DNV·GL

Certificate No:
MEDB00001W6

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 the Kingdom of Norway.

This is to certify:

That the "A" Class divisions, fire integrity

with type designation(s)
A-60 Steel Bulkhead - FireMaster XLS Blanket 60 mm x 64 kg/m3

Issued to
Thermal Ceramics UK Ltd
WIRRAL MERSEYSIDE, United Kingdom

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2015/559,**
Annex A.1, item No. A.1/3.11a and Annex B, Module B in the Directive; SOLAS 74 as amended, Regulation II-2/3.2.5 and IMO 2010 FTP Code.

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

This Certificate is valid until **2021-11-13**.

Issued at **Høvik** on **2016-11-14**

DNV GL local station:
Manchester

Approval Engineer:
Helge Bjørnarå

Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
Head of Notified Body

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Product description

A-60 Steel Bulkhead - FireMaster XLS Blanket 60 mm x 64 kg/m^3
composed of a structural steel bulkhead insulated with a single layer of 60 mm thick FireMaster XLS Blanket (density 64 kg/m^3) applied in between stiffeners and packed inside stiffeners and 25 mm thick FireMaster XLS Blanket (density 64 kg/m^3) applied around the stiffeners.

The blankets are held in place using mild steel pins (Ø 3 mm / typically 50 mm long) welded to the bulkhead with friction-fit mild steel washers. The pins are to be installed with a nominal spacing of 300 mm across the blankets and maximum 350 mm along the blankets, whereas pins at the joints between blankets shall have a nominal spacing of 300 mm from the blanket edge. Maximum pin distance to lengthways joint is 300 mm.

The installation is to be performed according to the manufacturers Fire Protection Systems Information, reference No. FM-MS 01 PW and No. FM 4.112.

Application/Limitation

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

General application: Fire hazard from either side

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. KOMERI-0402-15T4083-1 dated 10 August 2016 from Korea Marine Equipment Research Institute, Busan, Korea.

Dwg No. MAMK-20160416-A60-003 dated 18 April 2016 from manufacturer.

Thermal Ceramics Fire Protection Systems Information, reference No. FM-MS 01 PW and No. FM 4.112 Rev. 0.

Tests carried out

Tested according to IMO 2010 FTP Code Part 3.

Marking of product

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