



Marine & Offshore

Certificate number: 53012/A0 BV

File number: ACI 4010/030/005

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

Sleev-it FC and Sleeve-it WT for plastic pipes in Aluminium divisions

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)

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: 01 Aug 2023

For Bureau Veritas Marine & Offshore,

At BV GOTHENBURG, on 01 Aug 2018,

Torbjorn Ygesjo



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 :

Sleev-it FC and Sleeve-it WT for plastic pipes in Aluminium divisions

Penetration system consisting of a stainless steel casing containing intumescent material.

It has also an additional rubber grommet that is engineered for a wide range of pipe sizes. Roxtec Sleeve-it penetration series consisting of seal in sizes 16-225 for aluminium sections.

Penetration type	Pipe material	Pipe Outer diameter	Installation	Insulation drawing
Sleev-it FC	Plastic Pipe	16 to 225 mm	Bulkhead/ Deck	S1530946, rev A, dated 2018-03-08
Sleev-it WT	Plastic Pipe	16 to 225 mm	Deck	S1530951, rev A, dated 2018-03-07

2. DOCUMENTS AND DRAWINGS :

- Insulation Drawings S1530946, rev A, dated 2018-03-08 and S1530951, rev A, dated 2018-03-07
- Information Drawings S1507771, rev B, dated 2016-05-26 and S1507772, rev D, dated 2017-06-08

3. TEST REPORTS :

- Test report N° PGA10801A, dated August 29, 2016, as per IMO 2010 FTP Code Annex 1 Part 3, from DBI, Denmark
- Test report N° PGA10802A dated August 29, 2016, as per IMO 2010 FTP Code Annex 1 Part 3, from DBI, Denmark
- Test report N° RS-17/B-209/E, dated June 2, 2017, as per IMO 2010 FTP Code Annex 1 Part 3, from CTO, Poland
- Test report N° RS-17/B-210/E, dated June 2, 2017, as per IMO 2010 FTP Code Annex 1 Part 3, from CTO, Poland
- Test report N° RS-17/B-555/E, dated January 15, 2018, as per IMO 2010 FTP Code Annex 1 Part 3, from CTO, Poland

4. APPLICATION / LIMITATION :

4.1- The fitting aboard to be the same as used for the test.

4.2- Not for use in tank boundaries.

4.3- The insulation material shall be type approved. The fire tests were conducted with various types of insulation materials; alternative ones (duly type approved) may be used provided their insulation performance are equivalent/appropriate.

4.4- Approved for use as pipe penetrations in A-0, A-15, A-30 and A-60 class steel divisions. For A-0 class divisions, local fire insulation arrangement shall be installed (on the penetration itself - i.e. as per fire tests - and further extended 200 mm around).

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 -The **Sleev-it FC & WT penetration seals** 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 office and production site(s) 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 :

7.1- It is **Roxtec International AB** 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.

7.2- Watertightness and Gastightness (before fire exposure) for Sleeve-it WT penetration seal: Inspection report N° N141EX90, dated June 30, 2017, from DNV-GL:

- Tested watertightness : 1,5 bar during 60 min.
- Tested gastightness : 1 bar during 30 min.

*** END OF CERTIFICATE ***