Consumer Appliances

Hitachi has released a series of “vacuum compartment” large capacity refrigerators that can preserve the taste of food in the chilled compartment, the vegetable compartment, and the freezer compartment through the use of three unique technologies to keep food fresh*.

The main features are as follows.

1. Vacuum-chilled compartment
   The chilled compartment maintains the temperature at approx. -1°C, keeping meat and fish from freezing. Furthermore, the vacuum structure of the compartment reduces oxygen, suppressing oxidation, and the use of a new platinum catalyst, which increases the generation of carbon dioxide, inhibits enzyme activity on the surface of food, thus preserving the taste of food.

2. Vegetable compartment
   By adopting a new platinum catalyst, the vegetable compartment uses the effect of carbon dioxide to store vegetables in a sleep-like state. The compartment also keeps moisture in, helping to prevent drying, thus ensuring vegetables retain their freshness and nutrients.

3. Quick-freezing aluminum tray
   The spacious, thin case at the top layer of the bottom of the freezer compartment uses a new quick-freezing function to maintain the taste of meat and fish and the nutrients of vegetables. The case is fitted with a large aluminum tray to create ample space to store food without stacking and it is also equipped with temperature sensor that detects when warm food is stored, enabling the food to be frozen quickly.

* Effectiveness varies depending on operating conditions and the type, state and volume of the food stored.

Hitachi has released the robot cleaner RV-DX1 which, with a small body, can clean hard-to-reach areas around the home such as tight gaps and underneath low furniture. The main features are as follows.

1. Robot Cleaner
   With a system unit 25 cm wide and a small body 9.2 cm high, the robot cleaner can fit into tight spaces, such as between the legs of a dining table or chairs, and underneath low furniture such as sofa or bed.

2. The robot cleaner can clean an entire room
thoroughly, changing direction quickly and moving briskly and adeptly. The control system, which incorporates newly developed artificial intelligence (AI) for the robot, automatically controls operations, quickly judging ambient conditions with the aid of multiple sensors and selecting from more than 100 behavior patterns depending on conditions, thus helping the robot to avoid obstacles and get through narrow gaps.

(3) The robot cleaner delivers powerful suction thanks to the newly developed small high-power fan motor which combines a compact design with high efficiency. The suction port is equipped with a unique double-action scrape & brush to effectively collect dust from various floor surfaces including wooden floors and carpets.

(Hitachi Appliances, Inc.)

Hitachi has released a front loading washer-dryer machine (BD-NX120A) featuring heat recycling drying technology, a wind iron function, and a large-capacity drum. The BD-NX120A combines the industry’s largest*1 laundry capacity with a compact form (laundry capacity of 12 kg, laundry to drying capacity of 6 kg).

The main features are as follows.
(1) The BD-NX120A is the industry’s largest*1 washing machine, with a laundry capacity of 12 kg, and also has a compact form, with a depth of 62 cm. Besides washing clothes, the BD-NX120A can wash up to four blankets (each weighing up to 1.5 kg) in one load on the blanket program.

(2) The BD-NX120A blow dries clothes at a wind speed of around 300 km per hour*2 to smooth creases. It features a new humidity control function, which maintains high humidity within the drum while maximizing control of drum rotation, as well as a wind iron function for a wrinkle-free finish.

(3) In addition to the newly developed powerful high flow rate shower which moves the water back and forth, BD-NX120A employs new washing function combines press washing, beat washing, and scrub washing effects, and warm mist cleaning to wash off yellow stains.

(Hitachi Appliances, Inc.)

*1 Among front loading washer-dryer machines for domestic use available in Japan as of December 2016 according to the study undertaken by Hitachi Appliances, Inc.

*2 Wind speed next to the air outlet, calculated from the area of the air outlet and the airflow.
Hitachi has released the health conscious superheated steam oven MRO-SV3000, equipped with Hitachi’s unique double scanning system\(^1\) that measures both the food temperature and weight (including the dish). It also features an automatic cooking program function for bringing out the taste of meat and fish\(^2\). The product also has an automatic cooking function for retaining vitamin C\(^3\), which is easily destroyed by heat and because of this function, the machine can evenly thaw\(^4\) frozen food such as minced meat, thinly sliced meat and sashimi, and can also heat food such as rice or noodle to the optimum temperature\(^5\) with or without plastic wrap.

In addition, automatic cooking function of the MRO-SV3000 also covers a wide range of recipes, including local dishes from all over Japan.

The bright interior is lit with light-emitting diode (LED) and has a bright-colored silicon coating to make it easier to see food simmering or browning during cooking and to facilitate cleaning by making it easier to see and remove any grime.

(Hitachi Appliances, Inc.)

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\(^1\) Three weight sensors and center infrared scanner.

\(^2\) 29 automatic cooking recipes with high inosinic acid and glutamic acid levels. When compared to meat and fish cooked using the heating control technology featured in the MRO-RY300 released in FY2015 and earlier models, and when compared based on the amount of flavor components of meat and fish cooked without using seasoning according to the study undertaken by Hitachi Appliances, Inc. Effectiveness varies depending on the ingredients used and other conditions. Taste perception also differs depending on factors such as seasoning, temperature, and preferences.

\(^3\) Compared to MRO-RY300 released in FY2015 according to the study undertaken by Hitachi Appliances, Inc. 13 automatic cooking recipes. Loss of vitamin C varies depending on the conditions and the type of vegetables.

\(^4\) Cooking results may vary depending on the factors such as the shape of the food, interior temperature, and dish.

\(^5\) The average temperature of the food at the end of the cooking time specified for each automatic cooking recipe. This may differ from the temperature setting, depending on the drink or food being heated up.
1. The ridged-surface dish can be used to cook everyone’s favorite grilled dishes such as grilled saury and herb crusted chicken. The flat-surface oven dish can be used to cook dishes such as roast beef and paella. The flat-face oven dish comes with its own special lid and can also be used for baking and steaming and to make bread and cakes.

2. Both the grill dish and oven dish are deep enough to prevent oil splatter during cooking and keep the inside of the oven clean.

3. The right and left induction heating zones have an induction heating capacity of 3.2 kW which is useful for cooking dishes that require a large amount of hot water such as pasta.

4. The HT-K300XTWF (W) has a pearl white top plate, with transparent glass giving a feeling of depth, which harmonizes beautifully with the kitchen.

(Hitachi Appliances, Inc.)

*1 The ridged-face grill dish and flat-face oven dish are designed for use inside the oven.

*2 Compared to the 2013 H series model without ridged-face grill dish according to the study undertaken by Hitachi Appliances, Inc. The condition inside the oven may vary depending on factors such as the type and amount of food.

*3 Input capacity.

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LED High-bay Luminaire for Commercial Lighting

Hitachi has released 27 models of LED high-bay luminaire for commercial lighting that offer high energy saving performance and have a compact, lightweight design.

The main features are as follows.

1. The fixtures have a new body with high heat dissipation properties, comprising heat radiation fins and a power circuit case as a thermally conductive aluminum integrated part. They also have a high efficiency LED module, thus achieving high levels of energy savings, with energy efficiency of 156.8 to 177.2 lm/W.

2. As a result of the new structure using an aluminum body with high heat dissipation properties, the new models are around two thirds more compact than previous products, with a height of 240 mm and a maximum width of 264 mm. They are also much more lightweight, weighing between 2.9 and 3.4 kg. This makes them easier to install and reduces the work involved in fitting fixtures to high ceilings.

3. The LED light source has a lifetime of 60,000 hours. Moreover, nine of the 27 models are damp-rated or wet-rated (dustproof) fixtures that can also be used as eaves lighting or on dusty construction sites, thus meeting a wide range of needs.

(Hitachi Appliances, Inc.)

*1 Comparison between the new products and 16 previous models in the same class such as MTE2203NN-J14A (height 362 mm, maximum width 404 mm, weight 5.3 to 6.5 kg) according to the study undertaken by Hitachi Appliances, Inc.

*2 The light source lifetime is the design life of the LED module calculated based on a thermal design determined for each LED and may vary depending on the conditions and method of use.