

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00000NV**  
Revision No:  
**3**

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 Norway.

**This is to certify:**

**That the Penetrations through "A" class divisions: pipe, duct, trunk, etc penetrations**

with type designation(s)

**Roxtec sealing system: Roxtec SPM seal series / Roxtec SPM Blind seal series (steel divisions)**

Issued to

**Roxtec International AB**  
**Karlskrona, Sweden**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2020/1170,**

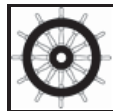
**item No. MED/3.26b. SOLAS 74 as amended, Regulation II -2/9, IMO MSC.1/Circ.1276, IMO 2010 FTP Code and IMO MSC.1/1488**

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2025-10-01.**

Issued at **Høvik** on **2020-10-02**

DNV GL local station:  
**Sweden CMC**



Notified Body  
No.: **0575**



for **DNV GL AS**  
Digitally Signed By: Hoff, Øyvind  
Location: DNV GL Høvik, Norway  
on behalf of

**Roald Vårheim**  
**Head of Notified Body**

Approval Engineer:  
**Helge Bjørnará**

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, and amended by Decision No 1/2019 dated February 22nd, 2019.

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.



**LEGAL DISCLAIMER:** Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Job Id: **344.1-005182-4**  
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## Product description

"Roxtec sealing system: Roxtec SPM seal series / Roxtec SPM Blind seal series (steel divisions)",  
Consisting of Roxtec SPM rubber seal in size 39 to 279 attached through expansion to steel sections and  
Roxtec SPM Blind rubber seal in sizes 39/0 to 92/0 attached through expansion to steel section.

## Application/Limitation

Approved for use as a single pipe penetration system in A-class steel divisions according to below tables.  
Other applications are subject to case-by case approval.

For A-15 and A-30 applications, the penetration shall be insulated as for A-60 and the division is to be fitted with A-60 insulation for a minimum distance of 200 mm around the penetration.

Table 1: Approved pipe penetration in A-60 steel bulkhead

Type	Size	Pipe material	Pipe diameter (OD) [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Seal position	Sleeve insulation
SPM	39 – 279	Steel	8 - 222	None	NA	Either side	S1518385 Rev. B
SPM	39 – 279	Copper	8 - 222	None	NA	Either side	S1518386 Rev. A
SPM Blind	39/0 – 92/0	NA	NA	None	NA	Either side	S1553706 Rev. A

Table 2: Approved pipe penetration in A-60 steel deck

Type	Size	Pipe material	Pipe diameter (OD) [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Seal position	Seal Insulation
SPM	39 – 279	Steel	8 - 222	None	NA	Either side	S1518359 Rev. A
SPM	39 – 279	Copper	8 - 222	None	NA	Either side	S1518384 Rev. A
SPM Blind	39/0 – 92/0	NA	NA	None	NA	Either side	S1553706 Rev. A

Table 3: Approved pipe penetration in A-0 steel bulkhead

Type	Size	Pipe material	Pipe diameter (OD) [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Seal position	Sleeve Insulation
SPM	39 – 279	Steel	8 - 222	None	NA	Either side	S1518398 Rev. B
SPM	39 – 279	Copper	8 - 222	None	NA	Either side	S1518399 Rev. A
SPM Blind	39/0 – 92/0	NA	NA	None	NA	Either side	S1553712 Rev. A

Table 4: Approved pipe penetration in A-0 steel deck

Type	Size	Pipe material	Pipe diameter (OD) [mm]	Sleeve length [mm]	Sleeve thickness [mm]	Seal position	Sleeve Insulation
SPM	39 – 279	Steel	8 - 222	None	NA	Either side	S1553744 Rev. A
SPM	39 – 279	Copper	8 - 222	None	NA	Either side	S1518400 Rev. A
SPM Blind	39/0 – 92/0	NA	NA	None	NA	Either side	S1553712 Rev. A

All seals shall be installed in accordance with Roxtec's SPM seal Installation Instructions, including aperture dimensions and tolerances, tightening torque, etc.

Penetrations through structural divisions should not impair the structural strength of the division. Special consideration should be given to bulkheads and decks with high stress locations (IMO MSC.1/Circ.1488).

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The insulation material used has to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

Each product is to be supplied with its manual for installation and maintenance.

### **Type Examination documentation**

Test Report No. 5P03451 dated 3 November 2015 from SP, Borås, Sweden.  
Test Report No. 5P03457 dated 12 November 2015 from SP, Borås, Sweden.  
Test Report No. 5P08343 dated 21 December 2015 from SP, Borås, Sweden.  
Test Report No. 5P08346 dated 21 December 2015 from SP, Borås, Sweden.  
Test Report No. 5P08395 dated 17 March 2016 from SP, Borås, Sweden.  
Test Report No. 6P05989 dated 24 October 2016 from SP, Borås, Sweden.  
Test Report No. 6P05990 dated 16 November 2016 from SP, Borås, Sweden.  
Test Report No. PGA1087A dated 13 December 2016 from DBI, Hvidovre, Denmark.  
Test Report No. RS-17/B-177/E dated 6 May 2017 from CTO, Gdansk, Poland.  
Test Report No. RS-18/B-022/E dated 29 January 2018 from CTO, Gdansk, Poland.  
Test Report No. RS-18/B-023/E dated 29 January 2018 from CTO, Gdansk, Poland.  
Test Report No. RS-18/B-181/E dated 7 May 2018 from CTO, Gdansk, Poland.  
Test Report No. PGA11302A dated 16 January 2019 from DBI, Hvidovre, Denmark.

Drawing No. S1518359 Rev. A dated 22 December 2016 from maker.  
Drawing No. S1518384 Rev. A dated 22 December 2016 from maker.  
Drawing No. S1518385 Rev. B dated 28 September 2020 from maker.  
Drawing No. S1518386 Rev. A dated 22 December 2016 from maker.  
Drawing No. S1518398 Rev. B dated 28 September 2020 from maker.  
Drawing No. S1518399 Rev. A dated 22 December 2016 from maker.  
Drawing No. S1518400 Rev. A dated 22 December 2016 from maker.  
Drawing No. S1553706 Rev. A dated 28 September 2020 from maker.  
Drawing No. S1553712 Rev. A dated 28 September 2020 from maker.  
Drawing No. S1553744 Rev. A dated 28 September 2020 from maker.

### **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 of manufacturer, type designation, fire-technical rating, MED Mark of Conformity and USCG approval number if applicable.

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## **Additional application/information for Watertightness/gastightness (Not part of the Marine Equipment Directive requirement)**

### **Product description**

"Roxtec sealing system: Roxtec SPM seal series / Roxtec SPM Blind seal series (steel divisions)",  
Consisting of Roxtec SPM rubber seal in size 39 to 279 attached through expansion to steel sections and  
Roxtec SPM Blind rubber seal in sizes 39/0 to 92/0 attached through expansion to steel section.

### **Application/Limitation**

SPM 39 – 279:

Approved for penetration in steel bulkheads or decks limited to a pressure of 1.00 bar watertightness  
and 0.67 bar gastightness.

SPM Blind 39/0 – 92/0:

Approved for penetration in steel bulkheads or decks limited to a pressure of 1.00 bar watertightness  
and 0.67 bar gastightness.

The penetration system is not to be used for penetrating boundaries of tanks.

### **Type Approval documentation**

Test Report No. N1417RRN dated 29 January 2016 from DNV GL Malmö.  
Test Report No. N1419WS4 dated 22 June 2016 from DNV GL Malmö.  
Test Report No. N14805C dated 22 November 2017 from DNV GL Malmö.

### **Tests carried out**

Tested according to Class Programme DNVGL-CP-0165 Chapter 4, February 2016.