DNV·GL

Certificate No:
TAS0000134

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hook

with type designation(s)
HPHA 2.5

Issued to
H. Henriksen AS
Tonsberg, Norway

is found to comply with
Standard for Certification No. 2.22 Lifting Appliances

Application :

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

Issued at **Høvik** on **2017-10-02**
This Certificate is valid until **2021-10-01**.
DNV GL local station: **Sandefjord**

Approval Engineer: **Mats Asvald Innstø**

for **DNV GL**

Aldo Matteucci
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.

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Product description

Equipment type: Catch Hook for Towing
Application: Offshore
Design temperature: -20 degrees Celsius
Operating condition: 0-45 degree upwards relative to the horizontal plane
Maximum dynamic tension in towing line, in relation to line-angle from horizontal plane:

Angle	Max. dynamic tension (SF=4)
0-10 °	2500 kg
10-20 °	2100 kg
20-30 °	1600 kg
30-45 °	1450 kg

The operator is responsible to ensure that the line pull does not exceed the above parameters. Dynamic effects shall also be considered when calculating the above.

Application/Limitation

- All materials 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 DNV's Standard for Certification No. 2.22 "Lifting Appliances" June 2013 Ch.2 Sec.1.
- Support and connection to the deck structure are not covered by this approval.

Type Approval documentation

Drawing No	*Rev.*	*Title*
M000443	--	User Manual - HPHA (ID 6353)
HH110505	B3	HPHA 2,5 house welded
HH040189	A-	Main bolt hook element
HH020091	B-	Sideplate HPHA 2,5 right 8 mm
HH020090	B-	Sideplate HPHA 2,5 left 8 mm
HH010025	A1	Main hook element
HH000164	A4	HPHA 2,5 On-load Capture claw

Tests carried out

Testing performed according to DNV GL statement N141DTYT. Testing witnessed by DNV GL Sandefjord 2017-04-06.

Marking of product

Each hook shall be marked according to DNV Standard for Certification No. 2.22 "Lifting Appliances" Ed. June 2013 Ch.2 Sec.12

Periodical assessment

For retention of the Type Approval, a DNV GL surveyor shall perform a survey every second year and before expire date of this certificate to verify that the conditions for the type approval are complied with.

END OF CERTIFICATE