DNV·GL

Certificate No:
MEDB000059H

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of Norway.

This is to certify:

That the Bedding components

with type designation(s)
MODERN MDPK (POCKET SPRING MATTRESS FOR MARINE)

Issued to
Modern Intech Co., Ltd.
Busan, Republic of Korea

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/3.21. SOLAS 74 as amended, Regulation II-2/3, II-2/9 & X/3, 2000 HSC Code 7 and IMO 2010 FTP Code

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

This Certificate is valid until **2024-06-03**.

Issued at **Høvik** on **2019-06-04**

DNV GL local station:
Gimhae Station

Approval Engineer:
Nanna Martine Jacobsen

Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005.

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.
This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.
Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

NORWEGIAN ACCREDITATION PROD 019

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

"MODERN MDPK (POCKET SPRING MATRESS MARINE)"
A pocket spring mattress composed of the following materials/layers (as seen from external to internal):

Outer cover (1)	- 0.57 mm thick Mattress cover made of one layer of flame retardant Polyester (38.5%) and Cotton (61.5%) with density 167 g/m^2.
Inner cover (2)	- One layer of 5 mm thick flame retardant sponge Polyester 100 % with density 21 kg/m^3 on top of one layer of 0.14 mm thick non-woven fabric Polyester 100% with density 18 g/m^2.
Filling material (3)	- Filling of 28 mm thick flame retardant Polyurethane foam with density 34 kg/m^3.
Core cover (4)	- Two layers of 3.5 mm thick felt made of 100% Polyester with density 87 kg/m^3 and one layer of 0.43 mm thick non-woven fabric with density 59 kg/m^2.
Core	- Core made of round bars of hard steel wire (Ø4.9) filled with Springs of hard steel wire (Ø1.99) which are wrapped in 0.5 mm thick non-woven fabric with density 70 kg/m^2.

The top, bottom and sides surrounding the core of the mattress are built up identically (layers 1-4).

Total mattress thickness is 100-250 mm with spring height as variable.

For further details of the mattress see drawing listed under Type Examination documentation below.

Application/Limitation

Approved for use throughout the accommodation as not readily ignitable bedding component.

Any thin light mattress or removable cover used in conjunction with the approved product is to be approved according to the Marine Equipment Directive.

Each product is to be supplied with its manual for use and maintenance.

Type Examination documentation

Test Report No. 13-630(E) dated 14 March 2014, from Research Institute of Marine Engineering, Tokyo, Japan.

Drawing No. MDPK01 "POCKET SPRING+FOAM MATTRESS" dated 17 December 2013, from manufacturer

Tests carried out

Tested according to IMO 2010 FTP Code Part 9.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, the MED Mark of Conformity and USCG approval number if applicable (see first page).