# Source of Our Growth



# Distribution Functions That Optimize the Supply Chain as a Whole

The MEDIPAL Group has built a system that efficiently and reliably delivers the required products at the required time, in just the required amount, by connecting manufacturers in the pharmaceuticals, health, and beauty fields with medical institutions, dispensing pharmacies, and retailers all over the country, through its independently developed state-of-the-art distribution centers.

## ALCs and RDCs: State-of-the-Art Distribution Centers

The ALCs (Area Logistics Centers) and RDCs (Regional Distribution Centers), which are state-of-the-art distribution centers, are vital distribution bases that enable the Group to fulfill its role in social infrastructure. We are working to achieve reliable delivery with no stock-outs or errors, and solid distribution channels that remain in operation even during emergencies, with the aim of optimizing the supply chain as a whole. ALCs are distribution bases for the Prescription Pharmaceutical Wholesale Business. Located close to our customers, these centers have a full line of over 20,000 items in stock, including pharmaceuticals, medical equipment, and clinical diagnostics. We deliver directly to customers, which shortens the lead time from receipt of order to delivery of goods. As of the end of June 2021, this system was in operation at 12 locations in Japan, and by establishing one more new location, we plan to complete a distribution platform for prescription pharmaceuticals covering the entire country.

RDCs, which are distribution bases for the Cosmetics, Daily Necessities and OTC Pharmaceutical Wholesale Business, are operating in 16 locations in Japan. RDCs provide efficient, low-cost delivery of over 50,000 items necessary for daily life to suit a range of retail business formats and sales floors.



Uni-Shuttle (high-speed automated storage and retrieval system)



Al case-picking robot

#### **Developing Next-Generation Distribution to Further Enhance Productivity**

At next-generation ALCs, picking productivity is five times higher thanks to the introduction of the AUPUS (Automatic Piece Picking Ultimate System), which automates work such as storage, dispatch, and sorting of products. At RDCs, we are developing and introducing SPAID (Super Productivity Advanced Innovative Distribution), a next-generation distribution system that actively utilizes the newest technologies such as AI and robotics. With SPAID, we are able to do twice as much work with the same number of workers as before through the use of AI case-picking robots that enable fully automated shipping operations from automatic case storage and retrieval warehouses, and adoption of our independently developed MUPPS\* (Multitaskcrane Piece Picking System) that moves products to specified locations, with no human intervention, in bulk picking areas where individual products are retrieved.

\* Please refer to page 73 for explanations of technical terms.

Ultra-low temperature distribution

Below -150°C

We have developed a storage and delivery

system that can handle various temperature

ranges, including ultra-low temperatures, to

accommodate products such as regenerative

medicines that require handling at temperatures below –150°C. We are building a distribution

platform with different temperature ranges

that can deliver anywhere in Japan.

## Features of ALCs

time



# Shortened inspection time Saving customers

We provide support for streamlining of customers' operations through distribution functions that leverage high delivery accuracy supported by shortened inspection times by scanning delivery container barcodes (individual scans\*) among other procedures, and operational support systems linked to ALCs such as PRESUS®\* and McHIL®\*.

\* Please refer to page 73 for explanations of technical terms.

## Features of RDCs



The use of JAN and ITF codes for scanning and weight inspection results in minimal mistakes during delivery to stores. Also, we have introduced a high-precision system capable of handling EDI in distribution. This ensures speedy and waste-free logistics by eliminating delivery mistakes.

# Enhanced productivity 2 times

The introduction of SPAID has doubled productivity without increasing the number of workers. Introducing robotic solutions for dangerous or labor-intensive work has both strengthened our distribution functions and created distribution centers that are more comfortable for employees.

Delivery ratio

In order to properly manage over 20,000

widely varied products, we independently

developed a demand forecasting system

enabled us to achieve a delivery ratio of

based on actual shipments, which has

over 99% with almost no stock-outs.

Over 99%



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Number of patents

(As of March 31, 2021) We are pursuing distribution technologies to achieve high productivity and low cost. In order to create a new distribution system that utilizes cutting-edge AI technology and robotics, we are progressing with in-house technology development, and have received patents for 19 devices and systems.

#### Highlight

### Ultra-low temperature transport system for distribution of regenerative medicines: Prescription Pharmaceutical Wholesale Business

The MEDIPAL Group predicts expansion in pharmaceutical distribution in the field of regenerative medicines going forward. We have established storage facilities and shipping systems capable of maintaining ultra-low temperatures of  $-150^{\circ}$ C or below to deliver items safely and securely from the time they leave the manufacturer's facility until they reach patients.

#### Building storage facilities and shipping systems for the distribution of a wide variety of pharmaceutical products

