



Marine & Offshore

Certificate number: 63792/A0 BV

File number: ACI4010/030/007

Product code: 5301H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

ROXTEC International AB

KARLSKRONA - SWEDEN

for the type of product

PIPE PENETRATIONS IN FIRE DIVISIONS

A-Class divisions "Cable sealing system with multidiameter technology, Roxtec S-Series"

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships Part C Chapter 4

SOLAS 74, as amended, Regulations II-2/9.3.1

IMO Res MSC.307(88) (2010 FTP Code)

IMO Res. MSC.61(67)-(FTP Code) with IMO Res MSC.307(88) (2010 FTP Code) article 8

IMO MSC/Circ.1120

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 27 Jan 2026

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 27 Jan 2021,

Magne MOLLER



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

A-Class divisions "Cable sealing system with multidiameter technology, Roxtec S-Series"

Consisting of Roxtec S-series frames (S, SO, SF, SFO, SR, SK, SRC r20&r40 and BTB) in sizes 1-8 and combinations thereof, welded or bolted on to the steel divisions; filled with Roxtec (standard or Ex, EMC) halogen free insert modules. Assembled with Roxtec Wedge kit or Roxtec EMC, Ex Wedge kit.

Type of pipe	Pipe outer diameter	Insulation arrangement on pipes	
Steel pipe / Titanium pipe	6 - 50 mm	Bulkhead:	two layers (45 mm thick and 350 mm long) of mineral wool ⁽³⁾
		Deck:	Ø6-30: no insulation on pipes Ø6-50: one layer (50 mm thick and 350 mm long) of mineral wool ⁽²⁾
Bundle pipes (in stainless steel and copper version)	16 - 50 mm	Bulkhead / deck:	two layers (30 mm thick and 500 mm long) of mineral wool ⁽¹⁾ compressed to 50 mm (space between pipes filled of wool)

⁽¹⁾ ⁽²⁾ ⁽³⁾ see §4.3

2. DOCUMENTS AND DRAWINGS:

As per the Manufacturer's drawings:

2.1 - Steel pipe / Titanium pipe: N° S1561814 Rev.A dated 07/12/2020 (A-60 Class division) and N° S1561862 Rev.A dated 07/12/2020 (A-0 Class division)

2.2 - Bundle pipes (in stainless steel and copper version): N° S1561835 Rev.A dated 04/12/2020 (A-60 Class division) and N° S1561866 Rev.A dated 07/12/2020 (A-0 Class division)

3. TEST REPORTS:

3.1 - Steel bulkhead:

Test report N° P602999 dated 23/01/2007, as per IMO FTP Code Annex 1 Part 3 [test standard : IMO Resolution A.754(18)], from SP, Sweden.

Test report N° RS-18/B-485/E dated 10/12/2018, as per IMO 2010 FTP Code Annex 1 Part 3, from CTO, Poland.

3.2 - Steel deck:

Test report N° P603000 dated 23/01/2007, as per IMO FTP Code Annex 1 Part 3 [test standard : IMO Resolution A.754(18)], from SP, Sweden.

Test report N° RS-17/B-395/E dated 30/10/2017, as per IMO 2010 FTP Code Annex 1 Part 3, from CTO, Poland.

3.3 - Technical assessment:

Report "Comparison of titanium and steel pipes in a fire test", N° 9P02428 dated 13/09/2019, from RISE, Sweden.

4. APPLICATION / LIMITATION:

4.1 - Approved for use with pipe penetrations in A-15, A-30, A-60 class steel divisions, with fire insulation as described in §1. For A-0 class divisions, penetrations shall be installed with fire insulation as described in §1 and the division shall be fitted with insulation 200 mm around the penetration.

4.2 - The arrangement of the pipe penetration (with fire insulation, if any) is subject to approval in each case.

4.3 - The tests have been carried out with fire insulating materials ⁽¹⁾"Rockwool Firemat 100" (thickness 30 mm; nominal density 125 kg/m³), ⁽²⁾"SeaRox SL 620" (thickness 50 mm; nominal density 100 kg/m³) or ⁽³⁾"SeaRox WM 620" (thickness 45 mm; nominal density 90 kg/m³) manufactured by Rockwool International A/S; any alternative A-class insulation material, previously proven and approved, giving at least an equivalent insulation performance, can be used.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The **A-Class divisions "Cable sealing system with multidiameter technology, Roxtec S-Series"** are to be supplied by **ROXTEC International AB** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **ROXTEC International AB** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

6. MARKING OF PRODUCT:

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

7. OTHERS:

It is **ROXTEC International AB**'s responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

***** END OF CERTIFICATE *****