



NIPPON KAIJI KYOKAI

Certificate

Certificate No.
TA201305E(R)

OF

TYPE APPROVAL

Item	: Oil Discharge Monitoring and Control System for oil tankers
Product name	: Oilcon Mark 6M
Product descriptions	: Intended for installation onboard oil tankers for ballast water monitoring control and alarm of contents of oil at discharge overboard.
Applicant	: VAF Instruments B.V. Vierlinghstraat 24, 3316 EL Dordrecht, P.O. Box 40, 3300 AA Dordrecht, The Netherlands
Manufacturer	: The same as the Applicant.
Documentations	: See Annex.
Applications	: See Annex.
Limitations	: See Annex.

THIS IS TO CERTIFY that the above type has been approved by Nippon Kaiji Kyokai with type approval No. N-861 and that products of the above type will be accepted for use on ships classed with the Society as complying with the relevant requirements of the Society's *Rules for Marine Pollution Prevention Systems*, the *MARPOL 73/78, as amended, Annex I, Regulation 31, IMO Resolution MEPC.240(65)* and *IMO MEPC.1/Circ.761* subject to conditional upon product verification being carried out in the presence of the surveyor of the Society.

This certificate is valid from 23 June 2020 until 22 June 2025.
Issued at Tokyo on 26 November 2020.

NIPPON KAIJI KYOKAI



Y. Takao
General Manager
Material and Equipment Department



1. Documentations

General document:

Technical Manual 642, Instruction for installation, operation and maintenance
– Publ. No. TIB-641-GB-0215 and TIB-642-GB-0119

Drawings:

<u>Drawing No.</u>	<u>Rev.</u>	<u>Title</u>
0806-0005-3	E	Control Drawing for Mark 6 Oil Discharge Monitor
0806-0008	B	Control Drawing for Mark 6M Oil Discharge Monitor (2 pages)
0806-0005-4	D	Notes Control Drawing for Mark 6 Oil Discharge Monitor
0806-0008	A	Notes Control Drw. for Mark 6M Oil Discharge Monitor
0806-1041	J	Dimensional Drwg. Ball Valve Flowmeter Kit, Ballast Monitor
0806-1075	E	Dimensional Drwg. Motor Starter Box, Ballast Monitor
0806-1076	I	Dimensional Drwg. Sample Pump Motor
0806-1077	F	Dimensional Drwg. Sample Valve
0806-1260	K	Assembly Drwg. Sample Pump
0806-1260	K	Parts List Sample Pump
0806-1288	D	Dim. Drwg. + Parts List Ballast Skid
0806-1287	A	Dim. Drwg. + Parts List EPU, 1-2 Sample Valves
0806-1306	D	Dim. Drawing + Parts List EPU Mark 6M
0806-1308	D	Dim. Drawing Parts List Ballast Skid Mark 6M
0206-0088	B	MCU MK6M (2 pages)
0806-1265	G	Parts List Sampling Probe Pipe Conn. Φ 15mm
0806-1267	G	Parts List Motor Starter Box
0806-1268	E	Parts List Isolating Valve Φ 15mm
0806-1272-4	B	Basic Spare Parts Kit
0806-1279	F	Parts List Detector Cell
0806-1621	E	Grab Cock and Injection Point
0806-1622-4	B	Light Scatter Cell
0806-2032-4	A	Connection Diagram Motor Starter Box
0806-2037	D	Connection Diagram, Cable Specification
0806-2048	A	Electric Connection Diagram
0806-2057	A	Electr. Connection Diagram Ballast Monitor Mark 6M MEPC 108(49)
0806-2058	A	Electr. Conn Diagram Ballast Monitor Mark 6M 2 dP/I Transmitters
0806-5019-4	D	Schematic Diagram Overboard Valve Control
0806-5026	A	Schematic Diagram Ballast Monitor
0806-5030	22/06/2018	Schematic Diagram Oilcon Ballast Monitor Mark 6M
0806-8016	M	Installation Flowmeter Ballast Monitor Mark 5/6
0806-8016-3	L	Installation Flowmeter
0806-8023-3	B	Installation Requirements F.W. Supply Line
0806-8035	E	Schematic Installation Diagram
0806-8038	G	Bulkhead Penetration and Piping Diagram (4 pages)
0806-8039-4	C	Schematic Pipe Arrangement
0806-8040-4	B	Cable Termination Instruction
0806-8090	11/06/2018	Schematic Installation Diagram Oilcon Monitor System with 1×dP-I Transmitter Mark 6M
0806-8091	11/06/2018	Schematic Installation Diagram Oilcon Monitor System with 2×dP-I Transmitter Mark 6M



<u>Drawing No.</u>	<u>Rev.</u>	<u>Title;</u>
0806-8092	12/06/2018	Bulkhead Penetration and Piping Diagram Mark 6M (sh.1 of 4)
0806-8092	08/01/2016	Bulkhead Penetration and Piping Diagram Mark 6M (sh.2 of 4)
0806-8092	12/06/2018	Bulkhead Penetration and Piping Diagram Mark 6M (sh.3 of 4)
0806-8092	12/06/2018	Bulkhead Penetration and Piping Diagram Mark 6M (sh.4 of 4)
0806-8093	26/06/2018	Schematic Pipe Arrangement Skid Mark 6M
0871-1212-3	A	Assembly Drwg. Window Wash Pump (sh.1 of 2)
0871-1212-4	A	Parts List Window Wash Pump (sh.2 of 2)
0871-1213	B	Assembly drawing Window Wash Pump
0871-1214	B	Assy Windowwash Pump Mark 6M
0899-1256-3	D	Parts List Pressure Reducing Valve Fresh Water
0899-1258-3	E	Parts List air Supply Units

Test reports and certificates:

- 1) - Test laboratory : INSTITUT FRESENIUS AG
- Report number : 104_254598
- Report name : Certificate of type approval for oil content meters intended for monitoring the discharge of oil-contaminated water from the cargo tank areas of oil tankers
- 2) - Test laboratory : Dijkstra Advices, Research & EMC Consultancy B.V.
- Report number : 03C00259RPT01
- Report name : Electromagnetic Compatibility Test Report, Measurement results of an Oil discharge monitor
- Test programma: No.01-09-2001 Rev. D
- 3) - Test laboratory : TNO Building and Construction Research
- Report number : 2003-CMC-R008
- Report name : Vibration Test of 'Oilcon Mark 6'
- 4) - Test laboratory : KEMA Quality B.V.
- Report number : KEMA 03ATEX1187X including Amendment 1
- Report name : EC-Type Examination Certificate, for 'Oilcon Mark 6'
- 5) - Test laboratory : Cosmos Corporation
- Report number : E89244
- Report name : EMC Test Report for Differential Pressure Transmitter
- 6) - Test laboratory : SGS Institute Fresenius
- Report number : 114_3189674
- Report name : TEST DATA AND RESULTS OF TESTS CONDUCTED ON AN OIL CONTENT METER IN ACCORDANCE WITH PART 1 OF THE ANNEX TO THE GUIDELINES AND SPECIFICATIONS CONTAINED IN IMO RESOLUTION MEPC.108(49) AS AMENDED BY IMO RESOLUTION MEPC.240(65) OF 17 MAY 2013"2013 AMENDMENTS TO THE REVISED



GUIDELINES AND SPECIFICATIONS FOR OIL DISCHARGE MONITORING AND CONTROL SYSTEMS FOR OIL TANKERS" AND INCLUDING MEPC.1/CIRC.761 OF 4 AUGUST 2011"2011 GUIDELINES FOR THE CARRIAGE OF BLENDS OF PETROLEUM OIL AND BIO-BUELS")

- 7) - Test laboratory : DEKRA Certification B.V.
- Report name : Test report of the Main Control Unit 0206-0088 for the Oil discharge
Monitor Type: Oilcon Mark 6 M (Date: 31 January 2012)
- 8) - Test laboratory : DEKRA Certification B.V.
- Report number : 2147179.0501-EMC
- Report name : EMC test report for a Main Control Unit, model MCU/MK6M
- 9) - Test laboratory : DEKRA Certification B.V.
- Report number : 2147179.0502-EMC
- Report name : Environmental test report for a Main Control Unit, model MCU/MK6M
- 10) - Test laboratory : DEKRA Certification B.V.
- Certificate No. : 2147179.0551-EMC / 2147179.0552-EMC
- 11) - Test laboratory : Sebert Trillingstechniek B.V.
- Report No. : M18.001-P18.001 VAF Instruments B.V.
- Report name : Vibration test on Maritime Control Equipment
- 12) - Test laboratory : Sebert Trillingstechniek B.V.
- Report No. : M18.003-P18.002 VAF Instruments B.V.
- Report name : Climate tests on Maritime Control Equipment
- 13) - Test laboratory : Dijkstra Advice, Research & EMC Services B.V.
- Report No. : 18C00636RPT01
- Report name : Electromagnetic Compatibility Test Report "Test results of an E. P. U. (control box to control oil discharge on ships), model Mark 6M

2. Applications

This type approval covers only the oil discharge monitoring and control system to which marking of explosion proof classification of EEX ia IIB T4 is applied in accordance with the Amendment 1 to EU-Type Examination Certificate No. KEMA 03ATEX1187X.

3. Limitations

- This type approval covers only the oil discharge monitoring and control system.
- The oil content meter is tested and approved for crude oils, "black" and "white" products.



- The cargo oil monitor is approved for following biofuels where the installed operating program is of Ver. 2.10 or newer.

Biofuel blends of Diesel/gas oil containing 25% or less FAME
Biofuel blends of Diesel/gas oil containing 25% or less Vegetable oil
Biofuel blends of Gasoline containing 25% or less Ethyl alcohol
Biofuel blends of Diesel/gas oil containing 25% or less Alkanes (C10-C26) liner and branched with a flashpoint > 60°C
Biofuel blends of Diesel/gas oil containing 25% or less Alkanes (C10-C26) liner and branched with a flashpoint \leq 60°C

- Under the verification of the surveyor of the Society, operating program in existing system may be updated from older than Ver. 2.10 to the newest. After the verification, a copy of this certificate and revised ODM manual are to be provided onboard.

- END OF CERTIFICATE -