

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB000020R**  
Revision No:  
**1**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV GL AS under the authority of the Government of the Kingdom of Norway.

## This is to certify:

**That the Fixed water-based fire-fighting systems for ro-ro spaces, vehicle spaces and special category spaces: Performance-based systems as per Circ. 1430 Clause 5**

with type designation(s)

**VID FireKill OH-OPX1 Suez, VID FireKill OH-OPX1 Panama**

Issued to

**Vid Fire-Kill ApS**  
**Svendborg Syddanmark, Denmark**

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2017/306,**

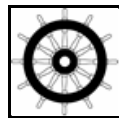
**item No. MED/3.49b and Annex B, Module B in Directive. SOLAS 74 as amended Regulation II-2/19, II-2/20 & X/3, 2000 HSC Code 7 and FSS Code 7, IMO Circ.1430 Clause 5**

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

This Certificate is valid until **2022-06-14.**

Issued at **Høvik** on **2017-06-15**

DNV GL local station:  
**Fredericia**



for **DNV GL AS**

Approval Engineer:  
**Piotr Orzechowski**

Notified Body  
No.: **0575**

**Vidar Dolonen**  
**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 AS 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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: **344.1-003667-3**  
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## Product description

"VID FireKill OH-OPX1 Suez, VID FireKill OH-OPX1 Panama"

is a water mist system of deluge type. The system consists of nozzles and section valves, in addition to pump unit(s), piping, control system as associated equipment.

The system is to be designed in accordance with the "Principal Requirements" of IMO MSC.1/Circ.1430 for performance based-systems.

Only nozzles are type approved by this certificate. Other components are to be approved and/or certified case by case.

Nozzles are manufactured by Vid Fire-Kill Aps, Svendborg, Denmark.

## Application/Limitation

Approved for use as a fixed water-based fire-fighting systems for ro-ro spaces and special category spaces (performance based-system)

System design and installation shall be in accordance with principal requirements and performance-based system requirements of IMO MSC.1/Circ.1430 Ch.3 and 5 and following limitations:

System type	Nozzle	Maximum spacing (m) <sup>i)</sup>	Min. pres. at nozzles (bar)	Min. coverage area (m <sup>2</sup> )
<b>Deck height up to 5.0 m <sup>ii)</sup></b>				
Deluge	OH-OPX1 Panama	3.5	6	See note <sup>iii)</sup>
<b>Deck height up to 2.5 m</b>				
Deluge	OH-OPX1 Suez	4.0	6	See note <sup>iii)</sup>

### Notes

- i. Distance to bulkheads should be half spacing
- ii. Installations with height above 5.0 will be considered case by case
- iii. According to Requirements of IMO MSC.1/Circ.1430 Ch.5.4 for type B or type C systems (as applicable)

## Spray head information

Sprinkler / nozzle type	k-factor (lpm/bar <sup>1/2</sup> )	Flow (lpm)	Pressure (bar)	Drawings
OH-OPX1 Panama	23	56.3	6	Ref. type examination documentation
OH-OPX1 Suez	23	56.3	6	Ref. type examination documentation
Nozzles are made of brass coated with NiSn. Maximum operating pressure is 16 bar.				
Nozzles are to be installed in a pendant (downward) position.				

### For all applications

- The pump unit(s) shall be delivered with product certificate. Other system components are to be certified or inspected in accordance with Class Rules (or equivalent standard as specified by the Flag Administration).
- Redundant pump arrangement is to be approved on a case by case basis.
- Restrictions apply to use of this system on open ro-ro and open special category spaces (see IMO MSC.1/Circ.1430).
- The pump unit and section / sprinkler valves shall be installed in a room having ambient temperature between +4 degree C and +45 degree C.
- Pipes, couplings and other components are regarded as "Class III" piping.

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The following items are to be submitted for approval for each project:

- System arrangement plans including routing of pipes, location of nozzles, sections valves, release stations and pump unit.
- Documentation of power supply and control system.
- Specification of pipes, section valves, pumps, including drivers and associated components.
- Pressure drop calculations and water mist capacity calculations.
- Design, installation, operation and maintenance manual.

Installation testing:

- The system is to be cleaned in accordance with routines outlined in maker's system description manual.
- At least 2 sections should be tested with full flow through the nozzles. Manual release of all section valves (without water accepted) shall be carried out.
- Manual start of pumps shall be carried out.
- Alarms at the manned control stations shall be tested.
- Other tests as required by Class Rules (or equivalent standard as specified by the Flag Administration) (pressure testing of piping, etc.) and according to maker's manual shall be carried out.

Periodical testing:

- Periodical control and inspection shall be carried out in accordance with maker's system description manual.
- At least one section should each year be tested with full flow through the spray heads (not the same section every year).

## **Type Examination documentation**

Fire Performance Test Reports:

- No.120413-68 dated 21 June 2012 from Danish Fire Laboratories (DFL) ApS;
- No.120413-69 dated 21 June 2012 from Danish Fire Laboratories (DFL) ApS.

Component testing:


- No. 110415-5 dated 14 April 2012 from Danish Fire Laboratories (DFL) ApS.
- Letter from Danish Fire Laboratories (DFL) ApS dated 02-11-2012 regarding component tests.
- No. 160129-164 dated 7 March 2016 from Danish Fire Laboratories (DFL) ApS (clogging test + statement manufacturer (no use of filter))

Drawings of OH-OPX1:

- No. 120802-1057 dated 2012-08-02;
- No. 120802-1058 dated 2012-08-02;
- No. 101116-852A dated 2011-05-05;
- No. 71120-473 dated 2007-11-21;
- No. 120802-1055 dated 2012-08-02;
- No. 120802-1056 dated 2012-08-02;
- No. 81021-607A dated 2009-09-11;
- No. 71121-476A dated 2010-06-15

All from manufacturer.

Datasheet pendent open low pressure water mist nozzle, Model: Suez & Panama OH-OPX1.



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### **Tests carried out**

Fire performance test in accordance with IMO MSC.1/Circ.1272 and in compliance with IMO MSC.1/Circ.1430.

Component test in accordance with IMO Res. A.800(19) and IMO Res. MSC.265(84), and in compliance with IMO MSC.1/Circ.1430.

### **Marking of product**

The nozzles are to be marked with type designation and MED Mark of Conformity (see page 1).