

# Consumer Appliances



1 Top-loading washer dryer [BW-D11XWV (N)]

1

## Top-loading Washer Dryer

Hitachi has released the top-loading washer dryer (BW-D11XWV), which is equipped with the high flow rate rinse program that completely removes detergent using a plentiful amount of water and centrifugal force.

The main features of the BW-D11XWV are as follows.

- (1) Comes equipped with the high flow rate rinse program that completely removes detergent from fibers through high speed rotation (approximately 1,000 revolutions per minute), which produces a strong centrifugal force and a powerful shower flow with a circulating flow rate of approximately 50 L/min.
  - (2) Comes equipped with a warm high flow rate circulation wash cycle with enhanced washing capability that fully utilizes the enzyme power of the detergent by adding a warm mist function for warming up garments for the high flow rate circulation wash. This ensures that even laundry with stubborn stains comes out strikingly white. Selecting the 120-minute warm mist course completely removes even yellowing from garments.
  - (3) Parts inside the washing tub have been slimmed down and the top part of the tub has been redesigned to achieve a washing capacity of 11 kg without changing the size of the unit. In addition, the glass top design includes a lid made from tempered glass that is free from scratching, and is flat for easy cleaning.
- (Hitachi Appliances, Inc.)

2

## High-power Cyclonic Cleaner, Paper Bag Vacuum Cleaner

Hitachi has released the high-power cyclonic cleaner (CV-SC700) equipped with the “Jet Suction Smart Head” and the paper bag vacuum cleaner (CV-PC500).

The main features of the CV-SC700 are as follows.

- (1) Using a newly developed “Jet Suction Smart Head” it achieves both strong suction power and light, smooth operation.
- (2) Achieves strong power with a suction work rate\*<sup>1</sup> of 430 W through a compact and lightweight high-power fan motor and a high-power cyclone structure.
- (3) Comes equipped with various unique functions that make the vacuum cleaner easy to use, such as a “One-Touch Zoom Pipe” which makes the pipe length easily adjustable.

The main features of the CV-PC500 are as follows.

- (1) The newly developed high-performance compact motor achieves strong power with a suction work rate\*<sup>1</sup> of 360 W, while maintaining a low operating sound of 57 dB\*<sup>2</sup>.
- (2) Components such as the advanced dust collection filter and airtight motor case ensure clean exhaust (99.999% collection efficiency\*<sup>3</sup>).
- (3) The vacuum cleaner has been made compact and lightweight



2 High-power cyclonic cleaner [CV-SC700 (R)] (top), paper bag vacuum cleaner [CV-PC500 (N)] (bottom)

by giving the unit a compact design and using a proprietary lightweight material.

(Hitachi Appliances, Inc.)

\*1 The maximum value for the suction work rate is given, under the guidelines for suction power specified by JIS standards. The dust collection performance during operation depends not only on the suction work rate, but also on differences in terms of factors such as the type of suction tool, the degree of dust accumulation, and the flooring material.

\*2 Operating sound measured under JIS C 9108.

\*3 Test dirt: air cleaner (AC) test dust (fine), test organization: SLG Prüf-und Zertifizierungs GmbH (Germany), test method: measured amount of discharged dust with size of 0.3 to 10 μm, test result: 99.999% collection efficiency (average).

### 3

#### Superheated Steam Microwave Oven

Hitachi has released the health conscious superheated steam microwave oven (MRO-RY3000), equipped with a double scanning system that measures both the food temperature and weight (including the dish). This reduces heating unevenness when heating or defrosting\*<sup>1</sup>.

Previous products\*<sup>2</sup> heated automatically after measuring the food weight (including the dish) with three weight sensors, but this product is also equipped with a center infrared sensor that measures the food temperature. This reduces heating unevenness when heating or defrosting caused by differences in the initial temperature of the food. In terms of ease of use, a large window is used, and the inside of the microwave is white and lit with an light-emitting diode (LED) to produce a bright interior where the stewing condition or roasting color of the food is clearly visible. The oven design also makes cleaning easy. The white interior oven surface is treated so that adhering grime is easy to see and wipe



3 Superheated steam microwave oven [MRO-RY3000 (R) (top), (S) (bottom)]

off, and the table plate at the bottom of the oven can be removed and washed.

(Hitachi Appliances, Inc.)

\*1 Cooking results vary due to factors such as the shape of the food, interior temperature, and dish.

\*2 Previous Hitachi product MRO-NY3000 (2014 model).

### 4

#### “Vacuum Compartment” Large Capacity Refrigerator

Hitachi has released the “Vacuum Compartment” refrigerator series (such as the R-X7300F with rated interior capacity of 730 L). This series uses a platinum catalyst that breaks down odors and generates carbon dioxide in a vegetable compartment that preserves vegetable nutrients and freshness, and in a vacuum-chilled compartment that minimizes food oxidation and preserves freshness through vacuum power.

The main features of the R-X7300F are as follows.

(1) A platinum catalyst jointly developed with Hokkaido University for home-use refrigerators breaks down ethylene gas and odors, and generates carbon dioxide. This raises the concentration of carbon dioxide around the vegetables, reducing their respiration activity. As a result, wherever the vegetables are stored in the vegetable compartment, the “Photocatalyst Preservation” function preserves the vegetables as if they are sleeping, protecting their nutrients.

(2) The platinum catalyst is also used in the vacuum-chilled compartment, which breaks down odors from meat and fish and increases the carbon dioxide concentration inside the compartment. This reduces the effects of enzymes on the surface of meat and fish. As a result, the “Photocatalyst Preservation” function preserves the food as if it is sleeping, and the nutrients and freshness of the meat and fish are protected by storing them in a vacuum pressure of approximately 0.8 atmospheres.

(3) When using the refrigerator model with the industry’s largest rated interior capacity of 730 L, there is ample space to store food



4 “Vacuum Compartment” large capacity refrigerator [R-X7300F (ZT) (left), vegetable compartment (top right), vacuum-chilled compartment (bottom right)]

bought in bulk on the weekend or received by a delivery service, and even large items can be stored whole.

(Hitachi Appliances, Inc.)

## 5

### LED Ceiling Light for Home Use

Hitachi has released four models of LED ceiling lights equipped with a new additional light function\*<sup>1</sup> that brightly illuminates all corners of a room from the ceiling to the walls, making the room feel more spacious.

The main features of the spacious light models are as follows.

(1) Comes equipped with a new additional light function that brightly illuminates all corners of a room from the ceiling to the walls, in addition to a wide lighting function that uses a lens to maximize the range of brightness to suit the size of the room\*<sup>2</sup>. The LED light at the top of the fixture shines toward the ceiling and walls, giving bright light to locations that are difficult to reach for conventional lights. This reduces imbalances between light and dark in the room and makes the room feel more spacious.

(2) When the easy viewing function button on the remote controller is pressed, the brightness increases by approximately 1.2 times compared to a fully lit room, and the easy viewing function LED also illuminates\*<sup>1</sup>. Blue and green light components, which are slightly lacking in conventional LED lights, are added to the fully lit LED lights to produce wavelengths closer to natural sunlight. This makes small text appear more clearly, and the color of photographs seem more vivid and with higher contrast.

(3) The lineup includes products with the industry's highest light intensity\*<sup>3</sup> of 10,000 lm (for 33-m<sup>2</sup> or larger\*<sup>4</sup> rooms). The three models for 13-m<sup>2</sup>, 20-m<sup>2</sup>, and 23-m<sup>2</sup> rooms deliver the maximum standard brightness for each room size\*<sup>2</sup>. In terms of energy saving performance, 137.7 lm/W\*<sup>5</sup> or higher is achieved in all models.

(Hitachi Appliances, Inc.)

\*1 Power consumption higher than normal fully-lit (rated) level.

\*2 Under the "Residential Catalog Applicable Room Size Standards" (Guide 121:2011), issued by the Japan Lighting Manufacturers Association.

\*3 As of September 2015, compared with LED ceiling lights sold in Japan.

\*4 Standard for 33-m<sup>2</sup> or larger room type model, set by Hitachi Appliances, Inc.

\*5 The energy saving performance expresses the energy consumption efficiency. The energy consumption efficiency is calculated as rated luminous flux divided by rated power consumption.



5 LED ceiling light equipped with additional light

## 6

### Inverter Pump for Home Use

Hitachi has released an inverter pump (WM-P250X) for shallow wells and pressurized water supply that uses a bladder tank system\*<sup>1</sup>. Through the use of components such as a pump head and high performance motor, this delivers high energy savings and minimizes noise.

The main features of the WM-P250X are as follows.

(1) Comes equipped with components such as a high efficiency pump head with newly-designed flow channels that reduce water flow resistance, and a high performance interior permanent magnet (IPM) motor dedicated to the pump. This delivers energy saving performance of 350-W power consumption, and low noise performance of 40-dB operating sound.

(2) Comes equipped with Hitachi's proprietary Karman vortex ultrasonic flow sensor, which monitors the water flow in the internal flow channels of the pump. This enables the new adoption of smart controls to detect cavitation\*<sup>2</sup> that causes reduced efficiency and water supply fluctuations, and adjust operations to the optimum level. This reduces wasteful power consumption and achieves stable water supply.

(3) Operational wear is greatly reduced because the high pressure area inside the casing of the pump head is equipped with a wear-resistant and elastic casing made from a new elastic elastomer material that is resistant to sediment wear.

(Hitachi Appliances, Inc.)

\*1 A pump using a pressure tank with a structure that seals nitrogen between the outer shell and a movable rubber film (bladder).

\*2 Phenomenon when bubbles occur in intake pipes or intake flow channels when the water flow resistance is high and the flow speed is fast. This reduces the water supply volume and causes vibration and noise in the pump.



6 Inverter pump for shallow wells and pressurized water supply (WM-P250X)