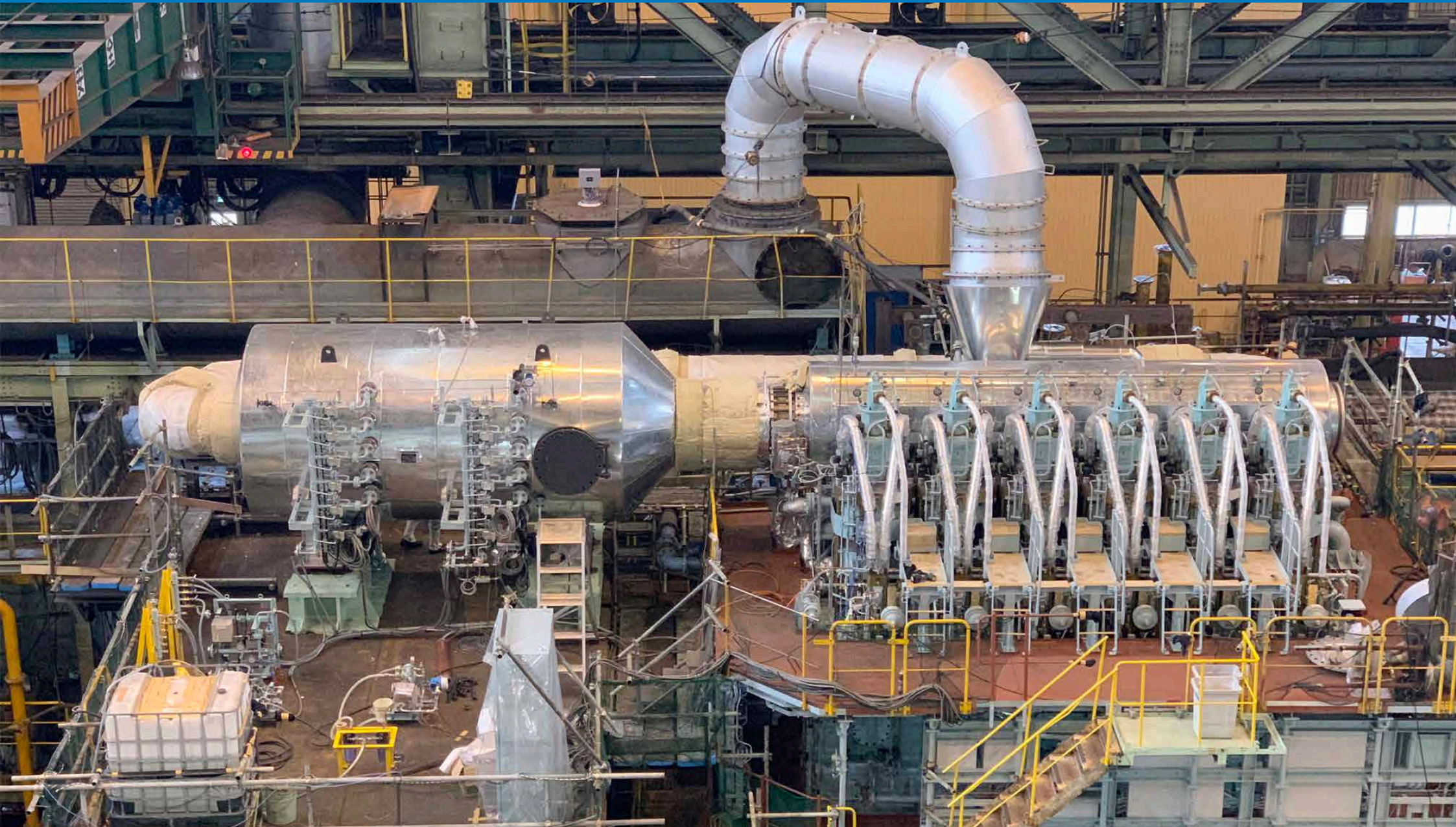


Hitz Green SCR Mk-II 117



Hitz Green SCR Mk- II 117

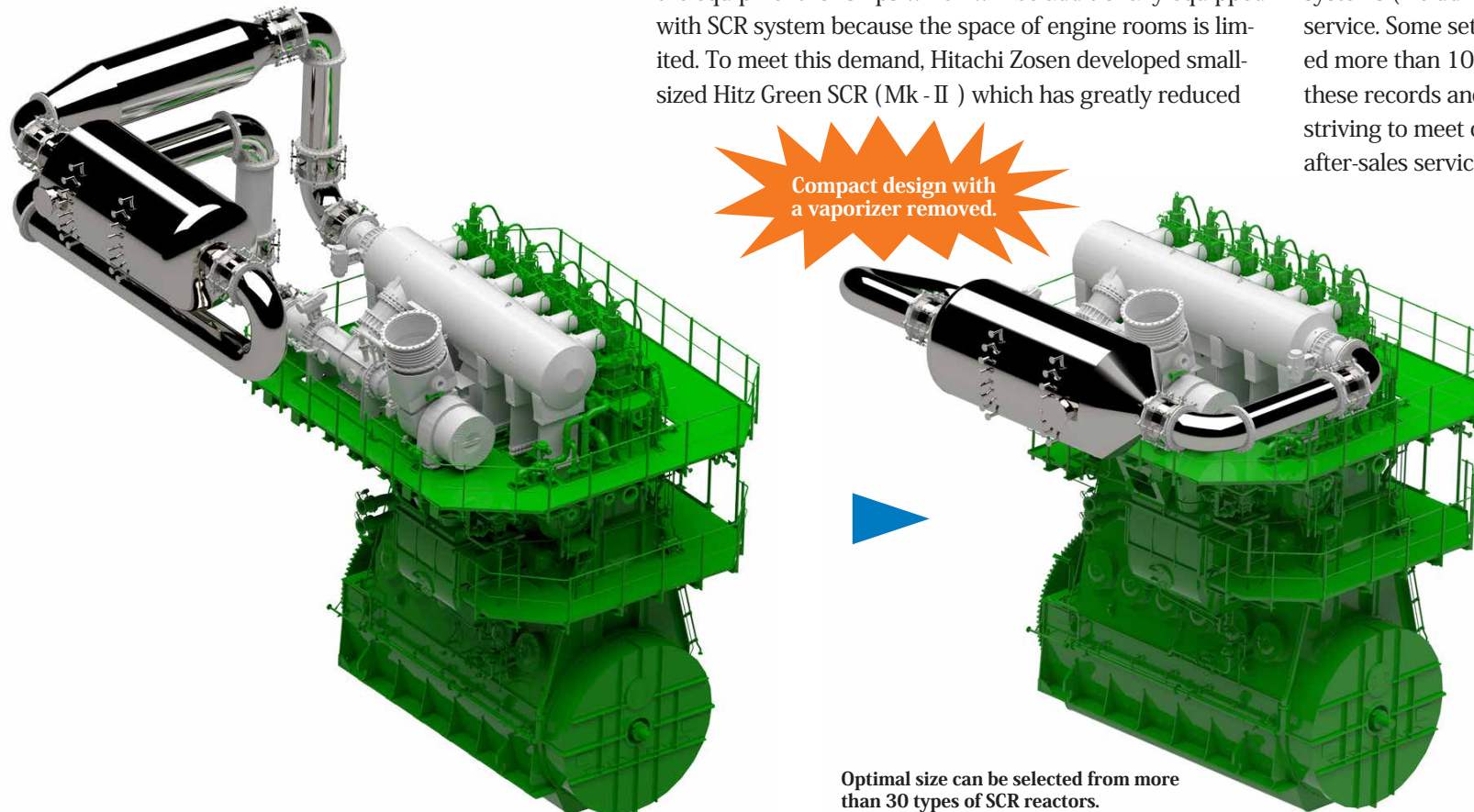
Hitachi Zosen's newly-developed High pressure SCR (Hitz Green SCR Mk- II) has successfully been in service from 2021. Hitz Green SCR (Mk - II) can be smaller and more compact compared to the previous model (Mk - I). SCR system is used for decomposing NOx into harmless nitrogen and water with the aid of catalyst and urea solution. Tier III NOx regulations of the International Maritime Organization

(IMO) require 80% reduction of nitrogen oxides (NOx) emission from Tier II regulations, that means it is necessary for marine vessels to be equipped with any decomposing NOx technology.

Hitz Green SCR (Mk - II) was developed to meet demands from our customers. There was a great demand to downsize the equipment for ships which will be additionally equipped with SCR system because the space of engine rooms is limited. To meet this demand, Hitachi Zosen developed small-sized Hitz Green SCR (Mk - II) which has greatly reduced

the installation area compared to the previous model and is applicable to various vessel types.

By the end of 2021, Hitachi Zosen received more than 40 orders for Hitz Green SCR (Mk - II) and 3 of them are already in service. Until now Hitachi Zosen has also received more than 100 SCR systems in total and more than 50 SCR systems (including both Mk - I and Mk - II) are already in service. Some sets of our SCR systems have already recorded more than 10,000 hours commercial operation. With these records and experiences, Hitachi Zosen continues striving to meet customers' requirements also through after-sales services.



Compact design with a vaporizer removed.

Optimal size can be selected from more than 30 types of SCR reactors.

Urea Dilution Skid for Marine SCR

118

Contents
 By Builder
 By Ship Type



Since its market launching in 2019, Urea Dilution Skid (hereafter called “UDS”) for SCR systems has successfully in service from 2020, and over 8 UDSs are in service by the end of 2021. This device produces urea solution, used as a reducing agent for SCR systems that decomposes NOx (nitrogen oxide), from urea prill and the distilled water obtained from shipboard water production equipment. The urea solution storage tank is more compact and can produce high-quality urea solution at low cost on board, contributing to the stable decomposition of nitrogen dioxide.

Features

1. A wealth of experience in producing urea solution on-board for more than 10,000 hours.
2. Enabling required volumes of urea solution for navigation in regulated area.
3. Anti-shock function good enough to survive sloshing caused by ship listing or drop of urea prill.
4. Easy maintenance enabled by simply-configured machinery.
5. Contributes to short installation period enabled by all the machinery installed on compact skids.
6. After urea prill is added, urea solution is automatically produced. No special operators are required.

Main specification

Model number	: UDS-1000	UDS-500	UDS-300
1. Max input volume	: 1,000 kg	500 kg	300 kg
2. Max production volume	: 2,500 kg	1,250kg	750 kg
3. Production concentration	: 40% (equivalent to ISO18611)		
4. Required production time (Approx.)	: 4hours	3hoiurs	3hours
		(Batch production)	

Hitachi Zosen is also working to expand sales of this device for marine SCR systems, which is currently the most popular measures for the Tier III Regulations on NOx emissions during ship operation as set out by the International Maritime Organization.