September 28, 2022

To the press:

Denyo Co., Ltd.
Kubota Corporation

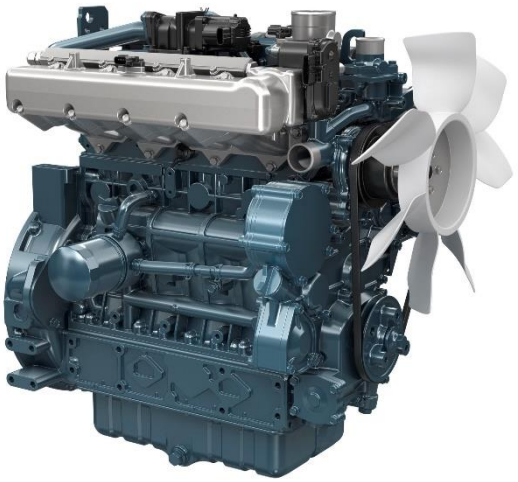
Denyo in Development of Generators Free of CO_2 Emissions

Hydrogen Engines for the Generators Procured from Kubota Corporation

Denyo Co., Ltd. (Head Office: Chuo-ku, Tokyo; President: Shoichi Shiratori; hereinafter, "Denyo") has begun development of a dedicated hydrogen generator*1 equipped with an industrial hydrogen engine pioneered by the Kubota Corporation (Head Office: Naniwa-ku, Osaka, Japan; President and Representative Director: Yuichi Kitao; hereinafter, "Kubota"). This research and development project is striving to release this generator to the market in spite of the challenges arising from related laws and regulations as well as the preparation of hydrogen infrastructure.

*1: A generator using only hydrogen as fuel to produce absolutely no CO_2 emissions.

<Denyo 45kVA Dedicated Hydrogen Generator*2>



<Kubota 3.8L Hydrogen Engine*2 >

*2: These two images are for illustrative purposes only.

Background and Objectives

○ Easily portable generators are widely used to supply power on construction sites, at events, and anywhere else needing electricity. The most common type of generator generally uses a diesel engine. Recognizing the world's push toward carbon neutrality, Denyo has been working to develop a hydrogen mixed combustion generator*3 and a fuel-cell portable generator*4.
*3: Hydrogen mixed combustion generator use technologies to limit carbon dioxide (CO_2) emissions through the combustion of hydrogen in combination with other fuels, such as diesel and city gas.
*4: A fuel-cell portable generator produces electric energy through a chemical reaction between hydrogen and oxygen.

○ As its initiatives for carbon neutrality in engines, Kubota has been researching engines for industrial machines that have greater fuel efficiency as well as application of carbon-free fuels such as hydrogen, bio, and synthetic.

○ As its further decarbonization initiatives, Denyo started developing a dedicated hydrogen generator equipped with an industrial hydrogen engine pioneered by the Kubota Corporation, which eliminates CO_2 emissions by using only hydrogen as a fuel. The development is making progress in a high-volume zone for portable generators by using a 45kVA diesel generator as a base. Denyo aims to release this dedicated hydrogen generator into the market early.