



Lloyd's
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Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER	Green Instruments A/S Brønderslev Nordjylland, Denmark
DESCRIPTION	Measuring and monitoring device of SO ₂ and CO ₂ emissions in exhaust gas
TYPE	Multigas Monitoring System G7000
APPLICATION	Marine and offshore applications for use in environmental categories ENV1, ENV2, ENV3 and ENV4 in general power distribution zones as defined in Lloyd's Register Type Approval System, Test Specification Number 1, February 2015.
ADDITIONAL TESTS	Enclosure test: IP66 for monitoring cabinet IP54 for gas sampling unit
STANDARD	Emission measurement according to chapter 5, 6.3 and 6.4 of NO _x Technical Code 2008 Continues monitoring of SO _x /CO ₂ emissions according to MEPC.259(68).
RATINGS	Exhaust gas temperature: 0-500°C Measuring range CO ₂ : 0-10%; freely configurable from 0-20% SO ₂ : 0-200 ppm; freely configurable from 0-1000ppm Accuracy/Linearity: ≤ ± 2% of reading, or ≤ ± 0,3% of full scale whichever is larger Precision/Repeatability: ≤ ± 1% of full scale above 100ppm or ≤ ± 2% of full scale below 100 ppm
Certificate No.	18 / 20076
Issue Date	26 November 2018
Expiry Date	25 November 2023
Sheet	1 of 2



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LIMITATIONS

In order to completely fulfil the requirements for NO_x- and/or SO_x monitoring additional equipment (e.g. data recording, engine performance measurements) have to be installed.

The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 37569-18 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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