

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00001VD**  
Revision No:  
**1**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

## This is to certify:

**That the Fire-fighting hoses – Non-percolating lay flat firefighting hoses (range of the inside diameter from 25 mm to 52 mm)**

with type designation(s)  
**HIGFLEX and SINFLEX**

Issued to  
**5Elem Hi-Tech Corporation**  
**Jiangyan, 100, China**

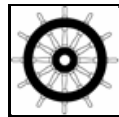
is found to comply with the requirements in the following Regulations/Standards:  
Regulation **(EU) 2019/1397,**  
**item No. MED/3.29. SOLAS 74 as amended, Regulation II-2/10 & X/3, 2000 HSC Code 7 and EN 14540:2014**

Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-12-15**.

Issued at **Hamburg** on **2019-12-16**

DNV GL local station:  
**Nantong**



for **DNV GL SE**

Approval Engineer:  
**Ana Cristina Do Carmo Insfran**

Notified Body  
No.: **0098**

**Gerhard Aulbert**  
**Head of Notified Body**

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-006166-2**  
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## Product description

Non-percolating lay-flat fire hoses with following specification:

### Type „HIGFLEX“:

- Fabric / textile: circular woven, 100% polyester high tenacity yarn
- Inside lining: synthetic rubber lining (EPDM)
- Internal diameter: 38 mm, 45 mm and 52 mm
- Max. working pressure: 1.5 MPa (15 bar)

### Type „SINFLEX“:

- Fabric / textile: circular woven, 100% polyester high tenacity yarn
- Inside lining: PVC lining
- Internal diameter: 38 mm, 45 mm and 52 mm
- Max. working pressure: 1.5 MPa (15 bar)

## Application/Limitation

Approved for discharging water from the fire main by using fire hoses (SOLAS II-2/10.2.3 and 2000 HSC Code, 7.7.5).

The fire-fighting hose is intended for use at ambient temperature range -20°C up to +60°C. It shall not be used in the cold climatic conditions of Northern Europe (down to -30°C)

## Type Examination documentation

CSI Certificate of conformity:

DC03/026F09 dated 2009-10-12

DC03/024F09 dated 2009-10-12

DC03/031F08 dated 2008-11-19

DC03/030F08 dated 2008-11-19

DC03/038F09 dated 2009-12-10

DC03/037F09 dated 2009-12-10

CSI Test Report:

DC03/026F09 dated 2009-10-12

DC03/024F09 dated 2009-10-12

DC03/031F08 dated 2008-11-19

DC03/030F08 dated 2008-11-19

DC03/037F09 dated 2009-12-10

DC03/038F09 dated 2009-12-10

Description of the fire hose type 38 mm, 45 mm and 52 mm for SINFLEX and HIGFLEX

EU MARINE Application Form

Declaration of Letter – No change statement

## Tests carried out

Tested according to EN 14540 (2004) incl. A.1 (2007), as superseded by EN 14540 (2014) [no difference in the scope of testing]

## Marking of product

The products are to be marked according to EN 14540 (2014), section 8 and with the MED Mark of Conformity (see page 1).