TYPE APPROVAL CERTIFICATE

Certificate No. : LOX32315-AE002 **Initial Approval :** 5th April, 2017

Product : TRO Sensor

Manufacturer : Halogen Systems, Inc.
919 Incline Way STE 11, NV, USA

Product Description : Ex-Amperometric type TRO sensor (Type: SWN-HT-EX)

- Applicable pressure	: -0.7 ~ 10 Bar
- Max. flow	: 4 m/sec
- Rated voltage	: 24 VDC at 400mA
- Salinity	: 3 ~ 34 PSU at 1 ~ 25℃
- Free TRO range	: 0 ~ 5.5 ppm as Cl2
- Ambient Temp. range	: 0 ~ 50 ℃
- Sample water Temp.	: 1 ~ 27 ℃
- IP grade	: IP 56
- Explosion proof grade	: Ex db ib IIB T5 Gb
- Manufacturing Location	: Halogen Systems Inc. 919 Incline Way, Unit 11, Incline Village, NV 89451, USA

" See Appendix 1 "

Approval Condition : " See Appendix 1 "

THIS IS TO CERTIFY that the above-mentioned product has been approved in accordance with the relevant requirement of this Society's Rules and / or of the recognized standards as follows and entered in the "List of Approved Manufacturers and Type Approved Equipment".

Pt. 6, Ch. 2, Art. 301 of the Rules for Classification, Steel Ships.

This Certificate is valid until 4th April, 2022

Issued at Busan, Korea on 5th April, 2017

KOREAN REGISTER OF SHIPPING

General Manager of
Marine & Ocean Equipment Team

Note : 1. This certificate will be valid subject to complying with the approval conditions described on the certificate and/or on the Rules of this Society.
2. This certificate will be invalid from the expiry date aforementioned unless the extension or renewal has been granted to the applicant or the manufacturer.
3. Any significant modifications or changes in design or construction to the above product without approval from this Society will render this certificate invalid.
4. Should the specified rules, regulations or standards be amended during the validity of this certificate, the product is to be re-approved by this Society in accordance with the requirements as amended.