

October 17, 2025

Meidensha Corporation

Meidensha wins JEMA Platinum Award at 74th Electrical Manufacturers' Engineering Achievement Awards for megawatt-class direct-drive system for large turbomachinery

Meidensha Corporation has received the JEMA Platinum Award—the top honor—at the 74th Electrical Manufacturers' Engineering Achievement Awards from the Japan Electrical Manufacturers' Association (JEMA) for its development of a megawatt-class direct-drive system for large turbomachinery. This marks the second time Meidensha has won the JEMA Platinum Award; the company was previously honored 15 years ago for the development and commercialization of motors and inverters for the electric vehicle i-MiEV.



Meidensha employees who received the top JEMA award pose for a photo at the award ceremony.

- The awards are presented by the JEMA to individuals who have contributed to the development and advancement of the electrical industry through outstanding achievements, such as new product and technology developments. This year's award ceremony was held in Tokyo on October 16.

■ About the megawatt-class direct-drive system for large turbomachinery

Turbomachinery such as turbo blowers and compressors is typically driven through an overdrive gear that couples a motor to an impeller spinning at several tens of thousands of revolutions per minute. In recent years there has been growing demand for higher-speed, higher-capacity systems that improve energy-conversion efficiency and can operate under heavy load. In response, Meidensha has developed the megawatt-class direct-drive system for large turbomachinery that delivers higher efficiency and larger capacity, along with improved maintainability and reduced space requirements.

Energy savings: 10–30% reduction in energy use compared with conventional blower systems.

Space savings: Motor volume reduced by 80% compared with conventional motors of equivalent output.

Maintenance savings: No lubricant required thanks to the gearless design and magnetic bearings.

Conventional system

High-speed fluid machinery

Overdrive gear

Coupling

Standard motor

Direct-drive system

Energy savings (improved efficiency)

Space savings

Maintenance savings

High-speed fluid machinery

High-speed motor

In addition to the JEMA Platinum Award, the Meiden Group received the JEMA Silver Award for the development of a 240 kV tank-type vacuum circuit breaker (VCB)^{*1} and for inverters for energy storage systems with virtual synchronous generator functions^{*2}. It also received the JEMA Bronze Award for the development of Metaverse technology education^{*3}.

Award name, category	Award theme
JEMA Platinum Award	Development of a megawatt-class direct-drive system for large turbomachinery
JEMA Silver Award, Electric Power Fields	Development of a 240kV Tank Type Vacuum Circuit Breaker (VCB)
	Development of inverters for energy storage system with Virtual Synchronous Generator functions
JEMA Bronze Award, Craftsmanship Fields	Development of Metaverse Technology Education

Encouraged by these honorable awards, the Meiden Group remains committed not only to developing new technologies but also to further strengthening product and service quality to support social infrastructure.

*1: Development of 240kV Tank Type Vacuum Circuit Breaker

*2: Press release dated August 26, 2025: Demonstration to supply 100% renewable power begins on Hahajima Island; Project adopts a power conditioner system with a Virtual Synchronous Generator function for energy storage battery system

https://www.meidensha.com/news/news_03/news_03_01/_icsFiles/afieldfile/2025/09/09/20250826en.pdf

*3: Press release dated April 24, 2024: Meiden develops “VR/Metaverse Technology Education”; Making possible to practically learn about products by using VR and Metaverse

https://www.meidensha.com/news/news_03/news_03_01/_icsFiles/afieldfile/2024/06/04/20240424en.pdf