



TYPE APPROVAL CERTIFICATE
No. LAB012215CS/001

This is to certify that the product identified below is in compliance with the regulations herewith specified

<i>Description</i>	Devices for the passage of electric cables and pipes through A or B Class divisions
<i>Type</i>	ROXTEC PIPE SEALING SYSTEM
<i>Applicant</i>	ROXTEC INTERNATIONAL AB BOX 540 S-37123 KARLSKRONA SWEDEN
<i>Manufacturer</i>	ROXTEC INTERNATIONAL AB
<i>Place of manufacture</i>	BOX 540 S-37123 KARLSKRONA SWEDEN
<i>Reference standards</i>	IMO Res. MSC.307(88)-(2010 FTP Code) - Part. 3

Issued in **Genoa** on **February 16, 2015**. *This Certificate is valid until* **January 13, 2020**



RINA Services S.p.A.
Massimo Dinale

This certificate consists of this page and 1 enclosure

TYPE APPROVAL CERTIFICATE
No. LAB012215CS/001
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ROXTEC PIPE SEALING SYSTEM

Product description

Circular stainless steel penetrations seals type RS and RS OMD for steel and copper pipes having size ranging from type 23 to type 644 through bulkhead. The penetrations in A-0 version, must be insulated with two layers of 50 and 25 mm thick (density 110 kg/m³) mineral wool forming a disc around each transit on the unexposed side, extending 200 mm around the pipe. The penetrations in A-60 version, must be insulated with one or two layers of 50 or 30 mm thick (density 150 kg/m³) mineral wool fitted around the pipe on the exposed and unexposed side for a length ranging from 350 to 700 mm; such insulation may be omitted on the exposed side for sizes ranging from type 31 to type 150. In addition, for sizes ranging from type 31 to greater except for type 644, the penetrations must be insulated with two layers of 50 and 25 mm thick (density 110 kg/m³) mineral wool forming a disc around each transit, on the unexposed side, extending 150 mm around the transit.

Field of application

Fire resistant A-60 Class pipe penetrations through steel bulkheads. Type RS and RS OMD from size 31 to size 644.

Fire resistant A-0 Class pipe penetrations through steel bulkheads. Type RS and RS OMD from size 23 to size 150.

Watertight up to 6 bar and gastight up to 4 bar. Type RS from size 23 to size 644; type RS OMD from size 23 to size 150.

Reference documents

Roxtec drawings Nos. S100446, S1004444, S1004435, S1004445, S1004441, S1004459, S1004460, S1004461 (attached to report No. 103070.25 A), Nos. S1003250, S1003312, S1003314, S1003317, S1003315, S1003313, S1003316 (attached to report No.103070.13C), and Nos. S1005219, S1005353 (attached to report No. 103070.29 A).

Tests carried out

Tests as per Norwegian Fire Research Laboratory (SINTEF) Report Nos. 103070.25 A dated 11 March 2003, 103070.13C dated 23 April 2004, and 103070.29 A dated 28 October 2004. Details of water tightness testing contained in DNV Cert. Nos. MLM 010247 dated 28 September 2001, SKM-04-4088 dated 16 June 2004 and MLM 020106 dated 19 December 2001.

Remarks

Mass production items to be fitted on vessels classed by RINA are to be marked or labelled with the trade name and the data of the Company to whom this Certificate is addressed. The validity of this Certificate ceases in the case of amendments to the rules on the basis of which the Certificate was issued.

Genoa 16/02/2015





TYPE APPROVAL CERTIFICATE
No. LAB012215CS/002

This is to certify that the product identified below is in compliance with the regulations herewith specified

<i>Description</i>	Devices for the passage of electric cables and pipes through A or B Class divisions
<i>Type</i>	ROXTEC CABLE AND PIPE SEALING SYSTEM
<i>Applicant</i>	ROXTEC INTERNATIONAL AB BOX 540 S-37123 KARLSKRONA SWEDEN
<i>Manufacturer</i>	ROXTEC INTERNATIONAL AB
<i>Place of manufacture</i>	BOX 540 S-37123 KARLSKRONA SWEDEN
<i>Reference standards</i>	IMO Res. MSC.307(88)-(2010 FTP Code) - Part. 3

Issued in **Genoa** on **February 16, 2015**. *This Certificate is valid until* **January 13, 2020**



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TYPE APPROVAL CERTIFICATE
No. **LAB012215CS/002**
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ROXTEC CABLE AND PIPE SEALING SYSTEM

Product description

Circular stainless steel cable and pipe (steel and copper pipes) penetrations seals type RS and RS OMD having size ranging from type 23 to type 644 through deck. The penetrations in A-0 version, must be insulated with one or two layers of 50 and 25 mm thick (density 110 kg/m³) mineral wool forming a disc around each transit on the exposed side, extending from 30 to 200 mm around the pipe or cable for a length ranging from 50 to 150 mm. The penetrations in A-60 version, must be insulated (only for pipe) with one or two layers of 50 or 30 mm thick (density 150 kg/m³) mineral wool fitted around the pipe on the exposed side for a length ranging from 100 to 900 mm.

Field of application

Fire resistant A-60 Class pipe penetrations through steel decks. Type RS and RS OMD from size 31 to size 644.

Fire resistant A-0 Class pipe penetrations through steel decks. Type RS and RS OMD from size 23 to size 150.

Fire resistant A-60 Class cable penetrations through steel decks. Type RS and RS OMD from size 23 to size 125.

Fire resistant A-0 Class cable penetrations through steel decks. Type RS and RS OMD size 125. Watertight up to 6 bar and gastight up to 4 bar. Type RS from size 23 to size 644; type RS OMD from size 23 to size 150.

Reference documents

Roxtec drawings Nos. S1000869, S1000943, S1000947, S1000948, S1000951 (attached to report No. 22N007.18 D), Nos. S1004346, S1004424, S1004425, S1004427 (attached to report No.103070.25 B), Nos. S1003251, S1003277, S1003279, S1003280, S1003282, S1003283, S1003281 (attached to report No.103070.13 B) and Nos. S1004919, S1004937 (attached to report No. 103070.27 B).

Tests carried out

Tests as per Norwegian Fire Research Laboratory (SINTEF) Report Nos. 22N007.18 D dated 29 May 2000, 103070.25 B dated 11 March 2003, 103070.13 B dated 23 April 2002 and 103070.27 B dated 4 July 2003. Details of water tightness testing contained in DNV Cert. Nos. MLM 010247 dated 28 September 2001, SKM-04-4088 dated 16 June 2004 and MLM 020106 dated 19 December 2001.

Remarks

Mass production items to be fitted on vessels classed by RINA are to be marked or labelled with the trade name and the data of the Company to whom this Certificate is addressed. The validity of this Certificate ceases in the case of amendments to the rules on the basis of which the Certificate was issued.

Genoa 16/02/2015

