

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:  
**MEDB00005F3**  
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 AS under the authority of the Government of Norway.

## This is to certify:

that the Hand flares (pyrotechnics)

with type designation(s)  
**IKAROS Hand Flare Red**

issued to

**Hansson PyroTech AB**  
Lindesberg, Örebro Län, Sweden

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

Regulation **(EU) 2023/1667**,

**item No. MED/1.9. SOLAS 74 as amended, Regulation III/4, III/34 & X/3, LSA Code and 2000 HSC Code 8 and IMO MSC.1/Circ.1629**

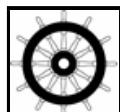
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-05-15**.

Issued at **Høvik** on **2024-05-16**

DNV local unit:  
**Finland CMC**

Approval Engineer:  
**Tessa Biever**



Notified Body  
No.: **0575**

for **DNV AS**

Digitally Signed By:  
Christine Mydlak-Röder  
Location: DNV Høvik, Norway  
**Mydlak-Röder, Christine**  
**Head of Notified Body**

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.

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 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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



**Product description**

"IKAROS Hand Flare Red"

Hand flares burning with a bright red colour for at least 1 minute and average luminous intensity of minimum 15.000 candela.

Design weight: 235 ±10% g

**Application/Limitation**

Approved for use as Hand flares (pyrotechnics).

Acceptable lifetime: expiration date not to exceed 48 months after month of manufacture.

Liferaft drop test has to be performed before installation on liferafts.

The design assessment is based on IMO Res. MSC.48(66) as amended by IMO Res. MSC.207(81) and IMO Res. MSC.218(82).

A statistically adequate sample of the production shall be tested in accordance with IMO Res. MSC.81(70), Part 2, Ch.4.

Each product is to be supplied with its manual for installation, use and maintenance.

**Type Examination documentation**

| Documents   | Date   |
|---|--|
| Drawings as listed in "Document structure", No. DS 341500 Rev. 2                                    | 2024-02-14   |
| Prototype test reports witnessed by Bureau Veritas  | 2015-03-30~04-02<br>2013-09-30~10-01<br>2012-05-29<br>2011-08-16~08-19 |
| Temperature cycling test and Salt spray test report No. SBTC 15-0080R by Bofors Test Center, Sweden | 2015-03-30   |

**Tests carried out**

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70), Part 1, including IMO Res. MSC.200(80), IMO Res. MSC.226(82) and IMO Res. MSC.323(89).

**Marking of product**

The product is to be marked with name and address of manufacturer, type designation, date of manufacture, date of expiry, operational restrictions, MED Mark of Conformity and USCG number if applicable (see first page).

The product should be provided with brief instructions or diagrams clearly illustrating the use printed on the casing.