

TYPE APPROVAL CERTIFICATE

This is to certify:**That the Line-throwing appliances**with type designation(s)
PLT Solas

Issued to

Restech Norway AS
BODØ, Norwayis found to comply with
SOLAS 74 as amended, LSA Code as amended. IMO Resolution MSC.81(70) as amended**Application :****Approved for use as Line Throwing Appliance onboard all vessels classed by DNV GL.****This Certificate is recognized by Transport Canada.**Issued at **Høvik** on **2018-08-21**This Certificate is valid until **2023-08-20**.for **DNV GL**DNV GL local station: **Bodø**Approval Engineer: **Nathaniel Frithiof**

Mårten Schei-Nilsson
Head of Section

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.



Product description

"PLT Solas"

line throwing appliance of hand held pneumatic type consisting of a pressurized air cylinder, anodized aluminium & stainless steel launching unit and four projectiles, each containing minimum 230 m nylon line.

Projectile weight: 1.8 kg
Launching unit: 9.6 kg
Fully equipped weight: 11.4 kg

Application/Limitation

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 Canadian Life Saving Appliance Standard TP 14475E Part I, Ch.VII item 7.1.

Production and installation testing shall be carried out according to IMO Res. MSC.81(70), Part 2, Ch.4.

The air cylinder shall be pressurized to minimum 200 bars, maximum 300 bars. The air cylinder shall be checked periodically according to user manual and have a hydrostatic test performed every 5 years from date of manufacture.

The unit shall be stored in a dry and safe place when not in use.

Type Examination documentation

Test report from tests performed at Restech Norway AS, Bodø dated 27th April 2018 and witnessed by DNV GL.

Technical documentation:

Drawing No	Rev.	Title	Date
		PLT Solas - Bill of material	
		PLT Solas - Tensile test of lines for projectiles	2018-04-17
		PLT Solas - Cyclic test of projectile	2018-01-29
		PLT Solas - User Manual	
		PLT Solas - Test report (Cyclic tests, low and high temperatures and launching tests)	2018-04-28
26-00	1.0	PLT Solas - Projectile	2018-04-25
24-05-00	1.0	PLT Solas - Air cylinder cover	2018-04-24
24-04-00	1.0	PLT Solas - Grip	2018-04-25
24-03-00	1.0	PLT Solas - Trigger valve	2018-04-24
24-02-00	1.1	PLT Solas - Regulator	2018-05-03
24-01-00-1	1.0	PLT Solas - Main unit	2018-04-25
24-00-00	1.0	PLT Solas - Base unit, overview	2018-04-25

Tests carried out

Tests are documented in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC.81(70) Part 1, as amended by IMO Res. MSC.200(80) and IMO Res. MSC.226(82), and Canadian Life Saving Appliance Standard TP 14475E Part II, item 9.

Marking of product

The product is to be indelibly marked in both French and English according to LSA Code as required by LSA Code item 1.1.2.9 and Canadian Life Saving Appliance Standard TP14475E item 15.1.2.

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

Transport Canada Approval



Job Id: **262.1-028864-1**
Certificate No: **TALB000002A**

Based on the procedures laid down in the Transport Canada Publication entitled "Approval Procedures for, Life Saving Equipment and Structural Fire Protection Products (TP 14612)", DNV GL confirms that the product/s listed in this certificate is/are in accordance with Transport Canada's requirements.

Periodical assessment

DNV GL's surveyor is to be given permission to perform Periodical Assessments at any time during the validity of this certificate and at least after 2 years and again after 3.5 years. The arrangement is to be in accordance with procedure described in DNVGL-CP-0338 Section 4.