

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

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 GL AS under the authority of the Government of Norway.

This is to certify:

That the Marine evacuation systems

with type designation(s)
UIAS - MES

Issued to

Undertun Industri AS
SKODJE, Norway

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773**,
item No. MED/1.27. SOLAS 74 as amended, Reg. III/4, III/15, III/26, III/34 & X/3, LSA
Code and 2000 HSC Code 8.

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

This Certificate is valid until **2023-09-24**.

Issued at **Høvik** on **2018-09-25**

DNV GL local station:
Ålesund

Approval Engineer:
Tessa Biever



Notified Body
No.: **0575**

for **DNV GL AS**

Roald Vårheim
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.

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 GL 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.



UIAS - MES is a Marine Evacuation System intended for use on ferries and high speed light craft (HSLC). The system is mainly made of aluminum and glass fiber. Bolts, connecting- and strength parts are in stainless steel performance.

The MES consists of a frame that is attached to the hull and a door/walkway with a raft fixed to it at the end, by two shackles. When the door is lowered by its own hydraulic system, a gangway is created provided with a railing. The gangway has both a friction/walking path and a slide path. When the door is in horizontal position the liferaft is released and deployed and stays connected to the gangway. After the raft has been deployed the door/walkways motion is controlled by an accumulator giving the door upwards lift to stabilize the raft and absorb the motion between ship and raft at sea.

The MES has it's own electrical control and power source. Connection to the ship is only for charging of the power source by 230VAC. The operation of the system is done from the bridge panel in wheelhouse or the control panel on the left side of the system on deck. The MES can be deployed manually or automatically.

The MES can be equipped with one of the following system liferafts:

1. Open reversible liferaft (OR) – 100 DKR+ and 150 DKR+ - (manufactured by Viking Life Saving Equipment AS – resp. 100 and 150 person capacity)
2. Self righting liferaft (SR) – 100 DKS U and 150 DKS U - (manufactured by Viking Life Saving Equipment AS – resp. 100 and 150 person capacity)

The MES can either be made:

1. in a short version:
 - a modest outer measurement of 2684mm x 1629mm x 592mm (H x W x D)
 - the weight without raft is 390 kg
 - a gangway length of 2,6m
2. in a long version:
 - a modest outer measurement of 2913mm x 1629mm x 592mm (H x W x D)
 - the weight without raft is 426 kg.
 - a gangway length of 2,8m

This MES in combination with open reversible rafts is intended for installation on high speed vessels/ferries trading in sheltered waters and suitable climatic conditions.

More details can be found in the user manual version 03.10.11 and in the drawings as listed under Type Examination documentation.

Application/Limitation

- The system is subject to acceptance by the Flag Administration.
- The system is approved for the following max. installation heights: 2.5m
- Max. angle for the different paths:
 - o Angle of slide path: max. 35-55°
 - o Angle of walking path: max. 38°
- Max. evacuation capacity for UIAS MES in combination with SR/OR: 150 persons in 17 min. 40 sec./30 min. according to HSC Code
- The main/system liferafts shall have separate MED Approval and be wheelmarked.
- Open reversible liferafts shall be accepted by Flag.
- Gas cylinders used for inflation of the systemrafts shall be of an approved type.

- Components in the gas inflation system for the system raft shall be approved according to ISO 15738:2002 or equivalent standard.
- The arrangement of the MES onboard any vessel, including the passageway and embarkation areas, are subject to approval by the administration to ensure that the flow rate as stated above can be maintained throughout the total evacuation of the number of persons for which the MES is certified for.
- It shall be verified that the ship on which the MES is installed is equipped with a sufficient number of rescue boats to satisfactory marshal and support the bowing and tow away, as applicable, of all the associated life rafts within the times allowed for embarkation as per SOLAS Ch.III/Reg.21.1.3 and 31.1.5.
- Production and installation testing shall be according to IMO Res. MSC. 81(70), part 2.

The following is to be submitted to the flag administration in each case, either by the yard, owner or equipment manufacturer:

Type Examination documentation

Tests carried out

Test documentation in accordance with recommendation on testing of Lifesaving Appliances, IMO Res. MSC 81(70), part 1 as given by the Technical Documentation specified above.

Marking