CERTIFICATE OF CONFORMITY - EC (MODULE G)

Certificate No:
MEDG000014G

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the On board exhaust gas cleaning systems

with type designation and serial number
ME0403B U-Type open loop EGC system installed onboard SEA ONYX (IMO: 9922108) - A4042221.0403.01

Issued to
Shanghai Marine Diesel Engine Research Institute
Shanghai, 020, China

is, by design assessment and product verification, found to comply with
Regulation **(EU) 2021/1158,**
item No. MED/2.10. Marpol 73/78 as amended, Annex VI Regulation 4 and IMO Res. MEPC.259(68)

USCG Approval No: **N/A**
Further details of the equipment and conditions for certification are given overleaf.

Issued at **Hamburg** on **2022-06-14**

DNV local station:
Hamburg Environmental Certification

Approval Engineer:
Mirko Schlegelmilch

Notified Body
No.: **0098**

for **DNV SE**

Christine Mydlak-Roeder
Head of Notified Body

0098/yyyy

0098: Notified Body number undertaking quality surveillance
yyyy: The year in which the mark is affixed

The product liability tests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate remains valid unless suspended, withdrawn, recalled or cancelled, provided this equipment is not modified without the acceptance of the notified body named herein.

This certificate authorises the manufacturer to affix the “Mark of Conformity” (wheelmark) to the product described herein.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees (“DNV”) arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

Product description
On board exhaust gas cleaning system used as an alternative compliance method with fuel oil Sulphur limits.

Application/Limitation
According to MEPC.259(68) - Scheme B, compliance with fuel oil sulphur requirements is demonstrated by continuous exhaust gas monitoring. The monitoring system is subject to periodical surveys according to MEPC.259(68).

Technical Documentation
SECP-B (SOx Emissions Compliance Plan, Scheme B), Version No.: V2, approved: 2021-12-20
ETM-B (EGC Technical Manual, Scheme B), Version No.: V4, approved: 2022-03-10
OMM (On-board Monitoring Manual), Version No.: V2, approved: 2022-02-02
EGC Record Book, Version No.: V2, approved: 2021-12-20
CFD Analysis Report - pH Compliance Calculation of Discharge Wastewater from EGCS for IMO Version No.: V4.0, approved: 2022-03-10

Tests carried out
On-board verification of Exhaust Gas Cleaning System
Test report:
- DNV GL Checklist for verification of Exhaust Gas Cleaning Systems (EGC 631), DNV GL Id No: 42496, date of issue: 2022-06-01

Marking of product
The product is to be indelibly marked with name and address of manufacturer, type designation, dimensions and date of manufacture. In addition, the manufacturer shall affix the Mark of Conformity followed by the DNV GL Notified Body No. 0098 and the production year (2 or 4 digits).