



MARINE DIVISION

Certificate number: 20289/B0 BV

File number: ACM 136/2105/01

Product code: 2180H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Mareflex GmbH**  
HAMBURG - GERMANY

*for the type of product*

### ANTI-SPRAYING PIPE FLANGES & JOINTS SYSTEMS

Anti-Spray Tape Mareflex MF-01

**Requirements:**

- BUREAU VERITAS Rules for the Classification of Steel Ships
- BUREAU VERITAS Rules for the Classification of Offshore Units
- SOLAS 74 as amended, Regulation II-4.2.2.5.3
- IMO Resolution MSC.61(67), Annex 1, Part 5

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 29 Apr 2018**

For BUREAU VERITAS,

At BV HAMBURG, on 29 Apr 2013,

Udo Storm



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION

#### **Anti-Spray Tape Mareflex MF-01**

##### 1.1 Design

The Mareflex MF-01 Tape is designed to screen the connections of fuel, lube oil and other flammable oils piping systems under pressure which are located in ship's engine room and others.

##### 1.2 Dimensions

Product Code	Size - Width (mm) x Length (m)	Total thickness (micrometer)
MF01-35	35 x 10	410
MF01-50	50 x 10	410
MF01-100	100 x 10	410
MF01-140	140 x 10	410
MF01-150	150 x 10	410
MF01-250	250 x 10	410
MF01-500	500 x 10	410

##### 1.3 Rating

- Design pressure 15 bar
- Design temperature 150 °C

##### 1.4 Tape structure

- Aluminium layer, adhesive layer, silicon impregnation, fiberglass fabric, water-proof and fire retardant adhesive, release liner

### 2. DOCUMENTS AND DRAWINGS

- Mareflex MF-01 Anti-Spray Tape - Samples
- Technical specification and installation instructions

### 3. TEST REPORTS

3.1 Tensile strength test at break and tape adhesion to metal surface carried out. Test report N° 43/2004 dated 28/04/2006 issued by laboratory Moratex (Poland).

3.2 Surface flammability test in compliance with IMO FTP Code, Annex 1, Part 5. Test report N° IBR/Z-021-2006 dated 06/03/2006 issued by laboratory Technical University of Szczecin (Poland).

3.3 Pressure resistance test carried out. Test report dated 23/11/2006 issued by laboratory Lucidus Optical Measurements (Poland).

3.4 Pressure resistance test at 19 bar Report N° 1/2013 witnessed by Bureau Veritas dated 05/04/2013.

### 4. APPLICATION / LIMITATION

4.1 The Mareflex MF-01 Anti-Spray Tape may be used for screening in systems for fuel, lube oil and other flammable oils with pipes, flanges and joints complying with the SOLAS 74 as amended, Regulation II-2/4.2.2.5.3.

4.2 The approval is restricted to piping systems which are readily accessible for maintenance and inspection purposes.

4.3 The tape cannot be used for pipes insulation or as replacement for pipe gaskets and sealings.

4.4 The tape is to be fitted according to the manufacturer instructions and satisfactorily witnessed by the Bureau Veritas's Surveyor for each application on board ship.

### 5. PRODUCTION SURVEY REQUIREMENTS

5.1 The products are to be supplied by **Mareflex GmbH** in compliance with the type described in this certificate. This type of product is within the category HBV of Bureau Veritas Rule Note NR320.

5.2 **Mareflex GmbH** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.3 No Bureau Veritas certificate is required.

#### Place of Production

**A-SPE Polska**

**ul. Gdynska 39 / 82-300 Elblag**

**POLAND**

**6. MARKING OF PRODUCT**

The product or packing is to be marked according to manufacturer' specification with at least:

- Manufacturer name or logo
- Format

**7. OTHERS**

This approval is given on the understanding that the manufacturer will accept full responsibility for informing shipbuilders or their sub-contractors of the proper method of fitting and general maintenance of the products and of the conditions of this approval.

*This certificate supersedes the Type Approval Certificate N° 20289/A0 BV issued on 09/04/2008 by the Society.*

**\*\*\* END OF CERTIFICATE \*\*\***