

## 中国船级社 CHINA CLASSIFICATION SOCIETY

证书编号/Certificate No. GB22PTB00011 01

# 型式认可证书 CERTIFICATE OF TYPE APPROVAL

兹证明本证书所述制造厂具备按照下列标准的要求生产本证书所列产品的能力和条件。

**This is to certify** that the manufacturer stated in the certificate meets the requirements of the standards listed below and is available with the ability and conditions to produce the products described in the certificate.

## 制造厂/Manufacturer

#### **Green Instruments A/S**

#### 地址/Address

Erhvervsparken 29, DK-9700 Bronderslev, Denmark

#### 产品名称/Product

#### 废气洗涤水监测系统 Exhaust Gas Washwater Monitoring System

## 附加标志/Notations

无/Ni1.

## 认可标准/Approval Standard

1. 国际海事组织环保会决议 MEPC. 259(68) 《2015年废气滤清系统指南》

IMO Resolution MEPC.259(68) 2015 Guidelines for Exhaust Gas Cleaning Systems

2. 中国船级社《船舶废气清洗系统试验及检验指南》(GD25-2016)

China Classification Society Guidelines for Testing and Survey of Exhaust Gas Cleaning System(GD25-2016)

3. 国际海事组织环保会决议 MEPC. 340(77)《2021年废气滤清系统指南》

IMO Resolution MEPC.340(77) 2021 Guidelines for Exhaust Gas Cleaning Systems

证书有数照至 his certificate is valid until

2023年08月14日/Aug. 14,2023

发证人物/Ash 再船級社會德堡办事处 Issued by ces so thenburg Office 签发日期 2023年01月07日 Date Jan. 07,2023

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Form No: T01. 联系方式/Contact Us,处本社官方何始/See official web site of the Society (http://www.ccs.org.cn)



UTN:P023-11656098

## 用于/Intended for

船舶与海上设施/Ships and Offshore Installations

#### 产品明细/Product Description

#### 废气洗涤水监测系统/Exhaust Gas Washwater Monitoring System (M0001)

名称/Name	属性(值)/Value	单位/Unit
型号/Type	G6200 Water Monitoring System	
电源/Power Source	400-440 VAC, 50-60 Hz, 3 phased	
防护等级/Degree of Protection	IP65	
系统组成/System Component	See Additional Page	

## 批准的图纸/Approved Drawings

图纸批准号/ Drawings Approval No.: NP22PPP00560

## 产品认可试验报告/ Approval Test Report

试验报告编号/ Test Report No.: P21-0087-1 试验报告日期/ Test Report Date: 2021-09-21

试验单位/ Laboratory: EKTOS Testing & Reliability Services A/S

试验单位地址/ Test Address: Hammerholmen 45A, 2650 Hvidovre, Denmark

试验报告编号/ Test Report No.: P20-0184-2 试验报告日期/ Test Report Date: 2021-04-20

试验单位/ Laboratory: EKTOS Testing & Reliability Services A/S

试验单位地址/ Test Address: Hammerholmen 45A, 2650 Hvidovre, Denmark

试验报告编号/ Test Report No.: P21-0087-3 试验报告日期/ Test Report Date: 2021-10-21

试验单位/ Laboratory: EKTOS Testing & Reliability Services A/S

试验单位地址/ Test Address: Hammerholmen 45A, 2650 Hvidovre, Denmark

试验报告编号/Test Report No.: G6200 IP rating assessment

试验报告日期/ Test Report Date: 2021-09-28 试验单位/ Laboratory: Green Instruments A/S

试验单位地址/ Test Address: Erhvervsparken 29, DK-9700 Bronderslev, Denmark

试验报告编号/ Test Report No.: G6200 Performance Test Report 试验报告日期/ Test Report Date: 2021-12-09

试验报告日期/ Test Report Date: 2021-12-09 试验单位/ Laboratory: Green Instruments A/S

试验单位地址/ Test Address: Erhvervsparken 29, DK-9700 Bronderslev, Denmark

试验报告编号/Test Report No.: Additional Test report - PAH with turbidity compensation

试验报告日期/ Test Report Date: 2021-09-10 试验单位/ Laboratory: Green Instruments A/S

试验单位地址/ Test Address: Erhvervsparken 29, DK-9700 Bronderslev, Denmark

#### 认可后的产品检验方式/ Method of Product Inspection after Approval

按规范只认可不进行产品检验的产品/The product approved only in term of the rules: 认可后的产品检验由制造厂按本社批准的产品检验计划进行检验,经检验合格后由制造厂签发合格证明,并连同该产品的本社认可证书复印件一并交付用户,制造厂对产品符合公约、法规、本社规范和本社认可的标准规定负责。 After approval, product inspection should be carried out by the Manufacturer in accordance with the product inspection scheme approved by the Society. Upon satisfactory inspection, and the Quality Certificate issued by the Manufacturer should be provided to the purchaser together with the copy of the approval certificate issued by the Society. The manufacturer should take responsibility for the product being in compliance with the convention, statutory regulation, the Society rules and the standard accepted by the Society.

#### 认可保持条件/ Maintenance Requirements of Approval

1. 型式认可后,如果产品及其重要零部件的设计、所用材料或制造方法有所改变,且影响到产品的主要特性、特征;或产品的性能指标有所更改,且超过认可的范围,则有关图纸和文件应经检验机构审批。并在检验机构认为必要时,经本社检验人员见证有关试验和进行检查,其结果应能证实仍符合认可条件。

After type approval, if there are changes to the design, materials used or manufacturing method of the product and important components and such changes affect major characteristics and properties of the product, or property indexes of the product are changed and exceed the scope of approval, related drawings and documents are to be examined and approved by the concerned survey office. Where deemed necessary by the survey office, the surveyor to the Society will go to witness relevant tests and conduct inspection and the results should be able to demonstrate compliance with the approval conditions.

2. 工厂的质量管理体系应保持有效运行,并且与认可时一致。如果质量管理体系发生改变,应经原体系认证机构审核并报本社批准。

The quality management system of the factory shall be ensure effective operation, and shall be the same as the situation of approval. If there are any changes to the quality management system, auditing of the original certification organization for quality management system and the society's approval shall be obtained.

3. 认可证书有效期内,如果出现可能导致本社取消认可的情况,工厂应及时采取有效的纠正措施。

Within the validity of the approval certificate, if cases occur that may cause the Society to withdraw the approval, the manufacturer should take corrective actions in a prompt and effective manner.

4. 在认可证书有效期内,本社检验人员可在未经事先通知的情况下对工厂的产品制造过程进行审核,以验证产品的生产是否符合业经本社批准的图纸和文件。工厂应予以配合。

Within the validity of the approval certificate, the surveyor to the Society may pay unannounced audit to the manufacturing process of the product in order to confirm whether it is in compliance with the drawings and documents approved by the Society. The factory should provide an active cooperation and necessary for the surveyor.

5. 如果属于获得型式认可B模式证书,且无需颁发船用产品证书/等效证明文件的情况,证书获得者应接受本社每年一次的定期审核,定期审核日为认可证书期满之日对应的每一周年日,检查工作应在周年日的前后三个月内进行。

If belong to the situation of the product has type approval mode B certificate, and marine product certificate/equivalent document is not necessary, those who have obtained the certificate should be subject to periodical audit every year. The date of periodical audit shall be each anniversary date which corresponds to the date of expiry of the relevant certificate and the periodical audit shall be done within a time span of three months before and after the annual surveillance date.

#### 备注/Remarks

本社已审核了产品厂无石棉声明,但本社的审核不免除产品厂按照合同关系向订货方保证产品无石棉的责任。The declaration of asbestos-free submitted by manufacturer has been reviewed by the Society. However, liability of the manufacturer to guarantee the products are asbestos-free to purchaser under contract will not be exempted.

本证书基于原型式认可证书(No. GB20PTB00034)变更,原证书保持有效。

This Certificate is modified from the previous Type Approval Certificate No. GB20PTB00034, the previous certificate remains valid.

## 中国船级社哥德堡办事处

#### **CCS Gothenburg Office**

注: 本证书含有附页, 共1页

Note: The certificate is attached with additional 1 page(s)

# **Product Description and Application/Limitation**

## 1. Product Description:

The G6200 Water Monitoring System is a continuous in situ water monitoring system in accordance with IMO MEPC.259(68) and MEPC.340(77). As a standard configuration the system monitors PAH, turbidity, pH and temperature.

A system can consist of measuring modules G6111 PAH, G6120 or G6121Turbidity and G6130 pH/Temperature.

The G6200 Water Monitoring System is configured from the following components:

G6200 Water Monitoring System					
Display		7" TFT LCD color display			
External Communication		Modbus TCP/IP, Modbus TCP/RTU converter (RS-485)			
Sensor module G6111 PA	G6111 PAH	G6120	G6121	G6130	
		Turbidity	Turbidity	PH and Temperature	
Manufacturer	Green Instruments	ABB	ABB	MJK	
Brand/Type GI/ G611		ABB/ 4690	ABB/	MJK/ pHix Compact	
	G6111 PAH	series; and	ATS430		
		ABB/Trans	series; and		
		mitter	ABB/Transmi		
		AWT420	tter AWT420		
Measuring	UV Fluorescence	Nephelometry		Glass electrode	
Technique					
Range	0-800 μg/l PAH <sub>phe</sub> Configurable	0-400 NTU/FNU Configurable		0 – 14 pH units 0 – 50 °C	
Accuracy	Max ±5% of sensor range or Max ±5% of the nominal standard test concentration, which value is not less than 80% of the sensor range.	±2 NTU		±0.2 pH unit Fully temperature compensated	

## 2. Application/Limitation:

- 1) G6200 Water Monitoring System may be used for monitoring of washwater from exhaust gas cleaning system in accordance with IMO resolution MEPC.259(68).
- 2) G6200 Water Monitoring System may also be used for monitoring of washwater from exhaust gas cleaning system in accordance with IMO resolution MEPC.340(77).
- 3) In order to completely fulfil the requirements of MEPC.259(68) for "washwater monitoring" and MEPC.340(77) for "discharge water monitoring", additional equipment (e.g. data recording) will have to be installed.
- 4) Installation to be made in accordance with maker's specifications.
- 5) Correct configuration and set up for each delivery to be tested during commissioning after installation.