# Business

## Mobility Innovation Utilizing Monozukuri

Solutions that Expand Mobility

Pursuit of Energy Efficiency

# Solutions that Expand Mobility

## Message

At JATCO, we are accelerating our expansion into new business areas beyond automobiles toward realizing our corporate purpose of "Driving the possibilities of mobility with technology and passion."

With advances in electrification requiring us to deal with revenue structures that are different from conventional CVTs and ATs, we are expanding our business domain from automobiles to "mobility," working on new businesses, and building a stronger system for promoting these efforts so as to achieve profitability through rapid commercialization and market introduction.

Leveraging precision machining technology and control technology cultivated over many years, JATCO is working on commercialization in diverse fields such as electric-assist bicycles, electric motorcycles, electric wheelchairs for nursing care, and products for wind power generation. In particular, we feel we are really gaining traction in the field of bicycles, where we are developing compact, high-performance drive units, realizing "solid assistance, smooth and sharp shifting, low noise and high efficiency," and delivering this to customers in collaboration with Hodaka Corporation.

Through new businesses as well, we will contribute to the realization of a sustainable society by solving social issues and providing value to customers.

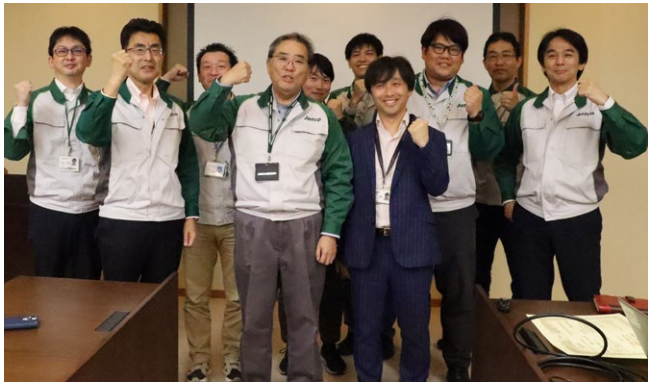
Head of Business Development Division
Corporate Vice President
Eiji Ogawa

## Fostering entrepreneurship to "drive the possibilities of mobility"

JATCO must create new value and businesses and take on risks to continually grow toward our corporate purpose. This posture is that of entrepreneurship. Since FY2022, led mainly by the Corporate Planning Department, we have held business contests and companywide events to foster entrepreneurship. The business contest called for ideas from our global workforce for creating new businesses. In response to over 100 submissions, the management team took part in reviewing the proposals. The aims are to enhance individual flexibility and adaptability to change and to encourage individuals to achieve growth and self-fulfillment by proactively embracing new opportunities and challenges and thinking and acting independently to realize their own ideas.

The outstanding projects from the business contest participate in external innovation programs to refine their ideas and finally present business proposals to the management team. As a result, their work has been transferred to the New Business Promotion Department together with its promoters, and there are some projects which are continuing their activities toward commercialization. Some of the refined ideas have made it through to field trials and are being tested in the market. We are advancing commercialization based on feedback from the market and customers.

Development team for a 2-in-1 drive unit for electric-assist bicycles

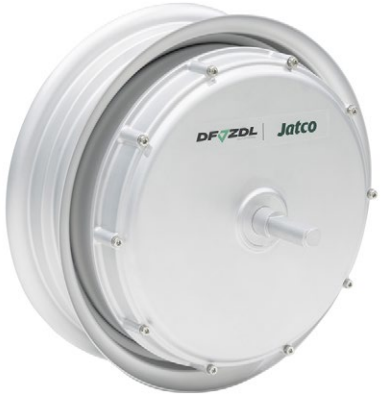


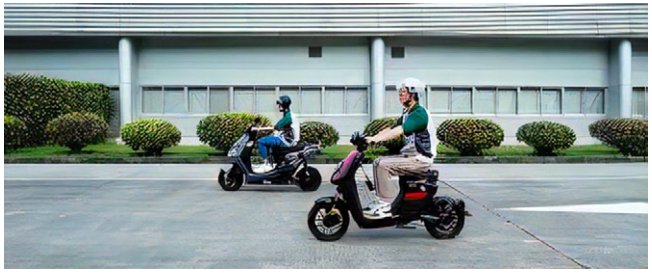
The participants in the FY2023 business contest

# Solutions that Expand Mobility

## Developing an automatic 2-speed in-wheel drive unit for electric motorcycles

We jointly developed this product with Zhejiang Jiuzhou New Energy Technology Co., Ltd., a prominent Chinese manufacturer of drive units for electric motorcycles. This unit, which integrates an automatic 2-speed transmission with a motor, exceeds a maximum torque of 250 Nm and a top speed of 100 km/h, and can climb steep gradients of 30 degrees.
JATCO aims to launch in the market during fiscal year 2025.

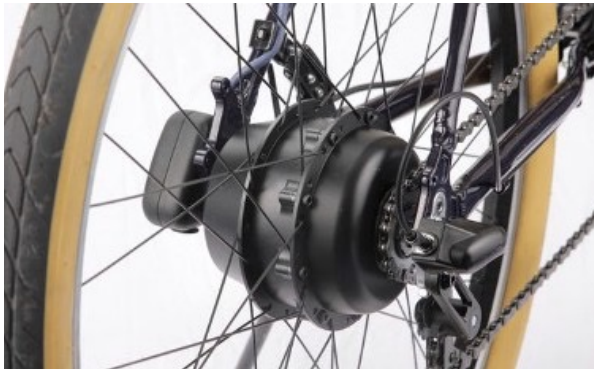


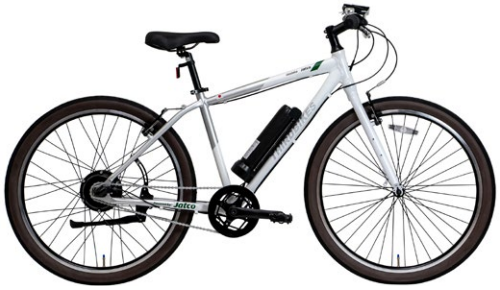



Automatic 2-speed in-wheel drive unit for electric motorcycles

## Developing a 2-in-1 drive unit for electric-assist bicycles

This drive unit combines an assist motor and transmission mechanism using our proprietary technology. We have also developed a smartphone app to monitor the remaining battery level and travel range and adjust the assist levels.
In February 2025, we concluded a Memorandum of Understanding (MOU) regarding mass production of the drive unit with Hodaka Corporation. We aim to launch in the Japanese market during fiscal year 2025.

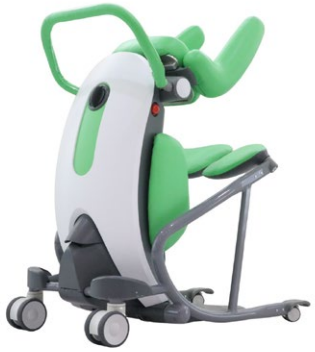




2-in-1 Rear Hub Unit

## Developing a wheelchair with a transfer mechanism

The wheelchair with transfer mechanism that JATCO is developing is a mobility device which integrates transfer and mobility. We are advancing the development of products to achieve smooth transfers and bring smiles to the faces of caregivers on the frontlines by using ergonomic robotic control to overcome challenges in nursing care faced by both caregivers and recipients of care on the frontlines.



Integrating the functions of mobility and transfer

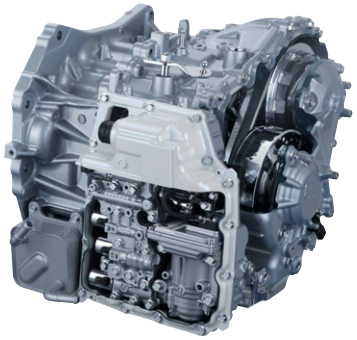
# Pursuit of Energy Efficiency

As a powertrain specialist manufacturer, JATCO has continually honed its technologies to supply increasingly energy-efficient units, delivering products that balance environmental performance and power. We will firmly carry these technologies forward into the electric powertrains we launch onto the market in the future.

## Jatco CVT-XS

### CVT with dramatically improved environmental performance and drivability

The Jatco CVT-XS is a product that is the culmination of our technological expertise as a transmission manufacturer and has dramatically improved environmental performance and driving performance. It expands the gear ratio by approximately 13% compared to conventional transmissions of the same size, and has reduced mechanical loss due to its smaller mechanical oil pump. Due to these improvements, the fuel efficiency of the vehicle has improved, contributing to meeting the requirements of the Greenhouse Gas/Corporate Average Fuel Economy (GHG/CAFE) regulations in the United States.



Jatco CVT-XS

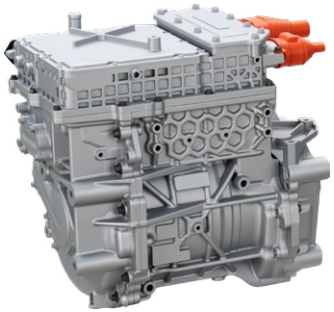
## X-in-1

### An electric powertrain which achieves the sharing of major components and modularization

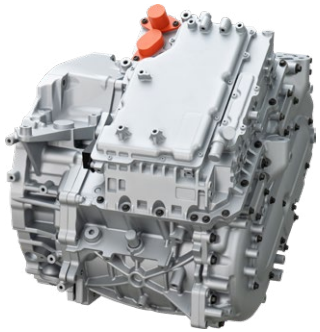
Integrating major components such as the motor, inverter, and gears makes it possible to create a small, lightweight electric powertrain unit, contributing to enhancing the energy efficiency of vehicles.

Furthermore, sharing major components between the 3-in-1 for electric vehicles and the 5-in-1 for e-POWER enhances the production efficiency of the units and contributes to enhancing energy efficiency during production.

In addition, the use of a motor which uses less than 1% rare earth reduces the environmental impact.



3-in-1: for electric vehicles



5-in-1: for e-POWER

## High-efficiency ultra-low-viscosity reducer oil

### Ultra-low-viscosity oil contributing to electrical power saving in EVs

We have developed an ultra-low viscosity oil which can contribute to electrical power saving in EVs.

This oil can significantly reduce friction in the reducers of EV systems, making it possible to extend travel range without increasing battery capacity.

As a result, this oil will contribute to reducing the cost of and popularizing EVs, and achieve a reduction in $CO_2$ emissions that will help prevent global warming.