type Approval is not valid for the final product but may be used as basis for obtaining a product certificate.
- The safety factor of the wire rope shall be not less than five in relation to the holding load
- Loose lifting gear like shackles, swivels, rope sockets etc. are not within the scope of this design approval.
- Electrical equipment shall be installed in accordance with IEC 60092-401.
- The connection and support of the winch to the ships' structure is not covered by this verification and is understood covered by separate drawings in connection with the approval of the hull structure.
- The motors, gears and brakes for the winches have not been evaluated in this verification. These components shall be delivered with manufacturer's certificates documenting sufficient capacity.

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in https://approvalfinder.dnv.com

END OF CERTIFICATE