Certificate No:

DNV·GL

MEDB00002TY

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 Bulkhead

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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



Product description

"Light Weight Stainless (LWS) - A60 bulkhead",

is a lightweight structural fire protection system consisting of structural aluminium bulkhead fitted on the stiffened side with insulated steel panels.

A light gauge steel supporting framework, filled with Fire Master Marine Plus Blanket type Alu 20R with density 70 kg/m³, is mounted to the bulkhead so that a minimum of 125 mm air gap is maintained between the bulkhead and the back of the panels. The steel panels are made of 0.45 mm stainless steel plates or 0.40 mm Colorbond painted carbon steel plates and they are insulated with 50 mm of the same insulation material as above, attached by means of steel pins and washers.

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 report and drawings mentioned under Type Examination Documentation below.

Application/Limitation

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

Restricted application: fire hazard against insulated side.

Only the system consitisitng of aluminium bulkhead fitted with the insulated steel panels is approved as a A-60 bulkhead.

Maximum panel dimensions: 1185 mm x 985 mm (H 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. 2015CS014189/2 dated 26 April 2016, from RINA Services Test laboratory Italy.

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

Design specification No. DS06 dated 12 May 2017, from CBG Systems International Pty Ltd.

Drawing No. LWS-D-TEST-BULK-G-01 Rev. A dated 20 November 2015, from CBG Systems Pty Ltd. Drawing No. LWS-D-TEST-BULK-G-02 Rev. A dated 25 January 2016, from CBG Systems Pty Ltd. Drawing No. LWS-D-TEST-BULK-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, firetechnical rating, the MED Mark of Conformity and USCG approval number if applicable (see page 1).