



DET NORSKE VERITAS

EC TYPE-EXAMINATION CERTIFICATE

CERTIFICATE NO. RCD-B-345

This Certificate consists of 3 pages

This is to certify that the product

Hatches
274.19

with type designation(s)

Deck Hatch & Luxury Deck Hatch
Type DH, LDH & DHR

Manufactured by

Man Ship Machinery & Hardware Co. Ltd.
KAOHSIUNG 81245, Taiwan

has been assessed with respect to

the conformity assessment procedure described in Annex VII (Module B) of
Council Directive 94/25/EC on Recreational Craft as amended by Directive 2003/44/EC,
and found to comply with the applicable requirements

Further details are given overleaf.

Place and date

Høvik, 2008-05-05


for DET NORSKE VERITAS AS




Marianne Strand Valderhaug
Head of Section

Notified Body No.: 0575




Hallgeir B. Eilertsen
Surveyor

Notice: The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product may render this certificate invalid.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision 'Det Norske Veritas' shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: RCD-B-345
Case. No.: 4193-520.01
File No.: 274.19

Jurisdiction

DNV is appointed by the Norwegian Ministry of Trade and Industry as a "Notified Body" under the terms of the Norwegian regulation - FOR 2004-12-20 nr. 1820 "Forskrift om produksjon og omsetning av fritidsfartøy m.v.", and - Article 9 of Council Directive 94/25/EC as amended.

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

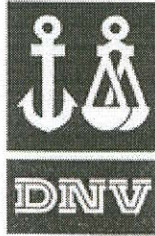
Type	Model	Inside opening (mm)	Glazing thickness (mm)	Nos of handles/hinges
Square -Luxury deck hatch (LDH)/ -Deck hatch (DH)	LDH/DH-08	206 x 349	8	1/2
	LDH/DH-10	254 x 254	8	1/2
	LDH/DH-20	317 x 444	12.7	2/2
	LDH/DH-30	368 x 495	12.7	2/2
	LDH/DH-40	419 x 419	12.7	2/2
	LDH/DH-50	495 x 495	12.7	2/2
	LDH/DH-60	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.

Applications/Limitations

May be used on Recreational Craft subject to CE-marking under the Directive 94/25/EC, as amended, in *Area IIa, III & IV* as specified in ISO12216 on *Any Boat Type of Any Design Category*.

The hatch does not comply with ISO12216 as Multihull Escape Hatch.



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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

Standard:

- ISO12216:2002 Small Craft – Windows, Portlights, Hatches, Deadlights and Doors- Strength and Tightness requirements

Tests:

- Test Report for CE certification of Hatch and Portlight, dated: 2001-06-30, 2002-09-10 & 2004-12-17
- Glue Product test report, dated: February 18, 1987

Terms and conditions

The product liability rests with the manufacturer, his representative or, in the absence of a representative, the importer, in accordance with the General Product Safety Directive 2001/95/EC.

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 must also 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:

- Conformity to type (Annex VIII/Module C)
- Production quality assurance (Annex IX/Module D)
- Product quality assurance (Annex XVI/Module E)
- Product verification (Annex X/Module F)

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

END OF CERTIFICATE