Certificate No:
TAS00003C8

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hook

with type designation(s)
HPHA 7

Issued to
H. Henriksen AS
TØNSBERG, **Norway**

is found to comply with
DNV standard DNV-ST-0498 – Launching appliances for work boats and tender boats

Application :

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

Issued at **Høvik** on **2022-02-21**
This Certificate is valid until **2027-02-20** .
DNV local unit: **East & South Norway CMC**

Approval Engineer: **Mats Asvald Innstø**

for **DNV**

Per Esvall
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 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 300,000 USD.

Product description

Capture claw/painter hook:

- Maximum Safe Working Load: 7000 kg
- Neutral angle: 30 degrees from horizontal plane
- Maximum Release Angles:
  - 60 degree from horizontal plane
  - 70 degree from vertical plane

Application/Limitation

- The product is to be installed and maintained as per makers instruction.
- All materials for load-carrying parts are to be delivered with 3.1 certificates documenting mechanical properties and chemical composition in accordance with the type approval documentation, and shall comply with Section 3 in DNV-ST-0498.
- Support and connection to the deck structure are not covered by this approval.

Type Approval documentation

Drawing	*Rev.*	*Title*
HH378237	-1	Main Hook Element - HPHA 7
HH378241	-2	Latch
HH378270	--	Welded housing - HPHA 7
HH000332	-2	HPHA 7
HH378238	-3	Sideplate left
HH378240	--	Main bolt
HH378243	-2	Roller bolt
HH378244	-1	Latch bolt
HH378239	-4	Sideplate right
HH000332	-1	HPHA 7
M000443	-2	User Manual - HPHA

Testing

Performed and required testing:

1. Prototype testing summarized in document H. Henriksen D0012539 Version 19, dated 26.10.21 and signed by DNV Sandefjord, Norway.
2. Each hook shall be factory tested to 2.2 x the SWL. Ref. DNV-ST-0498 9.2.7. Factory acceptance testing

Marking of product

The product shall be marked with SWL and DNV TA number.

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.

END OF CERTIFICATE