

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00007GM

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the A & B Class divisions fire integrity: A class divisions.

with type designation(s)
Class A-60 Deck Type CY Series

Issued to

BBMG Energy Saving Material and Technology (Dachang) Co., Ltd.
Langfang City, Hebei Province,, China

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

Regulation (EU) 2021/1158,

item No. MED/3.11a. SOLAS 74 as amended, Regulation II-2/3.2 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1434, IMO MSC.1/Circ.1435.

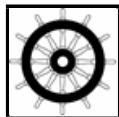
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-04-20**.

Issued at **Hamburg** on **2022-04-21**

DNV local station:
Dalian NB & CMC

Approval Engineer:
Roland Priebe



Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
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) 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 SE 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Product description

The **Class A-60 Deck Type CY Series** consists of a 5 mm thick core steel plate with stiffeners of L100 x 70 x 8 mm. The insulation material (CY45 type rock wool board) is applied on the core steel plate and on the stiffeners with one layer of 50 mm.

The insulation is fixed to the core steel deck and stiffeners with welded steel pins $\varnothing 3$ mm and washers $\varnothing 30$ mm. 23 pins are used per m^2 – compare figure 1 in test report.

The insulation CY45 type rock wool board is produced by BBMG Energy Savings Material & Technology (Dachang) Co., Ltd., is nominal 50 mm thick, has a nominal density of 45 kg/m^3 , a moisture content of $\leq 1\%$ and an organic content of $\leq 3\%$.

For further details refer to the documentation listed below under "Type Examination documentation".

Application/Limitation

Approved for use as a horizontal fire retarding division of class A-60.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

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

Type Examination documentation

Test report No. FT21236 dated 2021-07-28 from Far East Fire Testing Centre (FEFTC), Shanghai, China.

Tests carried out

Tested according to IMO Res. MSC.307(88) – 2010 FTP Code Annex1, Part 3.

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG approval if applicable (see page 1).