Marine & Offshore

**Certificate number:** 11446/E0 MED
**File number:** ACI 2200/002/03
**Item number:** MED/3.29

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*
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**Notified Body 2690 - MARINE EQUIPMENT DIRECTIVE 2014/90/EU**

# EC TYPE EXAMINATION CERTIFICATE

*as per Module B of Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations and Commission Implementing Regulation (EU) 2024/1975 of 19 July 2024*

*This certificate is issued to:*

## MANDALS A/S, A Michelin Group company

Nordre Banegate 26, 4515, Mandal, NORWAY

*for the type of product*

## NON PERCOLATING LAY FLAT FIRE-FIGHTING HOSES (RANGE OF THE INSIDE DIAMETER FROM 25 MM TO 52 MM)

Mandals Mertex

**Requirements:**
- SOLAS 74 Convention as amended, Regulation II-2/10, X/3
- IMO Res. MSC.36(63)-(1994 HSC Code) as amended, 7
- IMO Res. MSC.97(73)-(2000 HSC Code) as amended, 7
- EN 14540:2014

*This certificate is issued on behalf of the French Maritime Authorities to attest that Bureau Veritas Marine & Offshore did undertake the relevant type-examination procedures for the product identified above which was found to comply with the relevant requirements of the Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 as transposed in the French Regulations.*

**This certificate will expire on: 18 Dec 2029**

**For Bureau Veritas Marine & Offshore Notified Body 2690,**
At BV OSLO, on 18 Dec 2024,
Rune MARSTEIN

***This certificate was created electronically and is valid without signature***

**This certificate does not allow to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark ) to the products corresponding to this type. To this end, the production-control phase module (D, E or F) of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.**
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 Marine & Offshore. 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. Bureau Veritas Marine & Offshore is designated by the French Maritime Authority as a "notified body" under the terms of the French Regulations Division 140 Chapter 140-2. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore 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 Marine & Offshore 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

**Fire hose Mandals Mertex**

- Non-percolating layflat fire hose for fire fighting purposes
- Uncovered, fully synthetic polyester fire hose with a thermoplastic polyurethane (TPU) inner lining

**Mandals Mertex**

| Inner Diameter (inch) | Inner Diameter (mm) | Mass per Unit Length (Kg/m) | Max. Working Pressure (MPa) | Bursting Pressure (Min. 4.5 MPa) |
|---|---|---|---|---|
| 1-1/2 | 38,1 + 1.6 | 0.19 | 1.5 | 6.0 |
| 2 | 51,5 + 2.0 | 0.27 | 1.5 | 5.5 |

## 2. DOCUMENTS AND DRAWINGS

2.1 - Manufacturer's technical specifications as provided on 31/03/2020

2.2 - Maintenance and instruction manual dated July 2019

2.3 - General Hose Guidelines for Safe Use and Storage, Ref. T140-13-B

*No departure from the above documents shall be made without the prior consent of the notified body named on this certificate. The manufacturer must inform the notified body of any modification or changes to these documents and drawings.*

## 3. TEST REPORTS

3.1 - Fire hose type-tested in accordance with EN 14540:2014

3.2 - Test report dated 09/07/2009, witnessed by the Society.

3.3 - Test report dated 02/02/2005 (resistance to kinking test), witnessed by an IACS surveyor.

## 4. APPLICATION / LIMITATION

4.1 - Approved as fire hoses of fire fighting for ships having to comply with SOLAS 74 Convention as amended.

4.2 - The fire-fighting hose is intended for use at ambient temperature range -30°C up to +60°C.

4.3 - The supplier supplying the ship/unit will have to comply with the Rules and the applicable regulations acceptable by the National Authorities of the country in which the ship/unit is registered with respect to the maximum length of the fire hoses and the assembly couplings. The supplier shall make available its instruction manual for installation, use and maintenance.

## 5. PRODUCTION SURVEY REQUIREMENTS

5.1 - This certificate alone does not allow the applicant to issue the Declaration of Conformity and to affix the mark of conformity (wheelmark) to the products corresponding to this type. To this end, the production-control phase module D "Production Quality Assurance" or E "Product Quality Assurance" or F "Product Verification" of Annex II of the Directive is to be complied with and controlled by a written inspection agreement with a notified body.

5.2 - The manufacturer shall institute quality control procedure in order to ensure that the fire-fighting hoses "Mandals Mertex" are produced in accordance with the requirements stated on the front page of this certificate and to keep records of any production tests carried out in accordance with these requirements.

5.3 - For information concerning the production phase modules, **MANDALS A/S, A MICHELIN GROUP COMPANY** has declared the following manufacturing site(s):

**MANDALS A/S, A MICHELIN GROUP COMPANY**
**Nordre Banegate 26**
**4515 Mandal**
**NORWAY**

## 6. MARKING OF PRODUCT

Each length of hose shall be clearly and indelibly marked with the following information, at least twice per length:

- Manufacturer's name or logo
- EN standard (number and date)
- Inside diameter
- Maximum working pressure
- Quarter and year of manufacture
- Test temperature -30°C

Reference is made to MED 2014/90/EU chapter 2.
In particular Article 10.3 specifies that the wheelmark shall be followed by the identification number of the Notified Body involved in the production control phase (module D, E or F) and by the year in which the mark is affixed (4 digits or last 2 digits).

## 7. OTHERS

7.1 - It is **MANDALS A/S, A MICHELIN GROUP COMPANY's** responsibility to inform shipbuilders or their sub-contractors of the proper method of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the EC Type-Examination Certificate No. 11446/D0 MED issued on 09 April 2020 by the Society.

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