

December 27, 2021

Nidec's In-wheel Motor for Electric Motorcycles is Adopted by China's Largest Electric Two-wheel Vehicle Manufacturer for the First Time

Nidec Corporation (TSE: 6594; OTC US: NJDCY) (the "Company" or "Nidec") announced today that its in-wheel motor has been adopted for the first time for 換電獣 01(Huan Dian Shou 01), an electric motorcycle released by Yadea Group Holdings Ltd. ("Yadea") in October 2021.







Nidec's in-wheel motor for electric bikes

China's largest manufacturer specialized in two-wheel vehicles, Yadea has more than 50 million users in 80-plus countries around the world. Since its foundation in 2001, Yadea has achieved major milestones, including being listed on the Hong Kong Exchanges and Clearing Limited in 2016, and selling 10 million units globally in 2020, to grow rapidly by capturing needs for vehicle electrification.換電獣 01(Huan Dian Shou 01), Yadea's latest model, is part of the series corresponding to the battery replacement system of Gogoro Inc., a company successful in Taiwan, and features a battery that can be replaced at any of the charging stations installed across town. In addition, the model is equipped with cutting-edge functions, such as a smartphone-dedicated app to check battery charge remaining and the motorcycle's location, lock the vehicle electronically, and see its drive data.

Nidec's in-wheel motor for electric motorcycles (maximum output: 48V/2.8kW) adopted for 換電獣 01(Huan Dian Shou 01) is the first product that the Company developed for electric motorcycles, and installed inside 換電獣 01(Huan Dian Shou 01)'s rear wheel. The in-wheel motor boasts the world's top-level torque characteristics, with the low-speed torque 18%, and the high-speed torque 5%, better than other companies' motors of the same category. Developed by the Company's Small Precision Motor & Solutions Business Unit, which makes hard disk drive (HDD) spindle motors (the product of which Nidec has the largest global market share), the motor utilizes the Company's single-micron-scale magnetic circuit design technology cultivated in making compact and fast-rotating HDDs.

With vehicle manufacturers announcing plans to introduce an EV lineup of both four-wheel and two-wheel products recently, the pace of vehicle electrification is accelerating as environmental regulations become increasingly strict. As the world's comprehensive motor manufacturer, Nidec stays committed to developing products with our technologies to make light, thin, short, and small products, improve product efficiency, and control products with high accuracy, and to proposing, at an overwhelming speed, revolutionary solutions that contribute to the evolution of mobility and decarbonization.

For inquiries on the Company's aforementioned product, please contact: Sales Division, Small Precision Motor & Solutions Business Unit, Nidec Corporation Tel.: +81-75-935-6470

Nidec was founded in Kyoto, Japan in 1973 by four engineers and has since grown into a world-leading comprehensive motor manufacturer encompassing more than 300 subsidiaries employing over 120 000 people throughout the world.

After becoming the first company in the world to successfully commercialize a direct drive spindle motor for HDDs using brushless DC motor technology, the company branched off into the automotive motor market which now constitutes its fastest growing business segment. Nidec's electric power steering motors, in particular, have captured the largest global market share and helped cement the company's position in the industry.