

TYPE APPROVAL CERTIFICATE

Certificate No: TO.DEB.12-0269-6

This Certificate consists of 2 pages.

This is to certify that the

MOORING CAPSTAN

With type designations

DHC 3000 E DHC 3000 H

Manufactured by

DATA HİDROLİK MAKİNA SANAYİ A.S. TUZLA / ISTANBUL

Is found to comply with

Türk Loydu Rules for Classification of Ships.

Application

: The Mooring Capstan intended for ships, tugs, yacht and marine industry.

Design

: DATA HİDROLİK MAKİNA SANAYİ A.S.

Address of Manufacturer : İstanbul Deri Organize Sanayi Bölgesi Yan Sanayi Alanı

YA-8 Parsel Aydınlı-Tuzla / İstanbul / TURKEY

Place and date

: Tuzla / İSTANBUL - 16.07.2012

Subject to the conditions referred to 2nd page, this certificate is valid until 15.07.2017

İ.İlker KARP

Head of Marine Industry Division

Product description:

Maximum continuous pull : 3000 kg (Hydraulic) 2550 kg (Electric) Maximum pull : 3300 kg (Hydraulic) 3300 kg (Electric) 13 m/min. (Electric) Hauling speed : 13 m/min. (Hydraulic) Input power : max. 14 kW. (Hydraulic) max.7.5 kW (Electric)

Type Designation: DHC 3000, one capstan

Drive: E: Electric motor, H: Hydraulic

Wildcat and Capstan Material: B: Bronze Kr: Stainless steel P: Steel

Materials used : To be referred to the approved 04.05.200

Application/ Limitation (Approval conditions):

Maximum continuous pull : 3000 kg (Hydraulic) 2550 kg (Electric)

-When required by the rules the accessories fitted on the capstan must be type approved.

Documentation

Approved drawings, Test reports No: 24.01.2012 B.30.2.YIL.029.11.00 060.11.04-61 -23.01.2012 - B.30.2.YIL.0.29.00/060.11.04-57 - B.30.2.YIL.0.29.00.04 /060.01.06 -23, 09.02.2012/ B.30.2.YIL.0.29.11.00/060.11.04-121

Test carried out (and results):

Following tests were carried out, found satisfactory.

- Visual inspection
- Material test (mechanical and chemical)
- Continuous pull test 30 min.
- Short term pull test –
 Braking load test
 System function test Short term pull test – 2 min.

Place of test carried out

- YTÜ Laboratory
- Data Hidrolik Makina Sanayi A.Ş.

Marking of product: The product to be marked same as below mentioned.

- Manufacturer's name or trade mark
- Serial number of the units
- Equipment type or model identification
- Manufacture date

Hasan HABİBOĞLU

Surveyor

This certificate is valid if retention/renewal surveys carried out to the satisfaction of TL surveyor and following entries made:

Surveyor Surveyor Surveyor Surveyor/2013/2014/2015/2016 Survey Date Survey Date Survey Date Survey Date

This certificate is subject to terms and conditions described below.

Any significant change in design or construction may render this Certificate invalid. Type Approval Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. This certificate is not valid for products without TL marking above mentioned. The manufacturer should notify TÜRK LOYDU of any modifications or changes to the equipment in order to obtain valid certificate. This certificate shows that tested specimens as representative of the product complies of the TÜRK LOYDU rules, and relevant international instruments that apply to it.