

TYPE APPROVAL CERTIFICATE

Certificate No: TO.DEB.12-0269-1

This Certificate consists of 2 pages.

This is to certify that the

ANCHOR WINDLASS

With type designations

DZC 1701 H, DZC 1701 E DZC 1702 H, DZC 1702 E

Manufactured by

DATA HİDROLİK MAKİNA SANAYİ A.Ş. TUZLA / ISTANBUL

Is found to comply with

Türk Loydu Rules for Classification of Ships.

Application

: The Anchor Windlass intended for ships, tugs, yacht and marine industry.

Design

: DATA HİDROLİK MAKİNA SANAYİ A.Ş.

Sizes

: Chain diameter 14 -16 -18 mm acc. to DIN 766 12.5 - 14 - 16 mm Stud-link

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 KARPUZ

Head of Marine Industry Division

Form No: CE191-04/ 27th January 2012

Hasan HABİBOĞLU

Surveyor

Product description:

Maximum continuous pull : 1750 kg (Hydraulic) - 1750 kg (Electric)

Maximum pull : 1950 kg (Hydraulic) - 2190 kg (Electric)

Hauling speed : 13 m/min. (Hydraulic) - 13 m/min. (Electric)

Input power : max. 10.5 kW. (Hydraulic) - max.7.5 kW. (Electric)

Type Designation:

DZC 1701 one wildcat, one capstan DZC 1702 two wildcat, two capstan Drive: E: Electric motor, H: Hydraulic

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

Control unit: M: Local control S: Remote-control

Materials used

: To be referred to the approved drawings dated 08.03.2011

Application/Limitation (Approval conditions):

Maximum continuous pull : 1750 kg (Hydraulic) - 1750 kg (Electric)

-When required by the rules the accessories fitted on the anchor windlass 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 2 min.
- Braking load test
- System function test

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
- Chain size
- 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
 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.