# CERTIFICATE OF CONFORMITY - EC (MODULE G)

Certificate No:
**MEDG000018Z**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

## This is to certify:

**That the On board exhaust gas cleaning systems**

with type designation and serial number
**HPS U-type / Open Loop System installed onboard BRUGGE (IMO 9941855) - PJ8135/PJ8136/PJ8137**

Issued to
**Hyundai Heavy Industries Power Systems Co., Ltd.**
**Seongnam-si, Gyeonggi-do, Korea, Republic of**

is, by design assessment and product verification, found to comply with
Regulation **(EU) 2022/1157,**
**item No. MED/2.10. Marpol 73/78 as amended, Annex VI Regulation 4 and IMO Res. MEPC.259(68), IMO Res. MEPC.340(77)**

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

Issued at **Høvik** on **2023-07-06**

for **DNV AS**

DNV local unit:
**AC Europe Engines & Pressurized Equipment**

Approval Engineer:
**Mirko Schlegelmilch**

Notified Body
No.: **0575**

**Sverre Olav Bergli**
**Head of Notified Body**

0575/yyyy

0575: Notified Body number undertaking quality surveillance
yyyy: The year in which the mark is affixed

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled, provided this equipment is not modified without the acceptance of the notified body named herein.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.340(77) - 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.340(77).

## Technical Documentation
SOx Emissions Compliance Plan, Rev. 2: 2023-06-13, Approved: 2023-06-27.
Exhaust Gas Cleaning System Technical Manual For Scheme B, Rev. 1: 2023-01-04, Approved: 2023-01-16
Onboard Monitoring Manual, Rev. 1: 2023-01-04, Approved: 2023-01-16
EGCS Record Book, Rev. 1: 2023-01-04, Approved: 2023-01-16.
pH Verification Report, Rev. 0: 2022-11-23, Approved: 2022-12-20

## Tests carried out
Test report:

- DNV GL Checklists for verification of Exhaust Gas Cleaning Systems (EGC 631), DNV GL Id No: 44371, date of issue: 2023-07-11.

## 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. 0575 and the production year (2 or 4 digits).