

Powered exosuit for air cargo handling at KIX

- To create a safer work environment with less physical strain -

Kansai Airports today announced an introduction of powered exoskeletons in the international cargo area of Kansai International Airport (KIX) on September 24, 2019.

ATOUN Inc.'s "ATOUN MODEL Y" will be employed by CKTS Co., Ltd.*¹, one of the Kansai Airports Group companies specializing in ground handling services. In the midst of soaring work volumes driven by growing demand for air cargo business, the powered exosuits are expected to ease physical strain on the back of the workers engaged in sorting airfreight at the warehouse. ORIX Rentec Corporation*² (Headquarters: Shinagawa, Tokyo; President: Shinichi Obara) will provide the products through its robot rental service "RoboRen".

Prior to the full-scale introduction, pilot tests were carried out in June and July 2019, in which the wearable robot proved effective in supporting airfreight workers. Using the device is also anticipated to add impetus to work style reforms and boost productivity in airport front-line operations.

Kansai Airport Group will continue to strive for a safer and more secure workplace by actively introducing advanced technologies and reducing work burdens on airport workers.

[Overview]

Launch date: September 24, 2019

Location: CKTS cargo warehouse, international cargo area

Quantity: 4 units

[Product specifications]

Product number	AWN-12
Manufacturer	ATOUN Inc.
Dimension (in use)	48.4cm (W) x 28cm (D) x 81cm (H)
Dimension (stored)	48.4cm (W) x 23cm (D) x 67.5cm (H)
Weight	4.5kg (including batteries)
Assist force	10kgf max.
Motors	2 sets of motors
Hours of use	Approx. 4 hours (for estimated average workload)
Operation environment	0 − 40℃
Suitable wearer height	150 – 190cm



^{*}¹ CKTS Co., Ltd.: As a member of Kansai Airports Group, CKTS Co., Ltd. offers a wide range of ground handling services around the clock, including cargo handling, aircraft maintenance and ramp service. Providing quality services in handling passengers, aircraft and international cargo, CKTS precisely meets diverse customer needs. Company website: https://www.ckts.co.jp/



^{*2} ORIX Rentec Corporation: Since its foundation as Japan's first rental service company for measuring instruments, ORIX Rentec Corporation has been providing rental services for many customers mainly in the manufacturing industry. In 2016, the company launched "RobRen", a robot rental service, and now boasts a lineup of 40 models of robots made by 19 manufacturers. The company also provides customers with hands-on experience of operating robots at its permanent robot show rooms "Tokyo Robot Lab." and "Tokyo Robot Lab. 2" in Machida, Tokyo. Company website: https://www.orixrentec.jp/

Shaping a New Journey



Kansai Airports was established by a consortium made up of VINCI Airports and ORIX Corporation as its core members. Kansai Airports took over the operations of Kansai International Airport ("KIX") and Osaka International Airport ("ITAMI") from New Kansai International Airport Company ("NKIAC") and has been operating the two airports since April 1, 2016.

Kansai Airports Kobe, Kansai Airports' wholly-owned subsidiary, took over the operations of Kobe Airport ("KOBE") from Kobe City and started its business as an operating company on April 1, 2018.

Under the concept of "One Kansai Airports Group", Kansai Airports group strives to continuously improve its services for all airport guests through appropriate investments and efficient operations, with safety and security being the top priority. Kansai Airports group aims to maximize the potential of the three airports, for the benefit of the communities they serve.

For more information, please visit : http://www.kansai-airports.co.jp/en/

Kansai Airports

Ransal Ali ports					
Location	1-banchi, Senshu-kuko kita, Izumisano-shi, Osaka	Shareholders	ORIX 40%, VINCI Airports 40%, Other investors 20% ¹		
Company Representatives	Representative Director and CEO:Yoshiyuki Yamaya Representative Director and Co-CEO: Emmanuel Menanteau				
Business Scope	Operation and management services, etc. of Kansai International Airport and Osaka International Airport				

Kansai Airports Kobe

Location	1-ban, Kobe-kuko, Chuo-ku, Kobe- shi, Hyogo	Shareholder	Kansai Airports 100%		
Company Representatives	Representative Director and CEO: Yoshiyuki Yamaya Representative Director and Co-CEO: Emmanuel Menanteau				
Business Scope	Operation and management services, etc. of Kobe Airport				



ORIX Corporation (TSE: 8591; NYSE: IX) is an opportunistic, diversified, innovation-driven global powerhouse with a proven track record of profitability. Established in 1964, ORIX at present operates a diverse portfolio of businesses in the operations, financial services, and investment spaces. ORIX's highly complementary business activities span industries including: energy, private equity, infrastructure, automotive, ship and aircraft, real estate and retail financial services. ORIX has also spread its business globally by establishing locations in a total of 38 countries and regions across the world. Through its business activities, ORIX has long been committed to corporate citizenship and environmental sustainability. For more details, please visit our website: http://www.orix.co.jp/grp/en/



VINCI Airports, as the leading private airport operator in the world, manages the development and operation of 46 airports located in France, Portugal, the United Kingdom, Sweden, Serbia, Cambodia, Japan, the United States, Dominican Republic, Costa Rica, Chile and Brazil. Served by around 250 airlines, VINCI Airports' network handled 240 million passengers in 2018.

Through its expertise as a comprehensive integrator, VINCI Airports develops, finances, builds and operates airports, leveraging its investment capability, international network and know-how to optimize the management and performance of existing airport infrastructure, facility extensions and new-build construction projects. In 2018, its annual revenue for managed activities amounted to $\[\le \]$ 3.6 billion, for consolidated revenue of $\[\le \]$ 1.6 billion.

More comprehensive information is available on www.vinci-airports.com

ASICS Corporation; Iwatani Corporation; Osaka Gas Co., Ltd.; Obayashi Corporation; OMRON Corporation; The Kansai Electric Power Company, Incorporated; Kintetsu Group Holding Co., Ltd.; Keihan Holdings Co., Ltd.; Suntory Holdings Limited; JTB Corp.; Sekisui House, Ltd.; Daikin Industries, Ltd.; Daiwa House Industry Co., Ltd.; Takenaka Corporation; Nankai Electric Railway Co., Ltd.; NIPPON TELEGRAPH AND TELEPHONE WEST CORPORATION; Panasonic Corporation; Hankyu Hanshin Holdings, Inc.; Rengo Co., Ltd.; The Senshu Ikeda Bank, Ltd.; Kiyo Holdings, Inc.; The Bank of Kyoto, Ltd.; THE SHIGA BANK, LTD.; The Nanto Bank, Ltd.; Nippon Life Insurance Company; Mizuho Bank, Ltd.; Sumitomo Mitsui Trust Bank, Limited; MUFG Bank, Ltd.; Resona Bank, Limited; and the Private Finance Initiative Promotion Corporation of Japan.

