

TYPE APPROVAL CERTIFICATE

This is to certify:**That the High Holding Power Anchor**with type designation(s)
AC-14

Issued to

Dalian Kiyomoto Iron & Machinery Works Company Limited
Dalian, Chinais found to comply with
DNV GL rules for classification – Ships**Application :****Approved for use as "High Holding Power Anchor" - for weights from 90 kg to 21750 kg with 25% reduction in weight compared to a normal stockless anchor.****Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**Issued at **Hamburg** on **2019-08-08**This Certificate is valid until **2024-08-07**.DNV GL local station: **Dalian**for **DNV GL**Approval Engineer: **Ansgar Gorissen**

Andree Orth
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.



Product description

High Holding Power Anchor, casted.

Application/Limitation

- 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. Relevant NDT shall be performed after proof load testing according to Pt.3 Ch.11 Sec.1 [4.5].
- Each anchor is to be delivered with required material certificates in accordance with Pt.3 Ch.11 Sec.1 [4.2].

Type Approval documentation

Doc. No.	Title	Rev.	Status
KHAC	AC-14 Type Stockless Anchor		Type Approved
	Dimension for AC-14 Type Stockless Anchor (HHP)	2010-10-05	Type Approved
	Material Grade for AC-14 High Holding Power Stockless Anchor	2010-10-20	For Information
	High Holding Power Anchor Full-Scale Trial Report	1982-01-27	For Information
	Report of KHAC-14 Type Anchor Holding Power Test Result	1982-01-11	For Information
	A.C.14 Type Anchor for G.P Frigate Full-Scale Trials	April, 1959	For Information

Drawing No.	Title	Rev.	Status
KHAC-90-01	90 KG AC-14 Type	2011-03-08	Type Approved
KHAC-180-01	180 KG AC-14 Type	2011-03-08	Type Approved
KHAC-270-01	270 KG AC-14 Type	2011-03-08	Type Approved
KHAC-495-01	495 KG AC-14 Type	2011-03-08	Type Approved
KHAC-675-01	675 KG AC-14 Type	2011-03-08	Type Approved
KHAC-855-01	855 KG AC-14 Type	2011-03-08	Type Approved
KHAC-1080-01	1080 KG AC-14 Type	2011-03-08	Type Approved
KHAC-1440-01	1440 KG AC-14 Type	2011-03-08	Type Approved
KHAC-1845-01	1845 KG AC-14 Type	2011-03-08	Type Approved
KHAC-2295-01	2295 KG AC-14 Type	2011-03-08	Type Approved
KHAC-2835-01	2835 KG AC-14 Type	2011-03-08	Type Approved
KHAC-3240-01	3240 KG AC-14 Type	2011-03-08	Type Approved
KHAC-3668-01	3668 KG AC-14 Type	2011-03-08	Type Approved
KHAC-3938-02	3938 KG AC-14 Type	2011-03-08	Type Approved
KHAC-4208-01	4208 KG AC-14 Type	2011-03-08	Type Approved
KHAC-4500-01	4500 KG AC-14 Type	2011-03-08	Type Approved
KHAC-4838-01	4838 KG AC-14 Type	2011-03-08	Type Approved
KHAC-5175-01	5175 KG AC-14 Type	2011-03-08	Type Approved
KHAC-5513-01	5513 KG AC-14 Type	2011-03-08	Type Approved
KHAC-5850-01	5850 KG AC-14 Type	2011-03-08	Type Approved
KHAC-6225-01	6225 KG AC-14 Type	2011-03-08	Type Approved
KHAC-6525-02	6525 KG AC-14 Type	2011-03-08	Type Approved
KHAC-6975-02	6975 KG AC-14 Type	2011-03-08	Type Approved
KHAC-7425-02	7425 KG AC-14 Type	2011-03-08	Type Approved
KHAC-7875-01	7875 KG AC-14 Type	2011-03-08	Type Approved
KHAC-8325-04	8325 KG AC-14 Type	2011-03-08	Type Approved
KHAC-8775-03	8775 KG AC-14 Type	2011-03-08	Type Approved
KHAC-9225-02	9225 KG AC-14 Type	2011-03-08	Type Approved
KHAC-9675-02	9675 KG AC-14 Type	2011-03-08	Type Approved

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KHAC-10125-01	10125 KG AC-14 Type	2011-03-08	Type Approved
KHAC-10575-01	10575 KG AC-14 Type	2011-03-08	Type Approved
KHAC-11025-01	11025 KG AC-14 Type	2011-03-08	Type Approved
KHAC-11550-02	11550 KG AC-14 Type	2011-03-08	Type Approved
KHAC-12075-03	12075KG AC-14 Type	2011-03-08	Type Approved
KHAC-12675-05	12675 KG AC-14 Type	2011-03-08	Type Approved
KHAC-13350-02	13350 KG AC-14 Type	2011-03-08	Type Approved
KHAC-14100-03	14100 KG AC-14 Type	2011-03-08	Type Approved
KHAC-15000-03	15000 KG AC-14 Type	2011-03-08	Type Approved
KHAC-16125-04	16125 KG AC-14 Type	2011-03-08	Type Approved
KHAC-17250-02	17250 KG AC-14 Type	2011-03-08	Type Approved
KHAC-18375-01	18375 KG AC-14 Type	2011-03-08	Type Approved
KHAC-19500-01	19500 KG AC-14 Type	2011-03-08	Type Approved
KHAC-20625-01	20625 KG AC-14 Type	2011-03-08	Type Approved
KHAC-21750-01	21750 KG AC-14 Type	2011-03-08	Type Approved

Tests carried out

Marking of product

Each anchor shall be marked according to rules for classification of ships Pt.3 Ch.11Sec.1.

Periodical assessment

For retention of the Type Approval, DNVGL 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.