RCD-B-345

DNV-GL

Certificate No: RCDB000006M

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

This is to certify:

That the Hatches

with type designation(s) **DH, LDH & DHR**

Manufacturer

Man Ship Machinery & Hardware Co. Ltd. KAOHSIUNG, Taiwan

Has been assessed with respect to Directive 2013/53/EU of the European Parliament and of the Council according to conformity assessment procedure "Module B" described in Annex II of the Decision No 768/2008/EC of the European Parliament and of the Council, and found to comply with the applicable requirements.

Further details are given overleaf.

Issued at Stockholm on 2017-05-16

DNV GL local station: **Kaohsiung**

Approval Engineer: Kristoffer Uulas

CE

Notified Body No.: **0098** for **DNV GL SE**

Digitally Signed By: Höglund, Ville Location: Stockholm, Sweden Signing Date: den 17 maj 2017

Ville Höglund
Deputy Head of Certification Body

The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or the applied standards may render this certificate invalid. The product liability rest with the manufacturer or his representative in accordance with Directive 2013/53/EU of the European Parliament and of the Council.



Form code: RCD.Ba

Revision: 2016-12

www.dnvgl.com

Page 1 of 3

Job Id:

341.3-000362-1

Certificate No: RCDB000006M

Jurisdiction

DNV GL is appointed by the Central Authority of the German Federal States for Safety (ZLS) as a "Notified Body" in accordance with § 15(1) of the Product Safety Act (ProdSG) to carry out conformity assessment procedures on Recreational Crafts in the scope of ProdSG and Directive 2013/53/EU according to the administrative decision No. ZLS-Z1471-2015/1-1.

Certificate history

This is the original Certificate.

Product description

Square or round shaped outward opening type deck hatch. Type designations are listed below.

- Framing made from stainless steel (SS) 316
- Glazing made from polymethylmethacrylate (PMMA)
- Glazing attaches to frame by silicone sealant
- Handles made from nylon
- Seal of PVC-elastomer

Applications/Limitations

May be used on Recreational Craft subject to CE-marking under the Directive 2013/53/EU, in *Area IIa*, *III* & *IV* as specified in EN ISO 12216:2002 on *Any* Boat Type of *Any* Design Category.

The hatch does not comply with EN ISO 12216:2002 as Multihull Escape Hatch.

Туре	Model	Inside opening (mm)	Glazing thickness (mm)	Nos of handles/hinge s
Square -Luxury deck hatch (LDH)/ -Deck hatch (DH)	LDH/DH-08	206 x 349	8	1/2
	LDH/DH-10	254 x 254	8	1/2
	LDH/DH-20	317 x 444	12.7	2/2
	LDH/DH-30	368 x 495	12.7	2/2
	LDH/DH-40	419 x 419	12.7	2/2
	LDH/DH-50	495 x 495	12.7	2/2
	LDH/DH-60	609 x 609	12.7	2/2
	LDH/DH-70	787 x 787	13.5	4/3
Round deck hatch	DHR-40	Ø = 419	12.7	2/1
	DHR-50	Ø = 495	12.7	2/1
	DHR-60	Ø = 609	12.7	2/1

The certificate covers products with varying dimensions within the smallest and largest dimensions listed for each type. The glazing thickness shall be increased to the thicker size listed when these products exceed the dimension of the following types: LDH/DH-10.

Technical documentation

Drawings:

- Luxury deck hatch model LDH, dated 96.12.20 rev.3
- Deck hatch model DH, dated 96.12.20 rev.3
- Deck hatch model DHR, dated 96.12.20 rev.3
- Gluing Procedure

Applied Standards/Tests carried out

Form code: RCD.Ba Revision: 2016-12 www.dnvgl.com Page 2 of 3

Job Id:

341.3-000362-1

Certificate No: RCDB000006M

Standard:

 EN ISO 12216:2002 Small Craft – Windows, Portlights, Hatches, Deadlights and Doors - Strength and Tightness requirements

Tests:

- Test Report for CE certification of Hatch and Portlight, dated: 2002-09-10 & 2004-12-17
- Glue Product test report, dated: February 18, 1987

Terms and conditions

The following conditions may render this certificate invalid:

- Changes in the design or construction of the product
- Changes or amendments to the Directive
- Changes or amendments in the standards which form the basis for documenting compliance with the essential requirements of the Directive

Marking of product

This Certificate is concerned with the design of the product, only. In order to fully meet with the requirements of the Directive and legally affix the CE mark, the manufacturer shall have the final product and/or production assessed according to one of the procedures listed below and finally draw up an EC declaration of conformity.

Conformity assessment procedures for production as described in Annex II of the Decision No 768/2008/EC of the European Parliament and of the Council:

- Conformity to type based on internal production control (Module C)
- Conformity to type based on internal production control plus supervised product testing (Module C1)
- Conformity to type based on quality assurance of the production process (Module D)
- Conformity to type based on product quality assurance (Module E)
- Conformity to type based on product verification (Module F)

Other directives, covering other phenomena, and also having requirements related to CE marking, might also apply.

Form code: RCD.Ba Revision: 2016-12 www.dnvgl.com Page 3 of 3