

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Miscellaneous Fittings for Pressurised Equipment

with type designation(s)
NoSpray Protection System (IM 2002)

Issued to
Innovative Manufacturing Inc.
Delta BC, Canada

is found to comply with
DNV GL rules for classification – Ships

Application :

Products approved by this certificate are accepted for installation on all vessels classed by DNV GL.
Screening of pipe joints and fittings in accordance with SOLAS Ch. II-2 / Reg. 4.2.2.5.3

Temperature range:	max. 150°C / 300°F Fluid Temperature
Design pressure:	For use with piping systems with max 20 bar/300psi operating pressure
Operating media:	For use with pipe flanges and fittings in systems containing flammable liquids.

Issued at **Hamburg** on **2017-08-04**

This Certificate is valid until **2022-08-03**.

DNV GL local station: **Vancouver**

Approval Engineer: **Christian Kaemmer**



for **DNV GL**
Digitally Signed By: Drews, Olaf
Location: DNVGL Hamburg
Signing Date: 2017-08-08

Olaf Drews
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.



Job Id: **262.1-025987-1**
Certificate No: **TAP0000110**

Product description

NoSpray Protection System is an aluminium/ glass cloth jacketing system which is coated one side with a silicon adhesive for installation. Impervious to oil or oil vapours. Form of manufacture tape or sheet.

Dimensions

Tape¹

Width [mm]
35
50
100
140
250
500
1000

Note

¹ Tape length of 10m and total thickness 9.5 mil for all sizes.

Place of Production:

Advanced Flexible Composites
14 Walter Court
Lake in the Hills, IL 60156
USA

Application/Limitation

For protection of valves, fittings, flanges, threaded connections and any other piping components to avoid spilling spray, liquids or vapours on sources of ignition. To prevent liquid and gases from developing into a spray fire by controlling leakage.

Use is restricted to accessible positions. The integrity of the application has to be inspected regularly and new covering has to be applied after removal for maintenance purposes.

The installation of NoSpray Protection System is to be carried out in accordance with the Manufacturer's instructions.

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Type Approval documentation

- Product Description
- Specifications and Application Instructions for NoSpray Protection System

Tests carried out

DNV Survey Report No. 410-1-5166-GDR1, dated 23 January, 2003, Surface Flammability Tests of "NoSpray Protection System Metallic Tape".

Southwest Research Institute, Test Report dated January 2003; Fire Performance of "NoSpray Protection System" in accordance with IMO Resolution A.653(16).

DNV Report – Folder PP042629, dated 2013-02-25; Witness of Leakage Test for "NoSpray Protective Tape or Sheet."

Chemsultants International; Report: Project 13-147, dated March 19, 2013; Physical and Adhesive Properties of PSA Sheet.

DNVGL Witness of Leakage Test for "NoSpray Protective Tape or Sheet" dated 2017-06-15.

Marking of product

- Manufacturer's Name
- Product Type

Periodical assessment

For retention of the type approval certificate periodical assessments shall be carried out at production places by DNVGL surveyor.

The objective of the periodical assessment is to verify that the design and production conditions for the type approval have not been altered.

Main scope of the assessment:

- verification of the production and quality control system
- review of quality control documentation of recent deliveries
- review of drawings in production to verify any design changes which may have an impact on data specified in the type approval certificate, performance and range of application
- verification of the product marking

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

This certificate replaces previous Type Approval Certificates No. P-14439, P-12819 and P-11423.

END OF CERTIFICATE