

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Equivalent Class A Divisions

with type designation(s)
MTE Bulkhead Panel A60

Issued to

Mech-Tool Engineering Ltd.
DARLINGTON COUNTY DURHAM, United Kingdom

is found to comply with
DNV GL offshore standards
DNV GL rules for classification – Ships

Application :

Approved for use as a non-load bearing fire retarding bulkhead of class A-60.

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

This certificate is recognized by Transport Canada.

This Certificate is valid until **2020-10-29**.

Issued at **Høvik** on **2015-10-30**

DNV GL local station: **Newcastle-upon-Tyne**

Approval Engineer: **Silje Helene Waagaard**

for **DNV GL**

Petter Langnes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

Product description

"MTE Bulkhead Panel A60"

is a vertical corrugated bulkhead constructed of minimum 1,2 mm thick steel panels. The panels are connected by a 50 mm vertical overlap, welded together.

The panels are insulated on one side with 2 layers of 38 mm thick mineral fibre, type "Thermal Ceramics Firemaster Marine Plus" nominal density 128 kg/m³, by Thermal Ceramics. The insulation slabs, 600 mm wide, are laid vertically. The joints of the second layer are staggered with respect to the joints of the first layer.

A steel mesh is laid between the insulation and the bulkhead panels as well as over the outer insulation layer. The insulation and steel mesh is fastened to the bulkhead panels with steel pins (ø 3 mm x 100 mm) and washers.

Maximum distance between steel pins: 415 mm horizontally and 300 mm vertically.

Application/Limitation

The use of this product shall be limited to applications specifically approved by the Administration in question, see IMO 2010 FTP Code part 3, Appendix 1, items 1.12 and 1.13. The construction shall in any case not be used as part of main fire zone bulkheads and stairways enclosures on passenger ships (see also IMO MSC/Circ.1005).

The panel bulkhead may be exposed to fire on either side.

Any surface materials used have to be approved for smoke and toxicity and low flame-spread characteristics (IMO 2010 FTP Code parts 2 and 5) when required according to relevant rules and regulations.

Any adhesive used, other than the one used during testing, has to be tested for low flame spread characteristics according to IMO 2010 FTP Code part 5.

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

Type Approval documentation

Certification in accordance with Standard for Certification No. 1.2, Type Approval, January 2013.

Test report No. 350447 dated 2015-06-19 from Exova Warringtonfire, United Kingdom.

Drawing Nos. EC70011-13000-01 Rev. No. 02 & EC70011-13000-02 Rev. No. 02, both dated 21st of April 2015, both from Manufacturer.

Tests carried out

Tested according to IMO 2010 FTP Code part 3.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.



Job Id: **262.1-020386-1**
Certificate No: **TAF0000044**

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled "*Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)*", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessment at any time during the validity period of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Standard for Certification No. 1.2 Type Approval item 4.