DNV·GL

Certificate No:
TAF0000068

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Class H Penetration

with type designation(s)
RRS-15 / RS-105 cable

Issued to
Remitite Co., Ltd.
Kyungnam Korea, Republic of Korea

is found to comply with
DNV GL offshore standards

Application :

Approved for use as cable penetration system in class H-120 bulkheads.

See Applications/Limitations on page 2.

This Certificate is valid until **2020-12-31**.

Issued at **Høvik** on **2016-01-12**

for **DNV GL**

DNV GL local station: **Gimhae MC & FIS**

Approval Engineer: **Ragnar Tonjer**

Petter Langnes
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Product description

"RRS-15/RS-105 cable"
Penetration system composed of a 250 mm deep steel sleeve with thickness of at least 4 mm welded to the bulkhead. RRS-15 (Remitite Rubber Sleeve 15) is wrapped around the cables and filling the remaining space between sleeves and cables. The sleeve is dammed on both ends with 20 mm of RS-105 (Remitite Silicone Sealant #105).

For further details, see approved drawings listed under Type Approval documentation below.

Application/Limitation

Approved for use as a cable penetration system in class H-120 steel bulkheads. Approved for use in class H-0, H-60 when the penetration system is insulated as H-120. In addition the division is to be insulated with H-120 insulation at least 200 mm around the penetration.

Minimum size of sleeve: 230 x 110 mm (Width x Height)
Maximum size of sleeve: 600 x 300 mm (Width x Height)

In addition to the H-120 bulkhead insulation, 88 mm thick insulation type "Fire Master X-607" to be fitted around the sleeve. For details, see approved drawings listed below.

No more than 40% of the inside cross sectional area of each transit should be occupied by cables.

Approved for penetrations in steel bulkheads limited to a pressure of 1.0 bar water tightness and 0.2 bar gas tightness (test pressure 1.5 bar and 0.3 bar respectively). Penetration systems are not to be used for penetrating boundaries of tanks.

Type Approval documentation

Certification in accordance with Class Programme DNVGL-CP-0338, October 2015.

Test report No. KOMERI-08T418 dated 12 January 2009 from Korean Marine Equipment Research Istitute, Korea.

Cable penetration water and gas tight test report No. REMITITE-SR1000-10 dated 11 August 2009 witnessed by GL.

Drawings Nos:

- REMITITE-H120-BH-1000, Rev. 1, dated 08 December 2008;
- REMITITE-H120-BH-1001, Rev. 0, dated 20 November 2008;
- REMITITE-H120-BH-1002, Rev. 0, dated 20 November 2008;

Tests carried out

Tested in accordance with IMO FTPC Part 3 (IMO Res. A.754(18)) and the furnace HC time-temperature curve specified in EN1363-2:1999.

Marking of product

The product or packing is to be marked with name of manufacturer, type designation and fire-technical rating.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in DNVGL-CP-0338 Section 4.