

# NIPPON KAIJI KYOKAI

# TYPE APPROVAL CERTIFICATE FOR AUTOMATIC DEVICES AND EQUIPMENT

Certificate No. TA19687M

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

Manufacturer:

Changzhou Luo Pan Xing Analytical Tech Co, Ltd.

Place of Manufacturing:

6th Floor, A 3 Building, Technology Venture Centre, 801

Changwu Middle Road, Changzhou, Jiangsu, 213164, China

Product description:

Wash Water Monitoring System

Model:

**WWM-1000** 

Approval No.:

19A051

Valid until:

**10 December 2024** 

This certificate is subject to the conditions specified in the attached sheet(s).

Issued at Tokyo on 11 December 2019.

T. Shimada

General Manager Machinery Department

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

#### NIPPON KAIJI KYOKAI

Attached sheet -1/2 to the Certificate No. TA19687M

### **Specification & documents:**

1. Particulars: Voltage: AC100~240V

Frequency: 50/60Hz Protection: IP54

#### 2. Components and reference drawings:

Components	Drawing
Cabinet	LPX-WMS-E001 LPX-WMS-E002 LPX-WMS-E003 LPX-WMS-M001 LPX-WMS-M002 LPX-WMS-M003 LPX-WMS-M004
Pretreatment device	
Diaphragm booster pump	
Exhaust valve	
Pressure gage	
Flow switch	
Cleaning pump	
PAH probe	
Turbidity probe	
pH probe	
Display	

3. Documentation and Test Reports:
Test report No.UL119920190918001

#### NIPPON KAIJI KYOKAI

Attached sheet -2/2 to the Certificate No. TA19687M

Test items & approval conditions:

#### 1. Test items:

(Applied testing items are marked with X.)

ENVIRONMENTAL TESTS		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 $55^{\circ}C \times 16$ hours)		X
Damp heat test		X
Vibration test (Acceleration $\pm 0.7 \text{g} \times 1.5 \text{ hours}$ )		X
Inclination test		X
Cold test (Temperature $5^{\circ}C \times 16$ 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		X

## 2. Approved condition:

a) This product is not allowed to be installed in the bridge and on open decks.