



Marine &amp; Offshore

Certificate number: 46362/A1 BV

File number: ACI4000/032/011

Product code: 5301H

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

www.veristar.com

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**ROXTEC International AB**

KARLSKRONA - SWEDEN

*for the type of product*

**PIPE PENETRATIONS IN FIRE DIVISIONS**

Roxtec sealing system: Roxtec SPM seal series in steel divisions

### Requirements:

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

SOLAS 74, as amended, SOLAS 2000 Regulations II-2/9.3.1

IMO Resolution MSC.307(88) Annex 1 Part 3 (FTP Code 2010)

*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: 05 Sep 2021**

**For Bureau Veritas Marine & Offshore,**

At BV GOTHENBURG, on 18 Sep 2017,

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.

The electronic version is available at: <http://www.veristarp.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=pdu2ojm5nx>

BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

**Roxtec SPM seal series** in steel divisions

Single pipe penetration in Class A0, A15, A30 and A60 bulkheads and decks for Marine and Offshore Application. Penetrations of watertight and gastight steel bulkheads and decks up to specified pressure

Roxtec sealing system, Roxtec SPM seal series consisting of rubber seal in sizes 39-279 attached through expansion to steel sections.

The sealing system is made for steel pipes with outside diameter 8 to 220 mm for bulkhead and deck, with Roxtec SPM seal in size 39-279. Outside diameter for copper pipes to be between 8 to 222 mm for bulkhead and deck, with Roxtec SPM seal in size 39-279.

Insulation of the penetration to be carried out as shown in manufacturers drawings:

S1522746	Rev A. dated 10.5.2017	A-Class Steel Bulkhead Steel pipe
S1522747	Rev A. dated 10.5.2017	A-Class Steel Bulkhead Copper pipe
S1522742	Rev A. dated 10.5.2017	A-Class Steel Deck Steel pipe
S1522749	Rev A. dated 10.5.2017	A-Class Steel Deck Copper pipe

Penetrations through A-0 divisions are to be provided with the insulation as per manufacturers installation drawings for the penetration and 200 mm around the penetration.

S1522750	Rev A. dated 10.5.2017	A-0 Class Steel Bulkhead Steel pipe
S1522751	Rev A. dated 10.5.2017	A-0 Class Steel Bulkhead Copper pipe.
S1522755	Rev A. dated 10.5.2017	A-0 Class Steel Deck Steel pipe.
S1522756	Rev A. dated 10.5.2017	A-0 Class Steel Deck Copper pipe

### 2. DOCUMENTS AND DRAWINGS :

As per Manufacturer's drawings N° S1502970 Rev D dated 2016-08-25.  
Manufacturers Installation instruction DOC-0000116 version B.

### 3. TEST REPORTS :

- 3.1 - Test report N° 5P03451, dated 03.11.2015, as per IMO 2010-FTP Code from SP, Sweden
- 3.2 - Test report N° 5P03457, dated 12.11.2015, as per IMO 2010-FTP Code from SP, Sweden
- 3.3 - Test report N° 5P08343, dated 21.12.2015, as per IMO 2010-FTP Code from SP, Sweden
- 3.4 - Test report N° 5P08346, dated 21.12.2015, as per IMO 2010-FTP Code from SP, Sweden
- 3.5 - Test report N° 5P08395, dated 17.3.2016, as per IMO 2010-FTP Code from SP, Sweden
- 3.6 - Test report N° 5P05989, dated 24.10.2016, as per IMO 2010-FTP Code from SP, Sweden
- 3.7 - Test report N° 5P05990, dated 16.11.2016, as per IMO 2010-FTP Code from SP, Sweden
- 3.8 - Test report N° 6P07565, dated 20.12.2016, as per IMO 2010-FTP Code from SP, Sweden
- 3.9 - Test report N° PGA10870A, dated 13.12.2016, as per IMO 2010-FTP Code from DBI, Denmark

### 4. APPLICATION / LIMITATION :

- 4.1 - The fitting aboard to be the same as used for the test.
- 4.2 - Approved for use as pipe transits in A-0, A-15, A-30 and A-60 class steel divisions, with limitations contained in §1.
- 4.3 - Not to be used in tank boundaries.
- 4.4 - All seal types should be installed in according with manufactures installation drawings.
- 4.5 - The insulating material(s) shall have to comply with the requirements of BV Rules and be type approved.

### 5. PRODUCTION SURVEY REQUIREMENTS :

- 5.1 - The "SPM seal 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 :

**ROXTEC International AB**  
**BOX 540**  
**371 23 KARLSKRONA**

#### **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**'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.

7.2 -This certificate supersedes BV type approval certificate 46362/A0 BV issued by the Society.

7-3 - Tested for water tightness (before fire exposure): 1.5 bar during 60 min. Tested gas tightness (before fire exposure): 1.0 bar during 30 min in 4-15mm Structure.

- Third Party Inspection report N° N417RRN dated 29.01.2016, from DNV-GL, Sweden
- Third Party Inspection report N° N1419WS4 dated 22.06.2016 from DNV-GL, Sweden

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