TYPE EXAMINATION CERTIFICATE – EC MODULE B

Certificate no.:
MEDB00009BD

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

that the Oil/water interface detectors

with type designation(s)
UIT-200 PORTABLE OIL/WATER INTERFACE DETECTOR

issued to
Shanghai Rongde Engineering Equipment Co., Ltd.
Shanghai, **China**

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2024/1975,**
item No. MED/2.2. Marpol 73/78 as amended, Annex I Regulation 32, IMO Res. MEPC.5 (XIII)

Manufacturers authorised representative
DARLSA ELECTRONIC APPLICATIONS S.A.
Athens, Greece

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

This Certificate is valid until **2029-12-09**.

Issued at **Hamburg** on **2024-12-10**

DNV local unit:
Shanghai

Approval Engineer:
Anna Piotrowska

Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Röder
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 SE 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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 USD 300 000.

Product description

UIT-200 is a portable device to detect oil/water interface, measure ullage and temperature tested and approved according to IMO Resolution MEPC.5 (XIII).

UIT-200 detector is composed of detecting sensor, casing, steel tape, display unit. The measuring principle based on a special sensor, which is used to detect medium of oil, water and air. The processed data are converted to the sounding signal representing identified medium, respectively. At the same time the LCD display screen presents the type of the detected medium: ''AIR'', ''OIL'' or '' WATER''.

Application/Limitation

The detector can be used in gas-dangerous area of oil carriers.

This equipment cannot replace the required permanent level gauging device on oil product and chemical carriers for which closed gauging is required.

The valid explosion-proof certificate for the UIT-200 detector shall be always available on board the vessel.

A copy of the operation and maintenance manuals listed under Type Examination documentation shall be on board the vessel at all times.

Type Examination documentation

Assembly Drawings:

Drawing Title	Drawing Number	Revision (date)
General assembly	UIT-200-100	- (2012-01-05)
Battery box assembly	UIT-200-122	- (2012-01-05)
Reading window assembly	UIT-200-150	- (2012-01-05)
Sensor assembly	UIT-200-160	- (2012-01-05)
Display assembly	UIT-200-170	- (2012-01-05)
SCYS-9 Sensor PCB assembly	UIT-200-210	- (2012-01-05)
RD-UIT-200 Display PCB assembly	UIT-200-220	- (2012-01-05)

Electrical and Instrumentation Drawings:

Drawing Title	Drawing Number	Revision (date)
SCYS-9 Sensor circuit	UIT-100-211	- (2012-01-05)
SCYS-9 Sensor PCB wiring	UIT-100-311	- (2012-01-05)
SCYS-9 Sensor PCB components list	UIT-100-410	- (2012-01-05)
RD-UIT-200 Display PCB circuit	UIT-100-221	- (2012-01-05)
RD-UIT-200 Display PCB top wiring	UIT-100-321	- (2012-01-05)
RD-UIT-200 Display PCB circuit components list	UIT-100-420	- (2012-01-05)

Operation and Maintenance Manuals:

Drawing Title	Drawing Number	Revision (date)
Operation Manual for UIT-200 Portable Ullage Oil/Water Interface Detector	UIT-200-0-04	1.00 (2012-06-12)

Tests carried out

Tested in accordance with the requirements of the specification with a reference to IMO Resolution MEPC.5 (XIII):

- Shanghai Inspection and Testing Institute of Instruments and Automatic Systems (SITIIAS),
  103 Cao Bao Road, Shanghai, China
  Date of testing: 2012-06-21 – 2012-07-20
  Test report No. A12-046-WT, issue date 2012-07-25

- Shanghai Inspection and Testing Institute of Instruments and Automatic Systems (SITIIAS),
  103 Cao Bao Road, Shanghai, China
  Date of testing: 2012-09-24 – 2012-09-27
  Test report No. A12-046-WT-01, issue date 2012-10-10

Marking of product

For traceability to this EC-Type Examination, each unit to be marked with:

- Manufacturer's name or trademark
- Type designation
- Serial number
- Mark of conformity

A copy of this certificate should be carried on board the vessel using this equipment.

Revision history

Revision	Date of issuance	Description
0	2024-12-10	Initial certificate