

Acquisition of shares in ez-Wheel, a French company providing Innovative Mobility Solutions

IDEC Corporation (Headquarters: Japan, Chairman and CEO: Toshiyuki Funaki) announced that it has acquired 80% of the shares of ez-Wheel SAS (Headquarters: France, "ez-Wheel"), a manufacturer of autonomous electric wheels, as of August 1, 2023, MMI Technologies, an IDEC group company and holding company of APEM, has acquired 80% of the shares of ez-Wheel SAS.

1. Reason for the acquisition of shares

IDEC signed a strategic partnership agreement with ez-Wheel on 24 January 2022 and began exclusive distribution in Japan in April of the same year. ez-Wheel, founded in 2009 in Angoulême, France, is an innovative technology company whose mission is "to develop easier and safer means of transportation of goods".



They developed the world first self-propelled wheel in 2010 and the world first safe autonomous wheel in 2021. Demand for robots is expanding in response to the rapid progress of global automation, labor shortages and an aging workforce, and the use of AGVs (automated guided vehicles) and AMRs (autonomous mobile robots) is expanding in various industries and is expected to grow 25% per year for the next several years.

Since the launch of the products in Japan, we have received inquiries from a wide variety of customers, mainly from major automotive manufacturers, and we expect significant synergy effects from the expansion of solution sales, which we are currently promoting as a key transformation of our mid-term management plan.

By making ez-Wheel an IDEC Group company, we intend to strengthen the R&D capacity of the ez-Wheel team in Angoulême, France and secure their technological advance in the integration of safety electronics and embedded software in robotic systems.

IDEC will be able to expand global sales of various mobility solutions that combine ez-Wheel products with IDEC's specialty HMI (Human-Machine Interface) and safety-related equipment by utilizing the IDEC Group's sales network. IDEC defines HMI-X [Transformation] as a change in the optimal interface, and aims to lead HMI-X by providing society with products and services that integrate HMI and safety. We will also be able to strengthen our software capabilities, which are indispensable to achieve this goal.

IDEC's Mission is "to create an optimal environment for humans and machines," and with the addition of ez-Wheel to its group, IDEC will contribute to improving the wellbeing of all people and realizing safety in a wider range of applications where humans and robots can work together.

2. Schedule



(1) Date of resolution by the Board of Directors	July 26, 2023
(2) Date of conclusion of contract	August 1, 2023
(3) Share transfer execution date	August 1, 2023

3. Overview of ez-Wheel

(1) Name	ez-Wheel SAS
(2) Location	Moulin de l'Abbaye, 135, Route de Bordeaux 16400 La Couronne, France
(3) Title and name of representative	Antoine Juan, Chief Executive Officer
(4) Business	Development, manufacturing and sales of autonomous electric wheels
(5) Date of establishment	November 2009
(6) Capital	Approx. 67 million yen (as of June 30, 2023)
(7) Number of employees	19 (as of June 30, 2023)

(Note) Acquisition price and counterparty of share acquisition are not disclosed. The acquisition price is less than 15% of the Company's consolidated net assets.

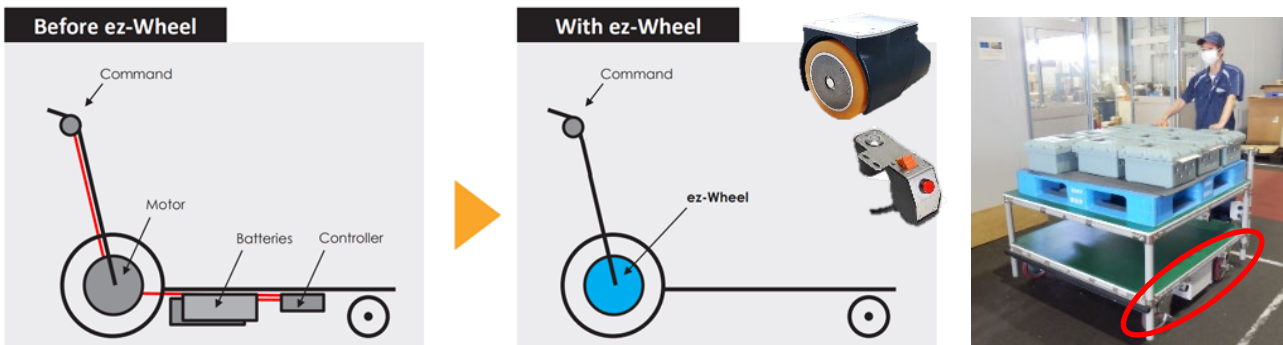
4. Product Overview

Electric Power Assist Wheel (EPAW)	Safety Wheel Drive (SWD)
Can be attached to existing carts, trolleys, etc. to reduce the burden of transporting heavy loads and improve safety at work	Facilitates the development and certification of mobile robots and automated logistics applications
	

■ Electric Power Assist Wheel

The motor, motor driver, gears, battery and control board are integrated into highly robust and protective housing (all-in-one).

Many factories where heavy loads need to be moved (transported) are facing labor shortages and the ageing of their workforce. The introduction of EPAW allows to easily electrify existing trolleys, reducing the burden and improving the wellbeing of the workers.



Case Study
 Easy conversion of carts utilized in the field to electric power assisted carts reduces the burden of transporting heavy objects that were difficult to carry by one person

■ Safety Wheel Drive

SWD is an all-in-one transportation wheel developed for AGVs and AMRs and equipped with the drive control and safety functions required for autonomous driving. By mounting SDW on AGVs and AMRs, a system of automated transport can be easily constructed, shortening the development time by about 50% and significantly reducing hardware cost.

The wheel is equipped with the 'safety operation monitoring function' required by international safety standards (ISO 3691-4) and can be used safely in environments where people and robots coexist.

All-in-one with the following functions

Driveline: motor, motor driver, gear box

Safety system: safety circuit, safety motion monitoring circuit,



Case Study

AMR equipped with safety autonomous driving wheels, all-in-one with all functions required for driving, including international safety standards required when operating in the same area as humans

■ 5. Future outlook

The impact of this matter on our business performance for the fiscal year ending March 31, 2024 is currently expected to be negligible, but we will promptly announce any matters that should be announced.

■ (Reference) About IDEC Corporation

Founded in 1945 as Izumi Shokai and established Izumi Corporation in 1947 (renamed IDEC CORPORATION in 2005). As a comprehensive manufacturer of control equipment mainly in the field of factory automation, we have been developing, manufacturing, and selling a variety of products centered on HMI (Human-Machine Interface), which connects humans and machines, with control and safety technologies at the core, and proposing control solutions in various fields since our establishment. We have the top share of approximately 50% of the Japanese market for industrial switches. By solving various social challenges through its business activities, the IDEC Group aims to realize a sustainable society by contributing to the promotion of automation, labor saving, and efficiency, the realization of safety, security, and wellbeing, and the reduction of environmental impact at manufacturing sites and in everyday life scenes around the world.

Company Name	IDEC CORPORATION
Title and name of representative	Toshiyuki Funaki, Chairman and CEO
Business	Development, production and sales of various control equipment products and solutions centered on HMI
Establishment of Business	1945: Founded as Izumi Shokai 1947: Establishment of Izumi Corporation
Net sales	83,869 million yen (FY2023)
Capital	10,056 million yen (FY2023)
Number of Employees	3,186 (FY2023)