

Technical Review Special Edition: New Products & Technologies

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Welcome to this special edition of our technical review featuring our new products and technologies.

As a global corporate group of approximately 300 companies inside and outside Japan, Mitsubishi Heavy Industries (MHI) Group actively operates in not only domestic markets but also international markets. As a global leader of manufacturing and engineering, MHI Group has provided wide-ranging solutions that were enabled through the integration of advanced technologies, including infrastructures such as power generation systems, transportation systems, marine vessels, aircraft and aerospace equipments. By making full use of our rich expertise from many years of experience and our skilled personnel, we continue to dedicate ourselves to creating a better future for people across the globe as well as the globe itself.

In May 2018, the “2018 Business Plan” was published as the first step toward our ongoing growth, in which, in addition to the growth strategy formulated in line with the changes in society, “MHI Future Stream” was introduced as a long-term growth vision. Based on this long-term vision, MHI Group will expand its business domains while focusing on manufacturing, by being responsive to social value changes and incorporating technological innovations. We will also take up the challenge of realizing a decarbonized or low-carbon society and sophisticating mechanical systems through electrification and intelligence.

Maximizing our long-cultivated expertise, MHI Group aims to establish itself as an integral asset capable of meeting fast-changing technological needs in our society by continuing to develop new and innovative technologies and products.

This edition introduces 16 examples of recently developed products and technologies. As decarbonized or low-carbon initiatives, the following are presented: “QoEn™”, a quantitative index that can suggest the direction toward high quality energy infrastructure based on the three aspects of society, economy and environment; a thermal storage system to provide highly efficient electric power resilience in the era of renewable energy; and gas turbine combustion test and analysis technologies.

Reported in relation to electrification and intelligence are the motor-driven equipment diagnostic system, plant water quality monitoring by virtual measurement, power transmission technology for rotor, and remote monitoring security technology.

Others include the power plant water treatment technology, a low-cost forming method for composite materials, beam transmission technology to realize high-precision and high-efficiency laser processing, risk assessment with use of RAM analysis, underwater noise prediction

technology, improvement of transmission load and noise reduction, aeroacoustic noise simulation technology, and a method for the evaluation of gas-liquid two-phase flow distribution in a heat exchanger.

We would appreciate your continued support and cooperation.