



## Confirmation of Product Type Approval

**Company Name:** ROXTEC SEALING SYSTEM (SHANGHAI) CO LTD

**Address:** GROUND FLOOR, BUILDING A, NO 875 QIUXIN ROADLINGANG NICHENG INDUSTRIAL AREA, PUDONG DISTRICT SHANGHAI China

**Product:** Penetration Device for Pipe Deck and Bulkhead Penetration Sealing

**Model(s):** Roxtec R Series Frames in Steel Divisions

**Endorsements:**

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	19-1787572-PDA-DUP	05-JUL-2023	02-JUN-2024
Manufacturing Assessment (MA)	23-6047656	28-SEP-2023	27-SEP-2028
Product Quality Assurance (PQA)	NA	NA	NA

### Tier

3 - Type Approved, unit certification not required

### Intended Service

Multi and single pipe penetrations in Class A0, A15, A30 and A60 bulkheads and decks for ship or offshore applications. Penetrations of watertight and gastight steel bulkheads and decks up to the specified pressure.

### Description

"Roxtec pipe sealing system with multidiameter technology" composed of a steel sleeve welded, bolted or attached through expansion (SLX sleeve, R X kit) to a steel section. Sleeve is fitted with a Roxtec R frame (standard, Ex/ATEX or EMC) in sizes 50-200.

The R frame is filled with Roxtec (standard, Ex/ATEX or EMC) halogen free RM modules.

### Ratings

A-0, A-15, A-30 and A-60 Bulkheads and Decks

Watertight test pressure 6 bar (except bolted versions test pressure at 5 bar)

Gastight test pressure 4 bar (except bolted versions test pressure at 2.5 bar)

### Service Restrictions

a) Minimum and maximum pipe outside diameter- 6mm and 54 mm for steel and copper pipes for bulkheads.

b) Minimum and maximum pipe outside diameter- 6mm and 95 mm for steel pipes for decks.

c) Minimum and maximum frame sizes tested are size 50 and size 200

d) Not for use in tank boundaries.

e) For fire class A-0, A-15 and A-30, 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, except for sizes that are approved with out insulation.

f) 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.

g) The scope of Type Approval is to comply with MSC.1/Circ.1221 dated 11 December 2006

### Comments

a) All seal type should be installed in accordance with the manufacturers instructions in accordance with ABS approved installation drawings.

b) Insulation material is to be A-60 approved type and properly installed in accordance with ABS approved drawings to the satisfaction of the Surveyors.

c) Watertight bulkheads or decks are to be tested as per ABS Marine Vessels Rules 3-7-1/Table 1.

d) 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.

e) 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), as amended.

f) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

### Notes, Drawings and Documentation

#### Test Reports

DBI Fire Test Reports PGA 11302 A Dated 16 January 2019, PGA 11301 A Dated 22 November 2018, PGA10800A Dated 26 May 2016, PGA10799A Dated 24 May 2016, PGA10724A Dated 05 February 2016, PGA10723A dated 04 February 2016, PGA 10025 Dated 22 December 2011

SP Fire Test Report Numbers 8P04040 Dated 13 August 2018, 8P04039 dated 06 August 2018, 6P10022 Dated 07 March 2017, 6P07563 Dated 20 December 2016, 6P02249 17 August 2016, 4P08662 Dated 08 June 2015, P603000 Dated 23 January 2007, P602999 Dated 23 January 2007

DNV Pressure Test Report Numbers MLM 010247 Dated 28 Sept. 2001, MLM 030473-1 Dated 27 January 2003

#### Drawings:

Drawing No. S1534086 Revision: B- A-60 Deck with Steel Pipes

Drawing No. S1534092 Revision: B - A-60 Bulkhead with Steel Pipes

Drawing No. S1534107 Revision: B- A-0 Deck with Steel Pipes

Drawing No. S1534145 ,Revision: B- A-0 Bulkhead with Steel Pipes

Drawing No. S1534131,Revision: B- A-60 Deck/ Bulkhead with Copper Pipes

Drawing No. S1534132 Revision: A- A-0 Deck/ Bulkhead with Copper Pipes

Drawing No. S1534109, Revision: B- A-60 Deck/ Bulkhead with Steel Pipes, ( Expansion Type Sleeve)

Drawing No. S1534111 Revision: A- A-0 Deck/ Bulkhead with Steel Pipes, (Expansion Type Sleeve)

**Term of Validity**

This Product Design Assessment (PDA) Certificate remains valid until 02/Jun/2024 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.

**ABS Rules**

2019 ABS Marine Vessels Rules 1-1-4/7.7, 1-1-A3, 1-1-A4, 4-6-2/9.7

2019 ABS Mobile Offshore Units Rules 1-1-4/9.7, 1-1-A2, 1-1-A3, 4-2-1/11.15

**International Standards**

Regulation II-2/ 9.3.1 of SOLAS (2014 Consolidated Edition)

IMO Resolution MSC.307(88) - (2010 FTP Code), Annex I: Part 3, adopted on 3 December 2010

**EU-MED Standards**

NA

**National Standards**

NA

**Government Standards**

This PDA conforms to Transport of Canada requirements as per Transport Canada Policy Letter A8706-1 RDIMS#1961446 dated 15 November 2006

**Other Standards**

NA



A handwritten signature in blue ink, appearing to read 'James W. ...', is written over the printed text.

Corporate ABS Programs  
American Bureau of Shipping  
Print Date and Time: 17-Nov-2023 4:28

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.