

TYPE APPROVAL CERTIFICATE

Certificate no.:
TALB000002N
Revision No:
2

This is to certify:

that the **Position indicating lights for life-saving appliances: (b) for lifebuoys**

with type designation(s)
IKAROS MOB Light Signal MKIV

issued to

Hansson PyroTech AB
Lindesberg, Örebro Län, Sweden

is found to comply with

TP14475E Ed.1 (2010-03) Canadian life saving appliance standard
SOLAS 74 as amended, Regulation III/4, III/7, III/22, III/32, III/34 & X/3, LSA Code, 2000 HSC Code 8

Application:

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV.

This certificate is recognized by Transport Canada.

Issued at **Høvik** on **2024-02-12**

This Certificate is valid until **2029-02-11**.
DNV local unit: **Sweden Fleet In Service**

Approval Engineer: **Tessa Bieber**

for **DNV**



Digitally Signed By:
Jowita Permoda
Location: **DNV Gdynia, Poland**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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 MOB Light Signal MKIV”,
 lifebuoy position indicating light signal.

Tested with drop height: 60 m
 Design weight: 4.5 kg
 Body colour: Yellow

The light signal can be combined with the “IKAROS MOB Smoke Signal MKIV”, the complete unit will then be called Ikaros “IKAROS MOB Light & Smoke Signal MKIV”.

Application/Limitation

Approved as a position indicating light for a lifebuoy.

The lifebuoy position indicating light is not to be stowed at a height above the waterline exceeding 60 m. Else a drop test shall be performed to verify correct working at installation heights of more than 60 metres.

Expiration date not to exceed 4 years after date of manufacture.

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) and the Canadian Life Saving Appliance Standard – TP14475 E, Part I, Ch. III, item 3.1.4.

Production and installation testing shall be carried out according to IMO Res. MSC.81(70), Part 2, Ch.4 and ISO 24408:2005 item 5.1.

Type Approval documentation

The certification is in accordance with Class programme DNV-CP-338, September 2021.

Drawing No.	Rev.	Title	Date
SBTC 15-0085R		Test record (Temp. cycling, salt & vibration)	2015-03-30
SBTC 15-0074		Test record (60 m drop and 30 cm wave test)	2015-04-13
		MOB lights - Evaluation and test report (IMO MSC/Circ.980)	2015-03-30 2015-04-02
DS 345105	1	Document structure (technical documentation)	2018-05-29
PP 15-04		Test program	2015-04-14
		Lifebuoy Self-Igniting Light, Test Report	2015-04-13 2015-05-19
TR19-012	0	IKAROS MOB Light & Smoke LED light luminous intensity test	2019-12-20

Tests carried out

Tested in accordance with the requirements of IMO Res. MSC.81(70), as amended by IMO Res. MSC.200 (80), IMO Res. MSC.226 (82), IMO Res.323(89) and the Canadian Life Saving Appliance Standard – TP14475 E, Part II, Ch. 4. Production and inspection tests iaw ISO 24408:2005.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, date of manufacture (month and year), date of expiry, lot number and operational restrictions. The product is to be marked in accordance with ISO 24408:2005 item 4.3, LSA Code 1.2.2.9 and 1.2.3.

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

All markings are to be provided in both English and French translations.

Transport Canada Approval

Based on the procedures laid down in the Transport Canada Publication entitled “Procedures for Approval of Life-Saving Appliances, Fire Safety Systems, Equipment and Products (TP14612)”, DNV confirms that the product/s listed in this certificate is/are in accordance with Transport Canada’s requirements.

Periodical assessment

DNV ’s surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least every second year. The arrangement is to be in accordance with procedure described in Class Programme DNV-CP-0338, Section 4