EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB000015X
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 Lifebuoys

with type designation(s)
Astra

Issued to
TR.EM. - S.R.L.
Osteria Grande BO, **Italy**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2020/1170,**
item No. MED/1.1. SOLAS 74 as amended, Regulation III/4, III/7, III/34 & X/3, LSA Code, 2000 HSC Code 8

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

This Certificate is valid until **2026-05-14**.

Issued at **Høvik** on **2021-05-15**

DNV local station:
Italy/Malta CMC

Approval Engineer:
Tessa Biever

Notified Body
No.: **0575**

for **DNV AS**
Digitally Signed By: Øyvind Hoff
Location: DNV Høvik, Norway
on behalf of

Sverre Olav Bergli
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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

Product description

“Astra” Art. N 14 35060 lifebuoy:

Weight	2.5 kg
Diameter, inner/outer:	400/650 mm
Colour	Orange
Max drop height:	30 m
Buoyancy material:	Double component polyurethane "Duanapol C 035 HA" foam OR “Deltanat SWE + Deltapol 55904/BO” by Deltapor Spa, Italy.
Cover material:	High-density "Rigidex HD 5502 GA" polyethylene.

Application/Limitation

The lifebuoy does not have sufficient mass to operate the quick-release arrangement provided for self-activated smoke signals and self-igniting lights.

Self-igniting light and retro-reflective material used have to be approved according to the Marine Equipment Directive and bear the Mark of Conformity.

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).

Each lifebuoy shall be marked in block capitals of the Roman alphabet with the name and port of registry of the ship on which it is carried.

Production and installation testing shall be carried out according to IMO Res. MSC. 81(70), Part 2, Ch.3.

Type Examination documentation

Basis for approval:

Title	Date
Test report Nr. N.97DG64TA	1997-09-17
"Astra" lifebuoy ring technical file	1999-10-20
Letter/product description from TR. EM SRL	2001-01-11

Tests carried out

Tests are documented in accordance with the recommendation on testing of Life-Saving Appliances, IMO Res. MSC.81(70) Part 1, as amended by IMO Res. MSC.200(80) and IMO Res. MSC.226(82).

Marking of product

The product is to be indelibly marked with name and address of manufacturer, type designation, date of manufacture, date of expiry, operational restrictions and the MED Mark of Conformity (see page 1).