# An Experience-based Robot Showroom, Kawasaki Robostage



An experience-based robot showroom, Kawasaki Robostage opened at Odaiba in the new Tokyo waterfront subcenter area on August 6, 2016. It promotes the potential of our robots by being open to not only our customers but also the public as a space where people can look closely at the collaborative dualarm SCARA Robot, duAro, and other robot products from Kawasaki Heavy Industries, Ltd.

## Introduction

To customers who have specific plans to deploy robots, we have been providing robot-related proposals through demo equipment at our sales offices and our service centers inside and outside Japan, as well as our largest showroom in the country, which we established at Nishi-Kobe Works in October 2014.

## 1 Background of establishing

The Japanese government set up Japan's Robot Strategy in its Japan Revitalization Strategy Ver. 2014, and this is expected to promote the use of robots in a wide variety of fields in the near future. In addition, there is a plan to transform Tokyo's Odaiba district, which is an area by Tokyo Bay that serves as one of the subcenters for the metropolis, into a showcase that will advertise Japan's advanced technologies to the world. Toyota Motors and Panasonic have already established advertising facilities for the general public in this area, where the nation's government is leading in the preparation for trials of robots such as automated vehicle operation and multi-lingual robot interpreters.

In addition to these activities, 2020 Tokyo Olympics and Paralympics and the World Robot Summit will be held in the Odaiba area. Thus, the Tokyo waterfront subcenter is sure to attract the world's attention. We decided to improve our brand value by quickly setting up a foothold in this area.

#### 2 Concept

The main concept of Kawasaki Robostage is a collaborative coexistence between humans and robots. We will seek the potential of our robots through exhibitions at this location where we hope people can experience new human-robot relationships in the future society, which will be full of robots.

## 3 Outline of Kawasaki Robostage

The Kawasaki Robostage is located on the first floor of the Tradepia Odaiba skyscraper next to the FCG building (the headquarters of a major Japanese television channel, Fuji TV). Its greenish-toned space with an area of about 132 m2 has screens on each wall showing our advertising videos.

In this place are exhibited the duAro collaborative dualarm SCARA robot, the BX165N welding robot, and the MS005N and MC004N medical robots. Visitors can enjoy demonstrations of robots and experience programs in order to understand our industrial robots and gain knowledge for the future robotic society (**Fig. 1**).

Thus, Kawasaki Robostage provides a space not only for BtoB but also for ordinary people from many walks of life to gain an understanding of robots.



Fig. 1 Inside view of the facility

## **4 Exhibits**

#### (1) duAro collaborative dual-arm SCARA robot

The duAro concept is a robot that works in collaboration with humans. Multiple duAro robots are on display. There are demonstrations and also the chance for visitors to interact with robots.

### (i) Demonstration

The robot demonstrates duAro's potential for a wide range of applications, such as PC board assembly using various types of hands.

#### (ii) Portrait drawing

The robot draws visitors' portraits by extracting contour lines from a photograph of the visitor's face taken at the site (**Fig. 2**). The finished portrait is then given to its owner.

#### (2) BX165N welding robot

The BX165N, a general-purpose large-size robot, boasts a large market share in the market for welding processes such as auto body welding production lines. The exhibited BX165N is combined with VR (virtual reality) technology to provide a hands-on demonstration. A visitor wearing a VR-goggle sits on a seat connected to BX165N, and the image in the goggles and the movements of BX165N are synchronized, allowing the visitor to have a virtual experience (**Fig. 3**).

# (3) MS005N and MC004N medical and pharmaceutical robots

Medical and pharmaceutical use robots are attracting attention because demand for them is expected to grow



Fig. 2 Portrait drawing by duAro



Fig. 3 New K-Roboride robot arm ride attraction



Fig. 4 Demonstration of drug dispensing

worldwide. The MS005N and MC004N medical and pharmaceutical robots are on display. Three robot units in total work collaboratively in a demonstration dispensing work that transfers a liquid from a beaker to test tubes (**Fig. 4**).

## Conclusion

Since its opening, this showroom has contributed to improving our brand through activities such as showing robot technologies not only to customers but also to students, government officials, and the general public, and giving press conferences for non-robotic products. We will make this showroom more attractive as a conveyor of information on the full-fledged robotic age, which is just around the corner.

In addition, we will run exhibitions in order to become a place for research into and trials of IoT (Internet of things) products by connecting with plants outside Japan.

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#### Contact

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Tel: +81-3-6457-2800 Admission free (\*Exhibits are subject to change without notice.)