

# More Sophisticated, More Stylish ROLLER BALL F



#### An Innovative Product Created by Takara Belmont

A far-infrared hair processor is essential for effectively processing colour, perms, and other treatments. The world's first far-infrared dome with a rotating ring was implemented in the ROLLER BALL, a leading Takara Belmont product. With an open feeling and chic-yet-functional style that you don't find in hood-based processors, it remains popular in Japan—and the rest of the world—more than 20 years after its first release.

## ROLLER BALL F is Revolutionising the Future of the Salon

And now, a new generation of ROLLER BALLs has been conceived: ROLLER BALL F ('F' for 'Future'). Complementing its stylish and futuristic design are several advancements in performance—for example, an industry-first\* carbon element—that make the ROLLER BALL F a powerful tool that will revolutionise the future of hair design. Evoking an image of high-end therapeutic technology and sporting a beautiful finish, it's sure to become a new icon of the salon in the years ahead.

\*As of July 2011

ROLLER BALL

## **High-Performance Carbon Element Expands** the Possibilities of Hair Design

In place of a conventional ceramic element, ROLLER BALL F employs a new, highly efficient carbon element that uses high-purity carbon (99.8% purity). What really impresses about this element is its outstanding speed and power. Formed into a circular shape that was very difficult to manufacture until now, it is the beauty industry's first\* carbon element to be used in a far-infrared hair processor.

\*As of July 2011

20

70.0

60.0

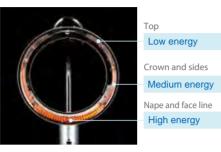
50.0

40.0

Advantage 1 **Quickly Processes Colour and Perms That Last** Takara Belmont's carbon element reaches the selected output setting faster than the ceramic elements of conventional models. And, since the energy of the wavelength regions acting on the hair and chemicals is significantly higher, it thoroughly processes the colour\*1 and the chemical reaction of perms\*2. As a result, it improves the efficiency of work in the salon. \*1 Colour: acidic hair dyes \*2 Perms: hot double-process perms ■ Comparison of Wavelength Regions The graph shows the ■ Comparison of Start-up Output energy distribution of Wavelength regions producing the greatest effect on hair and chemicals (wavelength regions absorbed by water) black-body radiation per unit of area at a given output temperature fo ROLLER BALL F and ROLLER BALL II. (Calculated according to ROLLER BALL F ROLLER BALL II 4 min. 34 sec. ROLLER BALL F Planck's law) 40 30 Approx. 2 minutes ROLLER BALL I 20 10 0 240 300 As a large amount of energy is produced in the most Only around two minutes to reach target temperature effective wavelength regions, the chemical process is further approximately half the time required by a conventional ceramic Comparison of Curling Strength (comparison using a curling agent) ■ Degree of Penetration into Hair and Persistence (comparison using an acidic dve) ROLLER BALL II Left as-is 10 minutes After being shampooed seven times Despite the shorter exposure time of ROLLER BALL F, the chemical agents are absorbed quickly, and the curl takes full effect, all the way to the tips With ROLLER BALL F, the dye was absorbed and took hold ■ Comparison of Curling Strength evenly. Even after the hair was shampooed seven times, there was relatively little loss of colour. (comparison using a curling agent <Processing details> A test was performed in ■ Degree of Penetration into Hair and Persistence (comparison using an acidic dye) which black human hair (damage level 3) was wound around 17 mm rods and a ROLLER BALL F: 10 minutes of exposure <Processing Details> curling agent was applied ROLLER BALL II: 10 minutes of exposure ROLLER BALL F and ROLLER BALL II were The efficiency of curl I eft as-is: 10 minutes compared in a test in which an acidic hair formation in the locks of dye was applied to grey human hair. hair was then calculated. Immediately after processing, there was little variation in the strength of the reddish tint. However, when we compared the Reddish tint (a\*) results after the hair was shampooed seven times, the locks of hair that had been ROLLER BALL F -- ROLLER BALL II exposed to ROLLER BALL F for ten minutes clearly held the reddish tint better, 8 demonstrating a longer-lasting persistence Processing time (minutes) Results Shamponed 7 times

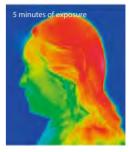
## Colour, Perms, and Other Treatments Are Absorbed Evenly

The element is divided into three blocks: the top; the crown and sides; and the nape and face line. By altering the amount of energy in each block, the element achieves a more uniform distribution of temperature. In the top part, where the temperature tends to be higher, the amount of energy has been set at a lower level, while in the nape region, where energy needs to be steadily applied, the amount of energy has been increased. This prevents the uneven absorption of colour, perms, and other treatments in different sections of hair and leads to a beautiful finish.



The element is divided into three blocks, with the amount of energy set to the appropriate level for each block.





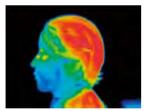
There is a uniform distribution of temperature from the top to the nape.

Advantage 3

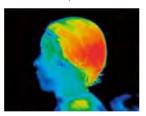
## Efficient Distribution to Only the Areas That Need It

Taking advantage of the carbon element's fast on/off response time, the controls allow you to turn the beam on and off in each of the three areas (front, sides, and nape) while the ring is rotating. You can limit the beam to only the sections that need it—for example, just to the nape. By having the beam go only to the sections of hair that have a more convoluted texture, or the sections that do not respond as quickly to the chemicals, you can provide customers with a more comfortable treatment. You can also stop the ring at the area where it is needed.

Heat: 10 minutes of exposure



Partial heat: Front OFF, 10 minutes of exposure



Turning off the beam to the front area, which heats up more quickly and is more sensitive to heat, slightly lowers the temperature at the sides and nape. The customer enjoys a comfortable treatment, and the technician is able to efficiently process sections that need more energy while keeping the whole area warm, leading to improved results.



## A Precise Sensor for Accurate Output Control

When the colour, perm, or treatment mode is used, ROLLER BALL's unique infrared thermal sensor directly detects the temperature of the hair on the scalp and ensures that it stays at the set output level. In addition, if the head moves out of alignment during operation—for example, because the customer dozes off—or if the sensor detects a deviation from the output settings, an error alarm will go off. When an abnormal increase in output is detected, the machine also shuts down automatically for safety.



Sensor position

## Designed for Better Work Performance and Ease of Use.

## Easy for Anyone to Master.

#### Slim and Lightweight—A Feather-Light Feeling

While a conventional machine (body plus stand) weighs 22 kg, this sleek new machine weighs just 15.6 kg. It's a full 30% lighter and much easier to move for salon staff. Takara Belmont also made the machine easier to access from behind and simplified the control panel.



## Smoothly Slides Up and Down Using a Gas Cylinder System

Takara Belmont employed a gas cylinder for the height-adjustment feature. By simply stepping on the



#### **New Easy-View Control Panel**

Takara Belmont rearranged the control panel and improved its visibility, so you can check the machine's operating status from a distance. It's also easy to select one of the four treatment modes perm, colour, treatment, and manual-or one of the three sections-front, side, and napeby simply pushing the corresponding button. In addition, a pilot lamp at the back of the main body lights up blue (when in operation) or blinks on and off (when an operation finishes, and so on) to indicate the machine's operating status.



#### **Glowing Light Indicates** Changes in Temperature

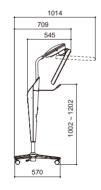
When you switch the machine on, the element glows red; when the given output level is reached, it stops glowing. If the output level falls, the ring starts glowing again as it increases the output.

• Note : The brightness of the room can make it hard to see



#### Dimensions (mm)





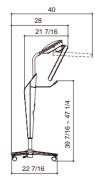
## Specifications (mm)

- Rated voltage: 110V, 120V, 220V, 230V, 240V
- Rated current: 8.1A (110V), 9.3A (120V), 3.4A (220V), 3.5A (230V), 3.7A (240V)
- Size (WxDxH): head: 485 mm , foot: 681 mm x 1014 mm x 1513 mm [stroke: 200 mm] • Weight: 15.6 kg
- Environmental temperature range: 10°C~40°C
- Environmental humidity range: 30%~85% RH Cord length: 3 m
- Safety devices: tilt sensor, rotating clutch function, power supply fuse
- Style: stand type
- Please note that, due to ongoing improvements, measurements and specifications are subject to change without prior notice.

  • Actual colour may differ somewhat due to variations in printing.

#### Dimensions (inch)





## Specifications (inch)

- Rated voltage: 110V, 120V, 220V, 230V, 240V
- Rated current: 8.1A (110V), 9.3A (120V), 3.4A (220V), 3.5A (230V), 3.7A (240V)
- Size (WxDxH): head: 19-inch, foot: 26 3/4-inch x 40-inch x 59 5/8-inch [stroke: 7 3/4-inch] • Weight: 34.5 lbs
- Environmental temperature range: 50°F ~ 104°F
- Environmental humidity range: 30%~85% RH Cord length: 10 ft
- Safety devices: tilt sensor, rotating clutch function, power supply fuse
- Style: stand type
- Please note that, due to ongoing improvements, measurements and specifications are subject to change without prior notice.
- · Actual colour may differ somewhat due to variations in printing.

#### Variations

#### Creative Model (one-tone specification)







AK-S23S-GR Metallic green

#### Creative Model

(two-tone specification; colour-combination example)



#### About the Creative Model, **Two-Tone Specification**

In addition to the one-tone specification, the Creative model is also available in a two-tone specification with different colours for the body and top cover. Choose the combination you like from five colours for the body and seven colours for the top-cover. (Note: The ring is available in grey only.)

#### **Top-Cover Colours for** the Two-Tone Specification

These are the colours that are available for the top-cover.



P(pink)

I (indigo blue)

Body	Top cover
AK-S23S-SL□ (Silver)	S (Silver)
AK-S23S-R□ (Red)	R (Red) Y (Yellow)
AK-S23S-Y□ (Yellow)	O (Orange)
AK-S23S-O□ (Orange)	G (Metallic green) P (Pink)
AK-S23S-GR□ (Metallic green)	I (Indigo blue)

• Enter the top cover colour code in the "

" space of the two-tone specification model number.

Example

For body colour: red, top-cover colour: silver, enter: AK-S23S-RS

For body colour: silver, top-cover colour: red, enter: AK-S23S-SLR

#### Standard Model



#### Option

#### Cooling Fan for Cooling Down the Nape Area

Model number: AK-S23SF□□ \*Enter the colour code in the " $\square$  "space  $\,$  of the model number.

The two-minute cooling time is preprogrammed after the colour, perm, and treatment mode. The cooling fan is also available in the middle of operations to enhance the client's comfort.

\* The cooling fan is a factory-installed option and unable to be mounted after shipment.

Please ask for the model with a cooling fan when placing an order.



The cooling fan for the Stand Type is silver-painted.