

Start of Joint Research with National Maritime Research Institute and Hitachi Zosen

We have started a joint research project with National Maritime Research Institute, National Institute of Maritime, Port and Aviation Technology (hereinafter referred to as "the Maritime Research Institute") and Hitachi Zosen Corporation (hereinafter referred to as "Hitachi Zosen") to develop a hydrogen co-combustion engine or a hydrogen fuel-burning engine that converts hydrogen, which is difficult to transport, from ammonia to hydrogen. This joint research is aimed at realizing a more compact, safer, and more environmentally friendly vessel operation.

In this joint research, in order to solve the problem of ammonia fuel, which is difficult to achieve complete combustion due to the slow combustion rate in a 4-stroke engine for marine vessels, we aim to build a compact integrated system from fuel supply equipment to combustion exhaust-gas aftertreatment system for ocean and coastal vessels that integrates the following three technologies, the catalyst technology of Hitachi Zosen and our combustion analysis technology and the marine system development technology owned by the Maritime Technical Safety Research Laboratory.

In addition to the application of the ammonia/hydrogen co-combustion technology developed together with the National Maritime Research Institute, the joint research will also consider the application of our own hydrogen-only combustion technology, and will focus on improving the thermal efficiency of engines using ammonia fuel, as well as the overall system volume efficiency and mount ability.

With the aim of researching and developing new technologies and creating new businesses, we will actively engage in joint research with universities and research institutions, and contribute to the realization of a sustainable society by working in harmony with the natural environment through high-quality, reliable products and services.

[For inquiries contact]

Corporate Planning Office

Phone: +81-6-6454-2331

e-mail : soumu.info@dhtd.co.jp