April 26, 2023
Meidensha Corporation

To members of the media

Marketing starts for integrated motor/inverter/gear unit for EVs, “MEIDEN e-Axle”

Product’s motor technology helps make vehicles more appealing and contributes to realizing a decarbonized society

Meidensha Corporation (Meiden) is pleased to announce that it has started full-scale marketing activities to sell “MEIDEN e-Axle,” a drive unit for electric vehicles (EVs), whose development has now been completed.

The product is an integrated unit of three components that are necessary in an EV drive system: motor, inverter and gear (speed reducer). It is a standard product designed to shorten the amount of time clients spend in developing EVs, and has several features that will increase the appeal of such vehicles.

[Specifications]

Items	Unit	Figures
Maximum output (30 seconds)	**kW**	**150**
Continuous output	**kW**	**70**
Maximum number of rotations	**min^{-1}**	**16,000**
Size (W×L×H)	**mm**	**485x440x280**
Weight	**kg**	**69**
Output density	**kW/kg**	**2.2**
Motor cooling method		**Water cooling**

[Features]

1. Mountable on three-row-seat vehicles with lower-height design
   By arranging the inverter’s location (axial arrangement), the MEIDEN e-Axle has achieved a top-class thinness (with a height of 280mm). When it is placed in the rear section (rear-wheel area) of a vehicle, where the structure allows only a limited space, the trunk floor can be lower. The MEIDEN e-Axle can be used for three-row-seat vehicles, and can also be mounted on the front part (front-wheel area) without

changing its shape. (Refer to the illustration below that shows where the product can be mounted on a vehicle)

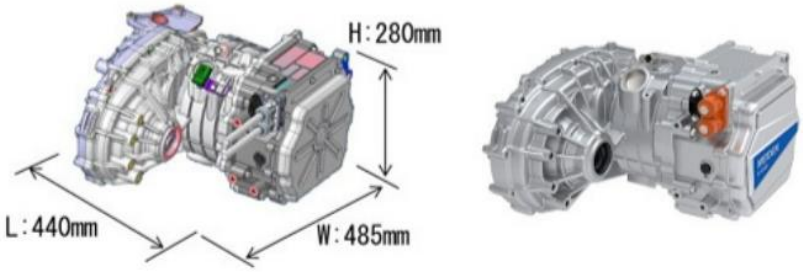
2. Improvement in vehicle energy consumption by making the product lighter and smaller
   The MEIDEN e-Axle weighs 69kg, making it one of the lightest such products in the industry. Rectangular wires (flat wires) are used inside the motor so that the wires can be neatly placed in the slot[*1] without any space between them. This has improved output density and facilitated downsizing. Making the product lighter and smaller means lower overall vehicle weight, thus reducing the vehicle's energy consumption, as well as reducing battery volume and the cost.

3. Making powerful driving performances with high output
   The MEIDEN e-Axle has a continuous output of 70kW, which allows for a vehicle powerful enough to travel continuously at a high speed or on a steep hill.

4. Realizing comfortable vehicle cabin space with low noise
   By optimizing the shape of its cover and integrating the components, the MEIDEN e-Axle attained the desired low noise level without using any sound-absorbing material. It is thus capable of providing a comfortable vehicle cabin space, as well as requiring fewer components.

Meiden will focus on marketing the MEIDEN e-Axle with the aim of expanding the range of vehicles that adopt it. The company will also increase the product's lineup in terms of output and prepare for mass production to deal with increased demand in the future. By providing products for EVs, Meiden will help realize carbon neutrality and promote green mobility.

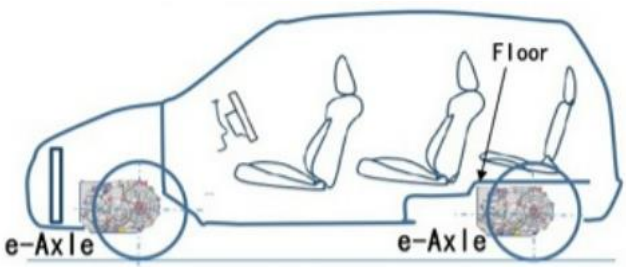
■ Illustrations showing approximate size and external appearance



One of the thinnest (height 280mm), lightest (69kg) in the industry

■ Illustration showing where the product can be placed

Targets: C-segment (compact cars), SUVs and sedans



Due to its thinness, the MEIDEN e-Axle enables a layout of a three-row-seat when it is placed in the rear section of a vehicle

*1 Slot: A groove for inserting copper wires into the core

This product is in the process of the application for design registration

Website for Meiden’s electric vehicle drive systems:

https://www.meidensha.com/products/automobile/prod_02/index.html