TECHNICAL CIRCULAR

DOC No.: HHI-TEC-0455
Date : OCT 5, 2022

SUBJECT: INTRODUCTION OF PEV FOR HPSCR SYSTEM

TYPE: ALL HYUNDAI-MAN B&W 2-STROKE ENGINES WITH HPSCR

DISTRIBUTION

☑ Ship yard	☐ Ship owner

Date	TEC No.	Design	Check	Approve	Change	R
20221005	HHI-TEC-0455	PYS	OSH	SSH	First issue.	0
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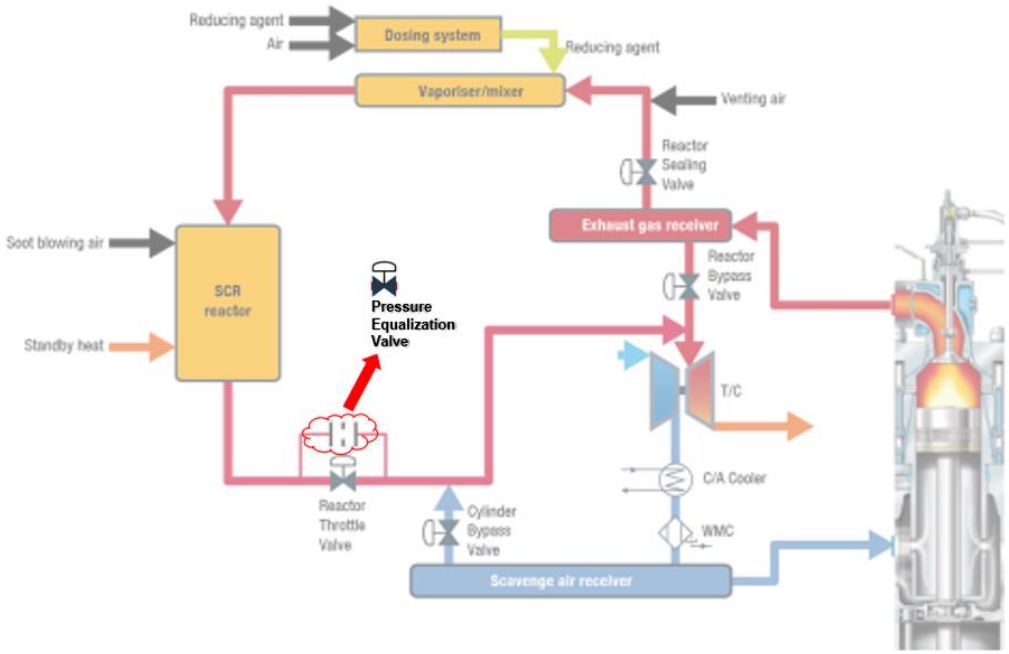
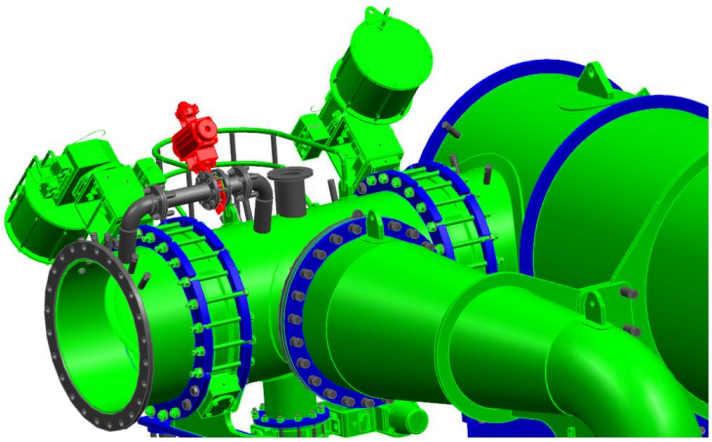
In Tier II mode, the HPSCR system is bypassed and the exhaust gas is led directly to the turbocharger. As the reactor sealing valve (RSV) and the reactor throttle valve (RTV) are not 100% gas tight, there will be a slight flow of exhaust gas intruding the HPSCR system that causes cold corrosion.

To avoid accumulation of exhaust gas, the HPSCR system is vented with compressed air. With the current design, an orifice in the RTV bypass ensures that the compressed air, diluted with exhaust gas, can leave the HPSCR in a steady flow, thereby equalizing the pressure when the RTV is closed.

We, HHI-EMD, will replace an orifice to a pressure equalization valve (PEV) in order to reduce the amount of venting air needed in Tier II mode. The PEV will be located on the bypass pipe.



<Figure: HPSCR Diagram>



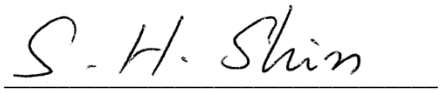
<Example figure: PEV Shown in red color on bypass pipe>

PEV will be standard application for new ordered all Hyundai-MAN B&W 2-Stroke engines with HPSCR from now on.

We hope the information will do you a valuable service.

[The end]

Yours sincerely,



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