



Marine & Offshore  
Division

Certificate number: 35139/A0 BV

File number: PYR 2466/02

Product code: 6007H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

www.veristar.com

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Nammo LIAB AB**

Lindesberg - SWEDEN

*for the type of product*

**HAND FLARES**

Ikaros Hand Flare, Red (Art. N° 341 500)

### Requirements:

SOLAS 74 Convention as amended,

Reg. III/4, III/34, X/3

IMO Res. MSC.48(66) amended by MSC.207(81), MSC.218(82), MSC.272(85), MSC.293(87), MSC.320(89) & MSC.368(93)

IMO Res. MSC.36(63)-(1994 HSC Code) 8, IMO Res. MSC.97(73)-(2000 HSC Code) 8,

IMO Res. MSC.81(70) amended by MSC.200(80), MSC.226(82), MSC.274(85), MSC.295(87), MSC.321(89), MSC.323(89) & MSC.378(93)

IMO MSC/Circ.980

TP 14612E; TP 14475E

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 02 Dec 2019**

**For BUREAU VERITAS,**

At BV GOTHENBURG, on 02 Dec 2014,

Magne MOLLER



This certificate is recognized by Transport Canada

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. 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. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division 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 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

Article N°	Trademark	Designation	Diameter	Overall length
341 500	HANSON Pyrotech	Ikaros Hand Flare, Red	30mm	243mm

### 2. DOCUMENTS AND DRAWINGS

- Drawings and specifications:

Number	Title	Revision	Date
DS 341500	Hand Flare, red	0	2014/06/13

- Manual(s) for installation use and maintenance.

*No departure from these documents is permitted without the prior consent of the society.*

### 3. TEST REPORTS

The product has been type tested by the manufacturer and witnessed by Bureau Veritas as per test reports listed :

DATE	TEST	
3/11/2004	N° 341 100	“circ.980 – Ikaros Polar MK IV”
21/12/2007		Annual Tests 2007
30/10/2007	SBTC 07-0807R	Temperature cycling test and Salt spray test by SAAB BOFORS TEST CENTER, Sweden
16/10/2008	---	Annual Tests 2008
01/10/2013	---	- Taking into account the amended IMO resolutions
02/04/2014	---	Additional Type Tests (Annual Tests 2013)
30/05/2014	---	Additional Type Tests (Linked to annual Tests 2013)
20/10/2014	444GTB14	Attestation for Pyrotechnics (Markings - Rubbing test)

### 4. APPLICATION / LIMITATION

- As per requirements of regulations stated on front page of this certificate.
- Each hand flare will be supplied with its instructions for use, inspections and on-board maintenance complying with Regulations stated on the front page of this certificate.
- Expiration date not to exceed 48 months after month of manufacture
- The equipment shall be replaced prior the date of expiry which is marked on the signal casing.
- Shall be used as per Manufacturer's operational instructions.

### 5. PRODUCTION SURVEY REQUIREMENTS

**HAND FLARES** are to be supplied by **Nammo LIAB AB** in compliance with the type described in this certificate.

This type of product is within the category HBV of Bureau Veritas Rule Note NR320.

**Nammo LIAB AB** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products :

For information concerning the production survey requirements, **Nammo LIAB AB** has declared that the product may be manufactured at the following manufacturing places:

**Nammo LIAB AB**  
**Box 54**  
**711 22 Lindesberg**  
**SWEDEN**

**6. MARKING OF PRODUCT**

Brief instructions or diagrams clearly illustrating the use of the **HAND FLARE** shall be printed indelibly on its casing (to be both in English and in French);

The signal body shall bear the following marks:

- Manufacturer name, logo or trade-mark
- Type designation
- Date of manufacture (*month and year*)
- Date of expiry
- Lot number
- BV TAC number : 35139/A0 BV

**7. OTHERS**

This approval is given on the understanding that the Society reserves the right to require check tests to be carried out at any time and that the manufacturer will accept full responsibility for informing Shipowners of proper methods of use, storing and maintenance of hand flare and the conditions of this approval.

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