



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAS00000YJ**  
Revision No:  
**1**

## This is to certify:

### That the Hook

with type designation(s)  
**HH000166 HTH 5**

Issued to

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

is found to comply with

**DNV standard DNV-ST-0378 – Offshore and platform lifting appliances, July 2019 (Amended October 2021)**

## Application :

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

Issued at **Høvik** on **2022-04-22**

for **DNV**

This Certificate is valid until **2027-04-21**.

DNV local station: **Sandefjord**

Approval Engineer: **Mats Asvald Innstø**

.....  
**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

Equipment type: HH000166 HTH 5, Henriksen Towing Hook with quick release  
 Categorization: offshore  
 Design dynamic factor (DAF): 1,3  
 Maximum Safe working load (SWL): 5 tonnes  
 Design temperature: -20 degrees Celsius  
 Operating condition: 0-45 degree upwards relative to the horizontal plane

## Application/Limitation

- The towing hook is approved as loose gear according to the aforementioned standard.
- Support and connection to the deck structure are not covered by this approval.
- All materials for load-carrying parts are to be delivered with 3.1 certificates (EN 10204:2004), documenting mechanical properties and chemical composition in accordance with the type approval documentation, and shall comply with Sec.3 from the aforementioned standard.

## Type Approval documentation

<u>Drawing No.</u>	<u>Rev.</u>	<u>Title</u>
D000891	15	Engineering Note: Design criteria - Henriksen Painter and Towing Hooks (HPH and HTH series)
D001191	3	System Segment Design Description: 15-4476 Henriksen Tow Hook
D001347		Datasheet - Nastran material bilinear data (ID 4183)
D002049	2	Engineering Report: HTH 5T FEM Analysis
D001326	2	First Article Acceptance Test: 15-4476 HTH - Henriksen Towing Hook
HH000166	-3	HTH 5, Henriksen Towing Hook
HH010024	-3	Main Hook Element HTH 5T
HH020086	-3	Sideplate HTH 5
HH020087	-5	Sideplate HTH 5
HH040165	1	Main bolt HTH 5
HH040167	1	Release bolt HTH 5
HH110470	-1	Main hook stem HTH 5
M000308	A	User Manual - HTH (ID 3836)

## Tests carried out

First Article Acceptance Test (document number:D001326, Version:2) was carried out on 2016-12-19 and witnessed by DNV Sandefjord station with Verification Statement No.:N141C92X.

In order to obtain a DNV Product Certificate, testing is to be carried out according to Sec.14 from the aforementioned standard.

## Marking of product

Each towing hook shall be marked according to Sec.14 from the aforementioned standard.

## 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