

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.

Beyond Japan, Mitsubishi Heavy Industries Group has been expanding its global presence with approximately 300 MHI Group companies worldwide. We strive to play a key role in the advancement of a sustainable society in cooperation with our international customers and local communities through innovative and optimal management of Group resources.

Last May, MHI published the 2018 Business Plan as the first step towards the Group's ongoing growth in order to create a highly profitable operating model and expand our business volume to five trillion yen. The plan also introduced our long-term growth vision, "MHI Future Stream". Under this banner, we focus on key technologies in climate change and urbanization such as de-carbonization, advanced logistics and transportation systems, and automation and autonomization.

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 20 examples of recently developed products and technologies. In the area of de-carbonization development, we introduce ammonia applications that provide CO₂-free energy alternatives. Developments in logistics and transportation systems include an automotive turbocharger motor, advanced aircraft structures, an improved development process for thermosetting composites, the use of large-scale unsteady CFD analysis for aircraft design, a satellite propulsion system, and the HTV-X space station supply machine. Showcased in the area of automation and autonomization are automated structural analysis for aircraft and an IoT monitoring system for machine tools.

Also highlighted are a new turbocharger for ship engines, a high-viscosity sludge dryer, a damping system for building vibration, a three-dimensional viewer for manufacturing, a high-precision machining system, corrosion wastage control technology, ultrasound flaw detecting technology, numerical simulation methods for gas-liquid two-phase flow, leakage reduction technology for high-frequency currents, and innovative gear grinding technology.

We would appreciate your continued support and cooperation.