

TYPE APPROVAL CERTIFICATE**This is to certify:****That the High Holding Power Anchor**

with type designation(s)

SHH Anchor Standard and Fully Balanced, SHI Anchor Standard and Fully Balanced

Issued to

**Schmitt Anchors & Chaincables B.V.
ZWIJNDRECHT, Netherlands**

is found to comply with

Det Norske Veritas' Rules for Classification of Ships and Mobile Offshore Units**Application :****High Holding Power Anchor type SHH Standard with weights from 180kg to 9700kg, with 25% weight reduction compared to ordinary stockless anchor.****High Holding Power Anchor type SHH Fully Balanced with weights from 180kg to 21400kg, with 25% weight reduction compared to ordinary stockless anchor.****High Holding Power Anchor type SHI Standard with weights from 180kg to 9700kg, with 25% weight reduction compared to ordinary stockless anchor.****High Holding Power Anchor type SHI Fully Balanced with weights from 180kg to 9700kg, with 25% weight reduction compared to ordinary stockless anchor.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**This Certificate is valid until **2018-06-30**.Issued at **Høvik** on **2015-09-28**DNV GL local station: **Rotterdam, Product Certification /Verification**Approval Engineer: **Finn-Roger Sørland**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.

Job Id: **262.1-011767-2**
Certificate No: **TAS000005G**

Product description

High Holding Power anchors, Type SHH Standard, HHP Anchor 180kg to 9700kg and Type SHH Fully Balanced, HHP Anchor 180kg to 21400kg in accordance with DNV's rules, Part 3, Chapter 3, Section 3.

High Holding Power anchors, Type SHI Standard, HHP Anchor 180kg to 9700kg and Type SHI Fully Balanced, HHP Anchor 180kg to 9700kg in accordance with DNV's rules, Part 3, Chapter 3, Section 3.

Application/Limitation

- Surveyor is to issue DNV GL Product Certificate and each anchor is to be tested prior to issuance of this. Proof load applied is to correspond to the weight of a normal stockless anchor, which is 4/3 of the HHP anchor weight.
- The materials as stated on the stamped drawings to be delivered with Material Certificates in accordance with the mentioned Rules.
- Each anchor shackle is to be delivered in compliance with above rules Pt.3, Ch.3, Sec.3, D300.
- Non-destructive testing (NDT) and repairs are to be performed in accordance to DNV's Rules Pt.2, Ch.2, Sec.7.

Type Approval documentation

Drawing No.	Rev.	Title	Status	Dated
-	18-07-2012	Anchor SHH Type ... Kg Standard	Type Approved	2014-03-05
-	17-07-2012	Anchor SHH Type ... Kg Fully Balanced	Type Approved	2014-03-05
-	20-07-2012	Anchor SHI Type ... Kg Standard	Type Approved	2014-03-05
-	19-07-2012	Anchor SHI Type ... Kg Fully Balanced	Type Approved	2014-03-05

Tests carried out

Anchor seatrial report SHH_ST_180-9700kg, SHH_FB_180-21400kg, SHI_ST_180-9700kg and SHI_FB_180-9700. Trials carried out in LR certificate no.: ROT 0606317/APCT dated 2010-08-17.

Marking of product

Each anchor shall be marked according to above rules Pt.3, Ch.3, Sec.3, D700.

Periodical assessment

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

END OF CERTIFICATE