DET NORSKE VERITAS

TYPE APPROVAL CERTIFICATE

CERTIFICATE NO. **P-14508**

This is to certify that the
Miscellaneous Fittings for Pressurised Equipment

with type designation(s)
SprayStop standard and SprayStop 50 Plus

Manufactured by
T-ISS
Dinxperlo, Netherlands

is found to comply with
Det Norske Veritas' Rules for Classification of Ships

Application
Screening of pipe joints and fittings in accordance with IMO SOLAS Consolidated Edition, 2004, Chapter II-2/ Regulation 4, item 2.2.5.3

Temperature range:	**Max. 150 degr.C Fluid Temp.**
Design pressure:	**SprayStop standard - For use with piping of maximum 15 barg internal pressure.**
(based on one layer)	**SprayStop 50 Plus - For use with piping of maximum 37 barg internal pressure.**
Operating media:	**For use with pipe flanges and fittings in systems for fuel oil, lube oil and other flammable oils.**

This Certificate is valid until **2017-12-31**.

Issued at **Høvik** on **2013-07-31**

DNV local station: **Rotterdam**

Approval Engineer: **Maya Rajinder Kaur**

for **Det Norske Veritas AS**

Digitally Signed By: Mouawad, Jad
Location: DNV Høvik, Norway
Signing Date: 2013-07-31

Jad Mouawad
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.
If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.

Holder of certificate

T-ISS
Helmkamp 34
7091 HR Dinxperlo
Netherlands

Distributed in Singapore by:

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Product description

For use in engine rooms or other enclosed spaces as wrapping around possible sources of leakage in fuel oil piping to help prevent fuel spray in event of a leak, as a means of meeting the requirements of the IMO SOLAS, Chpt. II-2, Reg.4, 2.2.5.3.

Reference is also made to IMO FTP Code – IMO Resolution A.653 (16).

Size range: 15 mm till 1000 mm width / 10m length.
The tape is manufacturered by KNW, Korea, and cut to specified sizes at T-ISS, Dinxperlo, The Netherlands.

SprayStop tapes is a multilayer aluminium/ glass cloth/ release liner with a special adhesive for installation.
SprayStop Standard is produced with woven fabric while T-ISS SprayStop 50 Plus is produced with knitted fabric.

When SprayStop 50 Plus is installed according to manufacture instruction (minimum 2 layers), SprayStop 50 Plus can hold pressures till 50 barg.

Application/Limitation

The extent of use is limited to spray shielding applications on oil pressure pipes located above the floor plates and which have no insulation in way of the joints. Use is also restricted to readily accessible positions where the integrity of the application may be inspected regularly, and new covering will be applied after removal for maintenance purposes.

The fitting of T-ISS Spray-Stop-Tape is to be carried out in accordance with the Manufacturer's instructions.

The T-ISS Spray-Stop-Tape cannot be used for pipes insulation, or as replacement for pipe gaskets and sealings.

Type Approval documentation

- Product Decription, Specifications and Application Instructions for T-ISS Spray-Stop-Tape.
- Installation & Application of SprayStop Tape

Tests carried out

- Union Tack Co.Ltd., Report No. UTCK 050816-1, dated 16 August, 2005; Adhesive test, tensile test, pressure test, temperature resistance test, surface flammability test.
- Fire Insurers Laboratories of Korea, Suface Flammability Test,No. 20050289, dated June 21, 2005, in accordance with IMO Resolution A.653(16).
- Independent Laboratory Textile Lab., Report No. T2012-303590-004, dated 11 December 2012; Determination of puncture impact, in accordance with DIN EN ISO6603-2.
- KNW., Report No. KWQAO20110402TISS, dated 2 April 2011; Adhesive Strength and Tensile Strength
- KNW., Report No. KWQAP20110706TISS, dated 6 July 2011; Adhesive Strength and Tensile Strength
- KNW., Report No. KWQAP20111215TISS, dated 15 December 2012; Adhesive Strength and Tensile Strength
- KNW., Report No. KWQAP20120319TISS, dated 19 March 2012; Adhesive Strength and Tensile Strength
- KNW., Report No. KWQAP20120710TISS, dated 10 July 2012; Adhesive Strength and Tensile Strength
- KNW., Report No. KWQAP20120919TISS, dated 19 September 2012; Adhesive Strength and Tensile Strength
- KNW., Report No. KWQAP20130215ATISS, dated 15 February 2013; Adhesive Strength and Tensile Strength
- KNW., Report No. KWQAP20130215BTISS, dated 15 February 2013; Adhesive Strength and Tensile Strength