DNV·GL

Certificate No:
MEDB0000339

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 Oil discharge monitoring and control system for an oil tanker

with type designation(s)
Oil Discharge system OILCON® Mark 6M

Issued to
VAF Instruments B.V.
Dordrecht, Zuid-Holland, Netherlands

is found to comply with the requirements in the following Regulations/Standards:
Regulation **(EU) 2018/773,**
item No. MED/2.5. Marpol 73/78 as amended, Annex I Regulation 31, IMO Res. MEPC.108(49), IMO Res. MEPC.240(65) and IMO MEPC.1/Circ.858

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

This Certificate is valid until **2024-06-23**.

Issued at **Høvik** on **2019-06-24**

DNV GL local station:
Rotterdam, Product Certification /Verification

Approval Engineer:
Erik Istad

Notified Body
No.: **0575**

for **DNV GL AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

© DNV GL 2014. DNV GL and the Horizon Graphic are trademarks of DNV GL AS.

Product description

Main components of The OILCON system Mark 6M Oil Discharge Monitoring & Control System:

Main Control Unit	Electro Pneumatic Unit
Skid containing the measuring cell	Pressure regulating valve
Samling Pump	Automatically controlled valves.
Starter box	Orifice plate
Sample Valves	
Sample Probe	

The equipment is designed and tested to meet the requirements of the IMO Resolution MEPC.108(49) and MEPC.240(65).

Application/Limitation

This EC-Type Examination covers system design principle and installation on board with regards to fire and explosion hazard, as well as performance. Arrangement drawing and certificate for intrinsically safe equipment is to be submitted for each installation. Inspection of intrinsically safety is to be carried out upon installation on board.

The oil content meter is tested and approved according to IMO Res. MEPC.108(49) for:
- Crude oils
- "Black" and "white" products

The oil content meter is also tested and approved for the blends of petroleum oil and bio-fuels as given in IMO MEPC.240(65) and MEPC.1/Circ.761, to meet the requirements for testing bio-fuel blends containing 99% and 75% or more of petroleum oil.

Type Examination documentation

Drwg.No.;	*Rev.;*	*Title;*
0206-0088	B / 21.11.2011	MCU MK6M (2 sheets)
0806-0005-3	E / 21.03.2011	Control Drawing for Mark 6 Oil Discharge Monitor
0806-0005-4	D / 21.03.2011	Notes Control Drawing for Mark 6 Oil Discharge Monitor
0806-0008	A / 17.08.2018	Control Drw. for Mark 6 oil Discharge monitor (sh. 1 of 2)
0806-0008	A / 17.08.2018	Notes Control Drw. for Mark.6M oil discharge (sh. 2 of 2)
0806-1041-4	I / 31.03.1994	Dimensional Drwg. Ball Valve Flowmeter Kit, Ballast Monitor
0806-1075-4	D / 18.01.2002	Dimensional Drwg. Motor Starter Box, Ballast Monitor
0806-1076-3	G / 25.01.2001	Dimensional Drwg. Sample Pump Motor
0806-1077-4	E / 28.10.2002	Dimensional Drwg. Sample Valve
0806-1260-3	D / 26.10.2001	Assembly Drwg. Sample Pump (sheet 1 of 2)
0806-1260-4	I / 26.10.2001	Parts List Sample Pump (sheet 2 of 2)
0806-1265-4	D / 11. 01.2002	Parts List Sampling Probe Pipe Conn. Ø15 mm
0806-1267-4	F / 18.01.2002	Parts List Motor Starter Box
0806-1268-4	D / 08.01.2002	Parts List Isolating Valve Ø15 mm
0806-1272-4	B / 05.06.2003	Basic Spare Parts Kit
0806-1279-4	E / 17.09.2004	Parts List Detector Cell
0806-1287	30.01.2012	Dim Drwing + Parts list EPU 1-2 sample valves
0806-1288	A / 30.01.2012	Dim. Drwg. + Partslist Ballast Skid
0806-1306	B / 11-1-2019	Dim. Drawing + part list EPU
0806-1308	A / 11-1-2019	Dim. Drawing Partslist Ballast skid
0806-1621-4	C / 02.04.2002	Grab Cock and Injection Point
0806-1622-4	B / 25.10.2002	Light Scatter Cell
0806-2032-4	A / 25.04.2003	Connection Dia gram Motor Starter Box
0806-2037-4	C / 21.03.2011	Connection Diagram, Cable Specification

0806-2048	A / 02.12.2011	Electr, Connection Diagram
0806-2057	A / 22.01.2019	Electr, Connection Diagram Ballast Monitor
0806-2058	A / 22.01.2019	Electr, Conn Diagram Ballast Monitor
0806-5019-4	D / 10.07.1995	Schematic Diagram Overboard Valve Control
0806-5026	A / 28.05.2015	Schematic Diagram Oilcon Ballast
0806-5030	22.06.2018	Schematic Diagram Oilcon Ballast
0806-8016-3	M / 20.06.2018	Installation Flowmeter
0806-8023-3	B / 07.06.1996	Installation Requirements F.W. Supply Line
0806-8035-3	D / 31.10.2001	Schematic Installation Diagram
0806-8038-3	E / 21.03.2011	Bulkhead Penetration and Piping Diagram (sh.1 of 3)
0806-8038-3	E / 21.03.2011	Bulkhead Penetration and Piping Diagram (sh.2 of 3)
0806-8038-4	D / 21.03.2011	Bulkhead Penetration and Piping Diagram (sh.3 of 3)
0806-8039-4	C / 05.12.2001	Schematic Pipe Arrangement
0806-8040-4	B / 07.01.2002	Cable Termination Instruction
0806-8090	11.06.2018	Schematic Installation diagram
0806-8091	11.06.2018	Schematic Installation diagram
0806-8092	12.06.2018	Bulkhead Penetration and piping Diagram (sh.1 of 4)
0806-8092	08.01.2018	Bulkhead Penetration and Piping Diagram (sh.2 of 4)
0806-8092	12.06.2018	Bulkhead Penetration and piping Diagram (sh.3 of 4)
0806-8092	12.06.2018	Bulkhead Penetration and piping Diagram (sh.4 of 4)
0806-8093	26.06.2018	Schematic pipe arrangement
0871-1212-3	A / 02.12.2002	Assembly Drwg. Window Wash Pump (sh.1 of 2)
0871-1212-4	A / 02.12.2002	Parts List Window Wash Pump (sh.2 of 2)
0871-1213	20.01.2015	Assembly Drwg. Window Washpump
0871-1214	A / 14.01.2019	Assy Windowwash pump
0899-1256-3	D / 27.09.2001	Parts List Pressure Reducing Valve Fresh Water
0899-1258-3	E / 07.01.2002	Parts List air Supply Units

General document;
-Technical Manual, Instructions for installation, operation and maintenance, 641 Oilcon® Mark 6M, Publication no. TIB-641-GB-0215
- Technical Manual, instruction for installation, operation and maintenance, 642 OilCon® Mark 6M, Publication no. TIB-642-GB-0119
-Asbestos-free declaration, dated 2015

Tests carried out

Tested in accordance with the requirements of the specification contained in Part 1 of the Annex to the Guidelines and Specification contained in IMO Resolution MEPC.108(49);
-Institut Fresenius AG, Cert.No. 104_254598, dated Dec.20, 2004, Certificate of Type Approval for Oil Content Meters intended for Monitoring the Discharge of Oil-Contaminated Water from Cargo Tank Areas of Oil Tankers.

Tested in accordance with the requirements of the specification contained in Part 2 of the Annex to the Guidelines and Specification contained in IMO Resolution A.586 (14);
Vibration-, inclination-, humidity-, dry heat-, cold- and EMC-tests;
-Institut Fresenius GMbH, Test data and results of test, additional test for blends and Bio-fuels, tested on S.No 150203, Appendix to report No.114-3189674, dated 11.11.2014
-Test Programme No.01-09-2001 Rev.D w/ Summary of results
-Dijkstra Advies, Research & EMC Consultancy B.V. (DARE), Report No. 03C00259RPT01, Electromagnetic Compatibility Test Report
- Dijkstra Advice, Research & EMC services B.V(DARE). Report No. 18C00636RPT01, Electromagnetic Compatibility Test Report
-TNO Building and Construction Research, TNO Report No.2003-CMC-R008, Vibration Test of 'Oilcon Mark 6'
-KEMA Quality B.V., EC-Type Examination Certificate No. KEMA 03ATEX1187 X w/Amendment 1, for Oil Discharge Monitor type Oilcon Mark 6

-Test report of the Main Control Unit 0206-0088 for the Oil discharge Monitor Type Oilcon Mark 6M dated 31/01/2012
- Enviromental test report for a Main Control Unit, model MCU/MK6M report number 2147179.0502-EMC dated 26/01/2012
- Enviromental test report for a Main Control Unit, model MCU/MK6M report number 2147179.0501-EMC dated 26/01/2012
- Certificate Electromagnetic compability Certfificate nr: 2147179.0551-EMC dated 26/01/2012
- Sebert Trillingstechniek B.V. – Climate test on Maritime Control Equipment, report No. M18.003-P18.002 VAF Instruments B.V.
- Sebert Trillingstechniek B.V. - Vibration test on Maritime Control Equipment, report No. M18.001-P18.001 VAF Instruments B.V.

Marking of product

For traceability to this type approval, each unit is to be marked with;
-Manufacturer's name or trade mark
-Type designation
-Serial No.
-Mark of Conformity

Mark of Conformity

The manufacturer is allowed to affix the Mark of Conformity according to Article 11 in the Council Directive 96/98/EC on Marine Equipment and shall issue a Declaration of Conformity, only when the module D or E or F of Annex B in the same directive is fully complied with.

Module D: The quality system for production and testing shall be approved by the Notified Body.

Module E: The quality system for inspection and testing shall be approved by the Notified Body.

Module F: Compliance of the products to type as described in this EC Type-Examination Certificate must be verified by the Notified Body who also shall issue a Certificate of Conformity.

This certificate replaces previous EC type-Examination Certificate No. MED-B-9868.