

Smart Life & Ecofriendly Systems

Connective Industries

#Carbon Neutral #Healthcare, QoL #Co-creation and Open Innovation #Sustainability #IoT/Data Utilization #Smart Life & Ecofriendly Systems

1. Front-loading Washer/Dryers

Hitachi has released the BD-STX130J and BD-SX120J front-loading washer/dryers featuring a new heat pump that shortens washing and drying times without compromising laundry cleanliness*1 while also saving on power and water bills*2.

[01] BD-STX130J (left) and BD-SX120J (right)



- (1) Improved energy savings and a shorter washing and drying cycle time achieved by the adoption of a heat pump, combining large air flow capacity and high-speed air flow without compromising laundry cleanliness. The washer/dryers also save on water use by not using water for cooling and dehumidification while drying.
- (2) A filterless drying structure that eliminates the drying filter on the top of the unit. For maintenance, three automatic cleaning features have been provided to wash away dust and lint*3: automatic drying duct cleaning, automatic washing machine tub cleaning, and automatic door gasket cleaning. This material is then collected in a large-capacity lint filter. A self-cleaning function for the heat exchanger was also added to complement the new heat pump.
- (3) The existing washing action ensures that the liquid detergent concentrate reaches every part of the clothes being washed and delivers a high flow rate to thoroughly eliminate dirt. This has now been augmented with a bottom spray that is able to apply detergent to clothes in even higher concentrations using a small amount of water, achieving a rapid wash while still retaining the same powerful cleaning performance.

(Hitachi Global Life Solutions, Inc.)

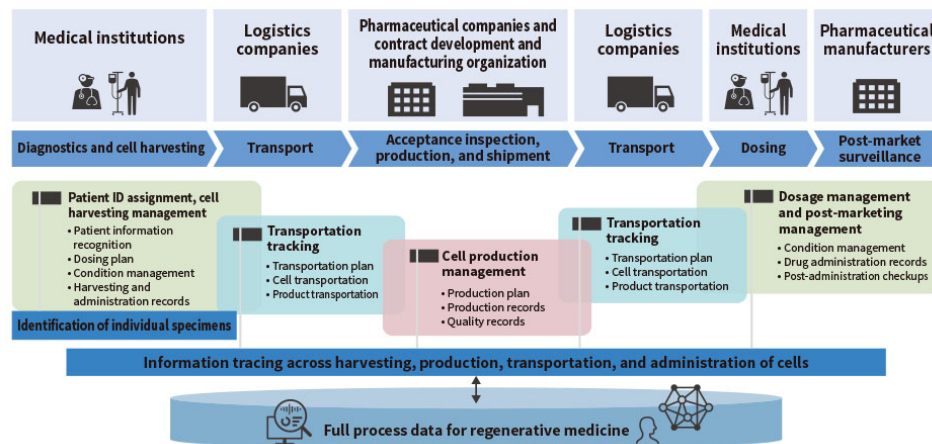
*1 Operating times may vary depending on conditions and the type and quantity of clothes.
*2 Electricity and water charges may vary depending on conditions, the type and quantity of clothes, and contract terms.
*3 Not all dust, lint, and dirt may be removed, depending on its type and quantity.

2. Collaborative Creation with Yukaze Biomedical on Regenerative Medicine

Techniques for the precise control of air quality, including temperature, humidity, cleanliness, and chamber pressure, which were developed through work on air conditioning solutions for regenerative medicine facilities are being put to use in the medical and healthcare fields in initiatives for improving quality of life (QoL). In addition to air conditioning solutions for cell processing centers (CPCs) used for regenerative medicine, the work of Hitachi Global Life Solutions, Inc. in this field also encompasses remote monitoring of cell processing equipment (including a wide variety of devices, air conditioning and related systems, and production equipment located inside culture chambers) and total coordination that extends to production systems under different operating conditions. In tandem with Hitachi Ltd.'s value chain traceability service, the company also contributes in ways that deliver economic benefits for stakeholders and working style reform in the healthcare industry.

Yukaze Biomedical, a regenerative medicine business based in Okinawa, commenced the production and supply of regenerative cellular medicines in June 2023 using the value chain traceability service in tandem with the latest CPCs that consolidate capabilities from across the Hitachi Group. Yukaze Biomedical's goal is to improve patient QoL. To this end, Hitachi is contributing to society by seeking to resolve customer challenges, supplying the company with a total seamless solution that combines operational technology (OT) such as a manufacturing execution system and IT in the form of the Hitachi Value Chain Traceability Service for Regenerative Medicine along with products for the up-and-coming field of regenerative medicine that include CPCs, automated cell culture systems, safety cabinets, and testing systems.

(Hitachi Global Life Solutions, Inc.)



3. Release of Happiness Up for Smartphones

Hitachi developed its Happiness Up for smartphones by combining the functions of its various product-specific apps for Hitachi connected appliances. The new app offers maintenance suggestions and support for household chores that are based on how the appliances are used. It was made available for download in January 2023.

The main features of Happiness Up are as follows.

(1) Support for household chores based on how appliances are used

This function provides hints on how to make the best use of a connected appliance that are derived from analysis of its operation.

(2) Maintenance suggestions based on appliance operation

This function offers suggestions for maintenance of connected appliances and reassurance inspection reports based on their operation. This helps to extend the long-term performance of important home appliances.

(3) Submit inquiries and repair requests directly from the app

The app provides an easy way to make inquiries or arrange for repairs if a problem occurs during the use of a Hitachi home appliance. It can also be used to access user guides and frequently asked questions (FAQs) for troubleshooting.

(4) Link to online store for Hitachi home appliances

The app includes a screen for easy access to the online store for purchasing Hitachi appliances, consumables, and parts.

(Hitachi Global Life Solutions, Inc.)

[03] Happiness Up for home appliance support



4. Cordless Stick Vacuum Cleaner

Hitachi has released the PKV-BK3K cordless stick vacuum cleaner that features paper pack dust collection. Its main features are as follows.

- (1) Paper pack dust collection with sufficient capacity for about two months of use in a typical household*1. When full, the paper pack is simply disposed of. Meanwhile, the suction path is designed in a way that avoids loss of suction power as the quantity of dust builds up.
- (2) Topology optimization has been used to make the vacuum cleaner’s dust collector lighter without compromising strength. By retaining the weight-saving features of conventional cordless stick vacuum cleaners, the new model combines light weight with powerful suction. The standard weight*2 is 1.1 kg.
- (3) The light-emitting diode (LED) lights in the cleaner head are white and green, with the latter being close to the wavelength that provides maximum apparent brightness, illuminating dust not only in darkness, but also in bright conditions where it can be difficult to see. The cleaner also features Hitachi’s tangle-free rotating brush designed to avoid getting caught up with hair or other material.

(Hitachi Global Life Solutions, Inc.)

*1 Based on research by Hitachi Global Life Solutions, Inc. The quantity of dust collected to fill the paper pack from empty when operating on high power, based on the voluntary standard specified by the Japan Electrical Manufacturers' Association (JEMA) of 1 g of dust collection per day. The quantity of dust required to fill the paper pack varies depending on the type of material.

*2 Total weight of body, extension pipe, and head. Measured in accordance with JEMA voluntary standard (HD-10).

[04] PKV-BK3K stick vacuum cleaner (left) and cleaner stowed in stick stand (right)



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