DNV·GL

Statement of Compliance

This is to confirm that the undernoted product has been tested in accordance with the relevant requirements of MEPC.259(68) in respect of washwater monitoring.

HACH Company

Company	Hach Company Loveland, Colorado U.S.A.				
Product Description	Exhaust Gas Cleaning System Washwater Monitoring				
Туре	Hach Washwater Monitoring System for Exhaust Gas Cleaning Systems				
Range of Application:	The Hach Washwater Monitoring System is intended for installation on-board				
	vessels operating an exhaust gas cleaning system (EGCS) and is found to be in compliance with the requirements of Resolution MEPC.259(68) – "2015 Guidelines for exhaust gas cleaning" adopted on 15. May 2015, Chapter 10 "Washwater"				
	The Hach Washwater Monitoring System meets the following requirements:				
	-	Principle of detection for $PAH_{PHE\ Eq}$	(MEPC.259(68), 10.1.3.3)		
	-	Turbidity influences on $PAH_{PHE\ Eq}$	(MEPC.259(68), 10.2.3)		
	-	Principle of detection for pH	(MEPC.259(68), 10.2.2)		
	-	Resolution for pH	(MEPC.259(68), 10.2.2)		
	-	Temperature compensation for pH	(MEPC.259(68), 10.2.2)		
	-	Principle of detection for Turbidity	(MEPC.259(68), 10.2.5)		
Documents:	Test reports:				
	"MEPC.259(68) Test Report for MEPC.259(68) Marine Type Approval" Hach Company, Version 1.0 - September 30 th , 2019				
	"MEPC Test Report, MEPC.259(68) Marine Type Approval; Hach Washv Monitoring System - EGCS" Hach Company, December 4 th , 2020				

DNV·GL

Statement of Compliance

Technical Data

Hach Washwater Monitoring System						
Component	Model	Sensor type	Range			
Controller	SC1000	SC1000 Probe Module with Display Module; 4 or 6 Digital Sensors; 4-20mA Outputs; Profibus/Modbus 485 (optional)	See Sensor Ranges			
PAH _{PHE}	PAH500 (Probe & Gateway)	Fluorescence	0 –900 µg/L			
Turbidity	ULTRATURB sc seawater	Scattered IR light	0 – 1000 FNU			
pH + Temperature	pHD: DPD1P1 or DPD2P1	Digital Differential pH Sensor	2.5 – 12 -5 – 70°C			
	Probes: LZY027 or LZY027.1 Gateway: 6120600	Combination Electrode pH Probe and Gateway	2 - 13 0 - 100°C			

This is to Note

- 1. Hach Washwater Monitoring System shall be installed, calibrated and operated in accordance with the requirements and intervals as specified in the respective user manuals.
- 2. Air bubbles in the washwater flow at the place of PAH_{PHE Eq} measurement should be avoided.
- 3. Because of turbidity correction by a calculation equation, the "PAH500" has demonstrated to operate correctly and not deviate more than 5% in washwater with turbidity within the working range.
- 4. In case sensors are mounted in a bypass of the discharge water system, the manufacturer shall take measures to ensure continuous flow within the bypass.
- **Remark** The compliance with relevant requirements of the DNV GL rules for classification Ships, offshore units, and high speed and light craft has been type approved by DNV GL, Certificate No: TAA000021W, Revision No: 3.