

Consumer Appliances

1 Big Drum Washer-dryer and Big Drum Slim Washer-dryer

Hitachi has released two new front loading washer-dryers, the big drum washer-dryer (BD-V9700), and the big drum slim washer-dryer [(BD-ST9700), width: 60 cm], with improved washing ability that ensures laundry comes out strikingly white, and reduces coarsening and darkening.

The main features are as follows.

(1) To reduce laundry coarsening and darkening*¹ more efficiently, the powerful high flow rate wide shower distributes plenty of water at a maximum flow rate of approximately 80 L/min, which is four times more than the previous model.*²

(2) Newly equipped with a misting function that sprays warm air and heated mist at a high speed to wash and completely remove sebum residue from garments. Sebum is known to cause yellowing in clothes.

(3) Comes equipped with the new wind iron function, which combines a 300 km per hour*³ high-speed air drying function that smoothens out wrinkles with a humidity control drying function that maintains a high humidity inside the drum. New wind iron function enables more effective smoothing of wrinkles around areas like sleeves.

(Hitachi Appliances, Inc.)

*1 Compared to previous model BD-V9500 (2012 model) without high flow rate circulation wash.

*2 Maximum shower flow rate of previous model BD-V9500 (2012 model) without high flow rate circulation wash: 20 L/min.

*3 Calculated from nozzle size and air flow.



1 Big drum washer-dryer [BDV9700L (N)] (left), big drum slim washer-dryer [BD-ST9700L (S)] (right)



2 IH rice cooker [RZ-VS2M (N), width: 21.7, depth: 26.0, height: 17.5 (cm)] (left), IH jar rice cooker [RZ-VW3000M (N), width: 27.5, depth: 36.1, height: 24.6 (cm)] (right)

2 IH Rice Cooker

Hitachi has released two new rice cookers, the 2-cup (0.36 L) induction heating (IH) rice cooker (RZ-VS2M) that enables small quantities [less than 2 cups (0.36 L)] of rice to be cooked deliciously and allows the top cooking container component of the heating base unit to be detached from the heating base, so it can be taken it to the dining table; and the 5.5-cup (1.0 L) IH rice cooker (RZ-VW3000M) that allows 1, 2, or even 5.5 cups of rice to be cooked as desired.

The 2-cup (0.36 L) type can maintain high temperature with its full heat-insulated structure (the thick thermal sprayed iron pot with high thermal storing characteristics is insulated with flexible vacuum insulation panel) which helps to steam and cook rice more efficiently. In addition, the top cooking container can be detached from the base heating unit, allowing hot rice to be served at the table as required.

The other 5.5-cup (1.0 L) type features a new technology using a higher output side heater, in addition to Hitachi's unique pressure and steam function that generates steam at the raised boiling point of 107°C at 1.3 atmospheric pressure, as well as a vacuum heat insulation container. These features ensure that the temperature of the empty space around the inner pot is kept appropriately, and helps rice to be cooked deliciously*, even for small quantities of less than two cups of rice.

(Hitachi Appliances, Inc.)

* When using the white rice finest springiness setting.

3 Air Purifier & Humidifier

Hitachi has released the air purifier & humidifier (EP-KVG900). It utilizes a wide and speedy dust collection system that draws air



3 Air purifier & humidifier [EP-KVG900 (N)]

from a wide area at the rear side of the unit, and blows purified air out at the top. This appliance can clean the air in 13-m² room in about seven minutes.

The main features are as follows.

(1) Applicable floor spaces*¹ up to 68-m²*² with improved air ducts, a new motor and high-efficiency compact fan, along with an enlarged air-intake area on the rear side. Dust collection is faster — for example, it can purify the air in 13-m² room within only seven minutes, which is approximately 1.7 times*³ faster than the previous model.

(2) Easy to handle and scratch resistant with reinforced glass used in the front area of the unit. A touch operation system makes it easy and simple to control. The display buttons only light up when needed, and only the humidity, temperature, and cleaning monitor are displayed in standard operation mode.

(3) Pursues the cleanliness of the inside of the unit, the stainless clean system that was adopted in previous models has been retained. The system uses antibacterial*⁴ stainless steel for pre-filters, flaps, and air ducts.

(Hitachi Appliances, Inc.)

*1 Based on a standard room size (calculated with a ceiling height of 2.4 m) that can be purified within 30 minutes, under the “JEM 1467” specification set by The Japan Electrical Manufacturers’ Association.

*2 When purifying the air

*3 Comparison between 2013 model EP-JV700 (applicable floor space: up to a 40-m² room, cleaning duration: 12 minutes for 13-m² room) and the new model EP-KVG900 (applicable floor space: up to 68-m² room, cleaning duration: Seven minutes for 13-m² room).

*4 It is not possible for all bacteria in the air to be eliminated by the air purifier. The antibacterial effect is achieved with (1) stainless pre-filter, (2) stainless flap, and (3) stainless net (outlet). Test laboratory: (1) and (2), Boken Quality Evaluation Institute, (3) Kitasato Research Center for Environmental Science. Test method: JIS Z 2801 (film contact method). Test target: Attached bacteria. Elimination method: With metal ion in stainless steel. Test results: 99% of bacteria eliminated after 24 hours.

4 Fully Automatic Natural Refrigerant Heat-pump Water Heater

Hitachi has released the natural refrigerant (CO₂) heat-pump water heaters for home use (BHP-FV37PD, BHP-FV46PD), a high-energy saving and earthquake-resistant water heater. The urethane foam has been adopted as an insulation material for its hot water storage tank unit.

The main features are as follows.

(1) Unlike previous models*¹, which were insulated with expanded polystyrene, this new model has been improved with the urethane-insulated storage unit in which the space between the outer wall and the tank is filled evenly with high insulating urethane foam. Connected with a high-efficiency heat pump cycle, the unit achieves the highest annual water heating and heat-retention efficiency rates*² of (JIS) 3.9 (BHP-FV37PD) and 3.8 (BHP-FV46PD).

(2) The rigidity of the hot water storage tank unit has been improved by including urethane foam in its bottom area, which is attached to the tank. With this design, the highest level of earthquake resistance, class S*³ is supported.

(3) Employs the rapid hot water filling system. This system enables hot water to be filled twice as fast compared to standard filling speeds. It can fill a bath with a capacity of 180 L in about five minutes and 45 seconds*⁴. In addition, jet bubble bath function provides a comfortable and bubbly bath setting*⁵. The system is also compatible with home energy management system (HEMS)*⁶. (Hitachi Appliances, Inc.)

*1 2013 products BHP-FV37ND and BHP-FV46ND.

*2 As of November 16, 2014. Applicable as a home use water heater at a normal temperature (1) At a hot water storage capacity of at least 320 L and no more than 460 L, the annual water heating and heat-retention efficiency (JIS) of the BHP-FV37PD is 3.9. (2) At a hot water storage capacity of at least 460 L and no more than 550 L, the annual water heating and heat-retention efficiency (JIS) of the BHP-FV46PD is 3.8. The annual water heating and heat-retention efficiency (JIS) is a value that is calculated according to JIS C 9220:2011, and it varies depending on the region, environment, operation setting, operating circumstances, and other conditions.

*3 Can withstand an earthquake with an intensity of 2.0 based on the “Standard Seismic Scale for Planning of Building Facility Equipment, Calculated by Seismic Intensity Method” specified by the “Seismic Design and Construction Guide for Building Equipments” (issued by The Building Center of Japan).

*4 Pipe diameter of 15 A. 5 m straight pipe. Water supply pressure of 300 kPa. Hot water temperature in the tank is 80°C. Cold water temperature is 17°C. Filling hot water temperature is 40°C. Capacity of bath is 180 L. Approximately five minutes and 45 seconds. Hot water filling time may vary depending on the installation conditions.

*5 Requires the circulation adaptor, sold separately.

*6 Requires a HEMS adaptor for Hitachi water heaters, sold separately.



4 Exterior of Natural Refrigerant Heat-pump Water Heater (BHP-FV46PD) and remote control units for kitchens and bathrooms



5 LED ceiling light (LEC-AHS 1810CC) (left) and light guiding ring type LED ceiling light (LEC-DHS1230C)

5 LED Ceiling Light for Home Use

Hitachi released eight new light-emitting diode (LED) ceiling lights. The units are equipped with the easy viewing function, which provides brighter and more natural lighting that is similar to sunlight, making text and color appear more clear and vivid.

The main features are as follows.

- (1) Adjustable brightness with the easy viewing function button, which increases the brightness by approximately 1.2 times compared to a fully lit room. In addition, blue and green light is added to make small text appear more clearly, and the color of photographs to be more vivid with higher contrast.
- (2) Achieves both more light and energy-savings. For brightness, the 30-m² room type model*¹ provides 8,000 lm, which is the highest class*² in the industry. For the 10-m² to 23-m² room type model, the maximum brightness*³ is achieved according to the corresponding room size standard. For energy-savings, it achieves a high level of intrinsic-energy consumption efficiency*⁴ between 123.1 to 125.8 lm/W.*⁵
- (3) Light guiding ring type LED ceiling light, which is equipped with Hitachi's newly developed clear lighting technology, is included in the new product lineup. This model has a sleek design with a height of just 72 mm, and provides large area of sparkling light.

(Hitachi Appliances, Inc.)

*1 Standard for 30-m² room type model, set by Hitachi Appliances, Inc.

*2 Applies to the home LED lighting market in Japan. Rated luminous flux of LEC-AHS1810CC 8,000 lm. As of November 16, 2014.

*3 Under the "Residential Catalog Applicable Room Size Standards" (Guide 121:2011), issued by the Japan Lighting Manufacturers Association.

*4 Excluding LEC-DHS1230C.

*5 Energy consumption efficiency is calculated as rated luminous flux divided by rated power consumption.

6 Room Air Conditioner

The room air conditioner has been released with a multi-monitoring system that uses a newly developed "Near-infrared Camera"

function in addition to a previous "Imaging Camera" (which captures visible images) and "Thermal Imaging Camera" (which capture surrounding temperature of people and objects), "Near-infrared Camera" function captures near-infrared images with a combination of the "Imaging Camera" and near-infrared LED, whereby the position and shape of furniture in a room can be detected and the path of air flow can be recognized.

The main features are as follows.

- (1) Equipped with a multi-monitoring system which detects the position of furniture, its shape, and gathers information regarding the size of the room and position of people in the room. The path of air flow can be recognized and controlled more finely using the three-way front flap. Warm air reaches the feet in the winter, and in the summer, cold air circulates efficiently throughout the room. Altogether, it achieves a flexible air flow control system.
- (2) Pursues cleanliness, anti-bacterial and anti-fouling stainless steel is used inside the unit, in the air duct, flaps, and filters. This clean system has been used in previous models.
- (3) The floor heating system that heats the area around the feet (5 cm above the floor, 3 m away from the air conditioner unit) to around 36°C has been improved. In addition, it is equipped with features from previous models such as the hot air supply setting, which circulates hot air of 55°C continuously for approximately 30 minutes, and the rapid heating setting, which blows warm air within approximately 30 seconds.

(Hitachi Appliances, Inc.)



6 Room air conditioner