Certificate No:
TAS00003CY

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Hook

with type designation(s)
Quick Release Hook GMH250 Incl. Foundations 220mm & 500mm

Issued to
Machinefabriek L. Straatman B.V.
Zwijndrecht, Zuid-Holland, Netherlands

is found to comply with
DNV-OS-E201 – Oil and gas processing systems, Edition July 2021
OCIMF Mooring Equipment Guidelines (MEG4), Fourth Edition 2018
DNV-OS-E301 – Position mooring, Edition July 2021

Application :

The GMH250 Quick-Release hook is designed to be used for the offloading system, the minimum breaking load of the mooring line should not exceed 500T.
Product (s) approved by this certificate are accepted for installation on all vessels classified by DNV.

Issued at **Høvik** on **2022-05-03**
This Certificate is valid until **2027-05-02**.
DNV local station: **Netherlands VMC**

Approval Engineer: **Chenyu Sun**

for **DNV**

Inger-Helene Hals
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

The GMH250 quick-release hook is used for the offloading system. The quick-release hook is equipped with quick-release capability and load monitoring.

Application/Limitation

Design Parameter	Value
Minimum design temperature (MDT)	0°C
Safe working load (SWL)	250 tonnes
MBL of the mooring line	500 tonnes

Components	Material
Hook	NV F 690
Tumble piece	NV E 36 and NV F 36
Hook Side Plate	NV D 36 and NV A 36
Foundation	NV E 36 and NV F 36

Type Approval documentation

Tests carried out

Each delivered quick release hook is recommended to be proof load tested bigger than SWL (for example 110% of the SWL).
The release mechanism shall be tested at least at SWL.

Marking of product

Each quick release hook shall be marked with manufacturer name or trademark, serial number, and type designation. For reference to this type approval certificate, each product shall also be marked with the certificate number, TAS00003CY.

Periodical assessment

For retention of this Type Approval, a DNV surveyor shall perform a periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days). The objective of the periodical assessment is to verify that the conditions for the Type Approval have not been altered (Ref DNV-CP-0338 Type approval scheme). The validity of this certificate can be checked at https://approvalfinder.dnv.com/.