



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA25366M

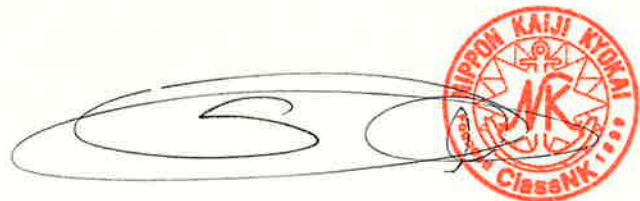
This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 1, Part 7 of "Guidance for the Approval and Type Approval of Materials and Equipment for Marine Use" and the relevant Society's Rules.

This certificate is issued to

Applicant:	NORSK ANALYSE AS.
Place of Applicant:	Wirgenesvei 10, 3157 Barkåker, Norway
Manufacturer:	Norsk Analyse AB
Place of Manufacturing:	Nyängsgaten 5, 66434 Grums, Sweden
Product description:	Continuous Emission Monitoring System
Model:	ShipCEMS Compact
Approval No.:	25A016
Valid until:	19 May 2030

The details are described in the attached sheet(s).

Issued at Tokyo on 20 May 2025.



S. Oishi
S. Oishi
General Manager
Machinery Department

Note: The manufacturer, if desired, is requested to apply to the Society for renewal prior to the expiration date.

Specification & documents:

1. Particulars:

Power supply: 110 / 230V, 50 / 60 Hz

2. Components:

Main Components	
Analyser Cabinet	Analyser Module SSC-AM-SO2-CO2, SSC-AM-ALL, SSC-AM-ALL+CH4, SSC-AM-ALL+COe
	(2x) Mains Fuse 10A 230V
	R3 Relay
	Power Supply (24V DC)
	SCC – A/C Unit
	PLC
	CPU
	I/O cards
	SCC- Air Reduction Regulator
	(4x) Stream Select Solenoid Valve 3/2
	SCC – Pump
	Ship CEMS Compact – HMI
	Ship CEMS – Switch 5-port
	Filter F2-RA
	Flow Controller (C-series, F-series)
	Low Profile Power Connector Kit
	SCC – GAS Cooler
	Damper Kit – Analyser Module
	SCC Wire Damper Kit
	Signal Converter O2 Sensor (F-Series)
PoE Adapter Module (Option)	
Sample Probe	Sample Quill
	Filter
	Calibration Port
	Sample Port
	Heated Sample Line

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Attached sheet -2/3 to the Certificate No. TA25366M

3. Documentation and Test Reports:

- ShipCEMS Compact User Manual, 50118-D21-05, Rev.05
- ShipCEMS Compact Installation Manual, 50118-D22-02, Rev.02
- GENERAL ARRANGEMENT, 50118-1001, Rev.01
- GENERAL ARRANGEMENT – INTERNAL VIEW, 50118-1003, Rev.03
- Wire Rope Dampers on Unistrut, 50118-1004, Rev.00
- GENERAL ARRANGEMENT DRAWING SAMPLE PROBE, 50118-1201, Rev.01
- GENERAL ARRANGEMENT DRAWING SAMPLE PROBE, 50118-1202, Rev.00
- SYSTEM DIAGRAM, 50118-3001, Rev.02
- TERMINATION DRAWING OVERVIEW, 50118-5001, Rev.01
- TERMINATION DIAGRAM POWER DISTRIBUTION, 50118-5002, Rev.01
- TERMINATION DIAGRAM SIGNAL DISTRIBUTION, 50118-5003, Rev.03
- TERMINATION DIAGRAM SAMPLE PROBE (SP), 50118-5005, Rev.00
- TERMINATION DIAGRAM CONDENSATE DRAIN TANK (OPTIONAL), 50118-5006, Rev.01
- SIGNAL DISTRIBUTION C-SERIES FLOW CONTROLLER, 50118-5008, Rev.02
- SIGNAL DISTRIBUTION F-SERIES FLOW CONTROLLER, 50118-5009, Rev.01
- SYSTEM BLOCK DIAGRAM P&ID DISTRIBUTION OVERVIEW, 50118-6001, Rev.00
- SYSTEM BLOCK DIAGRAM SIGNAL & POWER, 50118-6002, Rev.00
- NETWORK MAP ANALYSER NETWORK, 50118-8201, Rev.01

- To be continued -

Test items & approval conditions:

1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS (IACS UR E10 Rev.9 basis)		Mark
External examination		X
Operation test and performance test		X
Electric power supply failure test		X
Power supply fluctuation test	Electric	X
	Pneumatic and Hydraulic	--
Insulation resistance test		X
High voltage test		X
Pressure test (Pneumatic and Hydraulic)		--
Dry heat test (Temperature 55°C × 16 hours)		X
Damp heat test		X
Vibration test (Acceleration ±0.7g × 2.5 hours)		X
Inclination test		X
Cold test (Temperature 5°C × 16 hours)		X
Salt mist test		--
Electrostatic discharge immunity test		X
Radiated radio frequency immunity test		X
Conducted low frequency immunity test		X
Conducted high frequency immunity test		X
Burst / Fast transient immunity test		X
Surge immunity test		X
Radiated emission test		X
Conducted emission test		X
Flame retardant test		--

2. Approval condition:

The product is not allowed to be installed in the bridge or on open decks.