

# EC-TYPE EXAMINATION CERTIFICATE

Application of: Council Directive 96/98/EC of 20 December 1996 on Marine Equipment as amended by directive 2013/52/EU, issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Directorate. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

**This is to certify:****That the Embarkation ladders**with type designation(s)  
**Dolphin HC-B-A**

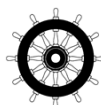
Issued to

**Hyun Chang Industries Co., Ltd.**  
**Kyungnam, Republic of Korea**

is found to comply with the requirements in the following Regulations/Standards:

**Annex A.1, item No. A.1/1.29 and Annex B, Module B in the directive. SOLAS 74 as amended, Reg. III/4, III/11, III/34 & X/3, LSA code and 2000 HSC code 8.**

Further details of the equipment and conditions for certification are given overleaf.

**Høvik, 2015-08-10**  
for **DNV GL AS**This Certificate is valid until  
**2020-08-09**Notified Body No.: **0575**-----  
**Petter Langnes**  
**Head of Department**DNV GL local office:  
**Pusan**-----  
**Silje Helene Waagaard**  
**Surveyor**

## Product description

Embarkation Ladder made of mildew-resistant manila rope meeting ISO 1181:1990, Quality 1.

## Application/Limitation

- This examination does only consider the embarkation ladder and not the installation arrangement. Installation to be approved on board.
- Handholds shall be provided to ensure a safe passage to and from the ladder.
- Each rope shall be continuous, with no joints below the top step.
- The side rope seizing to have minimum breaking strength of 800 N.
- Each ferrous metal part shall be coated in accordance with ISO1461 (ISO 5489:2008 Ch.3.3.2).

## Type Examination documentation

Basis for approval:

Drawings (as applicable)  
Prototype test report

2010-08-17  
2010-07-29

## Tests carried out

Tests are documented in accordance with recommendation on testing of embarkation ladder in ISO: 5489 (2008).

## Marking of product

The product is to be indelibly marked with name of manufacturer, type designation, dimensions and date of manufacture, according to LSA Code Ch. 1.2.2.9 and ISO 5489:2008 Chapter 7.

## Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.