DNV·GL

Certificate No:
TAS00001E0

TYPE APPROVAL CERTIFICATE

This is to certify:

That the High Holding Power Anchor

with type designation(s)
AC-14 HHP anchor 30kg - 19500kg

Issued to
Tengzhou Chengjin Machinery Manufacture Co., Ltd.
Zaozhuang, China

is found to comply with
DNV GL rules for classification – Ships

Application :

Approved for use as High Holding Power Anchor according to DNV GL Rules for weights from 30kg to 19500kg, 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.

Issued at **Høvik** on **2018-07-06**
This Certificate is valid until **2023-07-05**.
DNV GL local station: **Qingdao**

Approval Engineer: **Chi Wan Bang**

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

AC-14 HHP anchor from 30kg to 19500kg

Application/Limitation

- This certificate(design assessment) is a verification of the design towards the listed rules/requirements. The assessment does not waive requirements for certification of the anchor (i.e. issuance of DNVGL product certificate) or classification procedure required by DNVGL rules for product installed on DNVGL classed vessels.
- The manufacturer is required to have a DNVGL surveyor witness all important production and tests as required.
- Each anchor and anchor shackle are to be delivered with required material certificates in accordance with Pt.3 Ch.1 Sec.3 Table 2 and Ch.11 Sec.1 [4.2] with the specifications from the approved drawing below. Materials specified to other standards than DNVGL Rules shall fulfill the relevant corresponding rules requirements in Pt.2.
- The shackle pin shall be a push fit in eyes of the shackle according to Pt.3 Ch.11 Sec.1 [4.4] and after a tight fit of the pin, proper welding on the free end of the pin directly to the shackle shall be carried out.
- Surveyor is to issue DNVGL 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 according to Pt.3 Ch.11 Sec.1 [4.5].
- Relevant NDT shall be performed after proof load testing according to Pt.3 Ch.11 Sec.1 [4.5], and to the attending surveyor's satisfaction.
- All welding is to be carried out by qualified welders and according to approved welding procedures.

Type Approval documentation

Tests carried out

Seabed test to carried out on 2014-08-06, witnessed by DNV GL, sea trial report H2014-08. Additional seabed tests on 2014-08-09 and 2014-08-10, included in sea trial report H2014-08.

Marking of product

Each anchor shall be stamped according to Rules Pt.3 Ch.11 Sec.1 [4.7].

Periodical assessment

For retention of the Type Approval, a DNV GL 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 DNVGL-CP-0338.

END OF CERTIFICATE