DNV·GL

Certificate No:
MEDB00002TE

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)
Light Weight Stainless - A60 Deckhead

Issued to
CBG Systems International Pty Ltd
DERWENT PARK TASMANIA, Australia

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2017/306,**
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

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

This Certificate is valid until **2022-07-10**.

Issued at **Høvik** on **2017-07-11**

DNV GL local station:
Hobart

Approval Engineer:
Ginevra Giustiniani

Notified Body
No.: **0575**

for **DNV GL AS**

Vidar Dolonen
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

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Product description

"Light Weight Stainless (LWS) A60 deckhead",
is a lightweight structural fire protection system consisting of a structural aluminium deck with a ceiling suspended minimum 170 mm below the aluminium deck.

The ceiling is made of insulated steel framework and panels. The steel framework is constructed of C shaped steel channel profiles, 0.45 mm thick having dimensions of 35 x 75 x 8 mm, filled with Fire Master Marine Plus Blanket type Alu 20R with density 70 kg/m^3. Such profiles are screwed to stand off brackets (omega profiles) having dimensions of 25 x 20 x 95 mm screwed to the deck stiffeners.
The panels are faced with a 0.45 mm stainless steel or 0.40 mm Colorbond painted carbon steel sheets. The sheets are insulated with 50 mm Fire Master Marine Plus Blanket type Alu 20R with density 70 kg/m^3, attached by means of steel pins and washers.The longitudinal joints between the steel panels are covered with top hats (omega shaped profiles with dimensions of 25 x 18 x 90 mm) screwed to the panels, having the same insulating material. The transversal joints are fitted with cleats (T shaped profiles with dimensions of 51 x 15 mm).

Max. distance between standoff brackets:	1500 mm
Max. grid size (distance between channels/cleats):	1200 x 1000 mm

The system is to be installed and maintained according to the current edition of CBG Systems Pty. Ltd.'s Standard Operating Procedure.

For further details see test reports and drawings mentioned under Type Examination documentation below.

Application/Limitation

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

Restricted application: fire hazard from the insulated side only.

Only the system constisting of structural aluminium deck fitted with the ceiling suspended minimum 170 mm below the deckhead, is approved as an A-60 class deck.

Panel maximum dimensions: 1185 mm x 985 mm (L x W).

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. 2016CS011799/1 dated 28 June 2016, from Test Laboratory of RINA Services Spa Genoa, Italy.

Engineering Evaluation No. SwRI Project No. 01.16499.01.006 dated 28 September 2012 from Southwest Research Institute, USA.

Design Specification DS 05 dated 12 May 2017 from CBG Systems Pty. Ltd.

Drawing No. LWS-TEST-DECK-G-01 Rev. A, dated 20 November 2015, from CBG Systems Pty. Ltd.
Drawing No. LWS-TEST-DECK-P Rev. A, dated 20 November 2015, from CBG Systems Pty. Ltd.

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 and address of manufacturer, type designation, fire-technical rating, the MED Mark of Conformity and USCG approval number if applicable (see page 1).