



CERTIFICATE NUMBER 17-HS1683637-1-PDA

EFFECTIVE DATE 29 Jan 2019

EXPIRATION DATE 30 Apr 2023

ABS TECHNICAL OFFICE London Engineering Department

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

MCT BRATTBERG AB

located at

KARLSKRONA, Sweden

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product **Fire Stop System**

Model **MCT Brattberg Cable Transit System of type RGP and RGPO in sizes 50S & 50L to 200 with sleeves S, SFR or SFRB**

This Product Design Assessment (PDA) Certificate remains valid until expiration date or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping

Mohammed K.M. Abbas
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

MCT BRATTBERG AB

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Tier: 3 - Type Approved, unit certification not required

Product: Fire Stop System**Model:** MCT Brattberg Cable Transit System of type RGP and RGPO in sizes 50S & 50L to 200 with sleeves S, SFR or SFRB.**Intended Service:**

Marine & Offshore Applications - Cable penetrations in bulkheads and decks of fire Class A-0 through A-60, B-0 through B-30, and F-0 through F-30 for Steel Bulkheads and Decks.

Description:

Modular firestop transit system with round Lycron frame for cable penetration seals installed in bulkheads and decks and utilizing halogen-free Lycron Standard, AddBlock, Handiblock, U-block and EMI modules and accessories.

Rating:

Fire Resistance: A-0 to A-60, B-0 to B-30 and F-0 to F-30 in steel bulkheads and decks.

Watertightness: 5 bar g. hydrostatic test.

Gastightness: 3 bar g. pneumatic test pneumatic test.

Service Restriction:

- 1) Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- 2) The scope of the Type Approval is to comply with MSC.1/Circ. 1221 dated 11 December 2006.
- 3) Not for use in tank boundaries.
- 4) Cable sizes and combinations are to be typical of marine installations. These transits have not been approved for use with CLX-type armour-clad electrical cables.
- 5) Maximum and minimum tested marine cable size: 50 mm & 8 mm outside diameter.
- 6) Maximum and Minimum tested Frame Size: Size 200 & Size 50
- 7) All fire rated transits are to be fully insulated in accordance with manufacturer's installation instructions and ABS approved drawings.
- 8) For fire class A-0, sleeves are to be insulated as for class A-60 and in addition the division is to be insulated at least 200 mm around the penetration.

Comments:

- 1) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- 2) Approval not performed on behalf of any flag Administration.
- 3) Production items are to be manufactured in accordance with a quality control system which shall be maintained to ensure that items are of the same standard as tested/approved prototype.
- 4) Product should be installed/used in accordance with manufacturer's instructions and limitations.
- 5) The bulkhead or deck shall be insulated in accordance with applicable regulations.
- 6) Installation of transits are only permissible where strength and fatigue characteristics are not diminished or where satisfactory structural compensation has been provided.
- 7) When requested to be used in watertight bulkheads on passenger ships or special purpose ships, the penetration system has to comply with the requirements give in SOLAS Ch. 11-1 Reg. 13.2.3 (2014 Consolidated Edition, as amended)). This approval of penetrations passing through watertight bulkhead is not to be construed as a substitute for flag Administration's approval for the purpose of SOLAS (2014 Consolidated Edition).
- 8) The product or packing is to be marked with name of manufacturer, type designation and fire rating.

Notes/Drawing/Documentation:

Drawing No. 140977 Rev. D A -Class Steel/Aluminum Deck

Drawing No. 140979 Rev. C A- Class Bulkhead Steel

Drawing No. 140980 Rev. C A -Class Bulkhead Steel

Drawing No. 140981 Rev. C A -Class Bulkhead Steel

BRE Global Fire Test Report 290298A dated 15 May 2014 Marine Fire Resistance Test in Accordance with IMO

BRE Fire Test Report 212564 dated 27 January 2004 Marine Fire Test on Six Service Transits in an A-60 Steel

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Bulkhead

BRE Fire Test Report 212565A dated 9 December 2003 Marine Fire Resistance Test on Seven Service Transits in an A60 Steel Deck

BRE Fire Test Report 208234 dated 8 May 2003 Marine Fire Resistance Test on Seven Service Transits in an A60 Steel Deck

Revision- Addition of Handiblocks

BRE Global, Comparison of performance Test Reports P101462-1006 Issue 1 dated 2 February 2018, P101462-1003 Issue 1, dated 24 November 2016 and P10462- 1004 Issue 1, dated 30 May 2017, DNV-GL Pressure Test Survey Report Number N141GRC3 dated 22 Nov 2017

Terms of Validity:

This Product Design Assessment (PDA) Certificate 17-HS1683637-1-PDA, dated 29/Jan/2019 remains valid until 30/Apr/2023 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

STANDARDS**ABS Rules:**

2019 ABS Marine Vessel Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-8-4/21.13, 4-8-4/29.15

2019 ABS Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-1-3/5.13, 5-1-1/3.5, 5-1-1/5.17 & 5-1-1/5.21

National:

NA

International:

SOLAS (2014 Consolidated Edition), Chapter II-2 Pt.C/Reg.9.3,

2010 IMO FTP Code - Resolution MSC.307(88) (Adopted 3 December 2010), 2012 Edition (entered into force 1 July 2012), Annex 1 Part 3.

1998 IMO FTP Code - Resolution MSC.61(67) (Adopted December 1996), 1998 Edition (entered into force 1 July 1998), Annex 1 Part 3 as accepted by 2010 IMO FTP Code - Resolution MSC.307(88) (Adopted 3 December 2010), 2012 Edition (entered into force 1 July 2012), Section 5.2.

Government:

NA

EUMED:

NA

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OTHERS:
NA