

Electric Rice Cookers One kitchen chore made easy

While not a new invention, the electric rice cooker as a domestic appliance gained currency in India in the last few years as cooking gas prices shot up and people began looking for efficient alternatives. Rice cookers are now increasingly being used by people in regions where rice is a staple and cooked for almost all meals. Dozens of rice cookers, made by either local manufacturers or established brands, are selling quite well across India. In our endeavour to find out if all brands are suitable to be in the market and if consumers are getting value for what they are paying, we shortlisted 11 most sold branded rice cookers, bought them from organized retail stores, and tested their performance in an NABL-accredited laboratory.

A Consumer Voice Report

hile searching on the Internet to know more about rice cookers the world over and see the relevance of what is being written online vis-mivis what we found after our tests, some interesting snippets came up. There's a blogger who claims to

have an electric rice cooker that his family bought over 30 years ago (way before we Indians saw them on retail shelves) in the Philippines and it is still being used to cook in their kitchen without having to be repaired even once. In another blog post we found a family appreciating the rice cooker for saving on

time, cooking gas and water, and also saving them the hassle of checking every five minutes if the rice was cooked – auto-shut took care of that. And then there are forums where people are discussing ways to clean their cookers to keep them from catching mould, as also ways to protect the circuits from catching water... We also read that the Japanese have already prepared a prototype that can cook in the car...

Here in India, most of us became familiar with the electric rice cooker just about a decade ago. There are as yet no specific Indian Standards for this appliance, and we took reference for some qualitative tests from IS:11879-1986, meant for electric steam cookers. The tests revolve around the ability to cook a variety of rice and other foods, as well as convenience and ease-of-use factors including maintenance and power consumption. For safety tests, regular tests applicable to similar appliances were considered. We also looked at aesthetics including design and styling,

CV Recommendation Prestige

Cooks fastest among the tested brands

Value for Money Reconnect

At Rs 990, it is priced way below other brands (starting at Rs 1,600) and performs almost equally well.

KEY FINDINGS

- In overall score, Prestige came on top followed by Inalsa.
- Prestige took lesser time in cooking and was followed by brands Usha and Morphy Richards.
- In terms of quality of cooking, Maharaja Whiteline came on top followed by Inalsa.
- All the brands passed in various safety tests.
- R-connect was found to be best value for money for being sold at almost half the price than others, but performed no less.

and additional features if any. General parameters like controls, cord length, hinged cover/lids and accessories were also taken into consideration for overall evaluation.

WHAT'S THIS COOKER?

A rice cooker is an electrical kitchen appliance use for cooking of rice. It utilizes an insulated outer container and an inner removable bowl, often coated with a non-stick surface, and has an indicator for water level to be maintained vis-mivis the quantity of rice. The cooking principle is simple: it boils rice through the heating via electric element around the inner container. While cooking (when water is being evaporated from food), about 700 watts of electric power is consumed; on slow cooking mode, once the food is cooked, about 30–45 watts of electricity is consumed.

These cookers not only cook but also keep the rice warm for over 24 hours with their 'stay warm' function at a temperature high enough to suppress growth of harmful bacteria. Another notable improvement in the newer cookers is the use of electric timers and thermostat from the safety point of view.

Some people use rice cookers to make other foods that need to be steamed, including dumplings, idlis, dhoklas, steamed vegetables for salads as well as biryani and certain varieties of lentils.



BRANDS TESTED

Rank	Overall Score (Rounded off)	Brand	Capacity in Litres	Rated Input Power (Watts)	Model	Manufacturer/ Marketer
1	92	Prestige	1.8	650	PRCWCS 1.8	TTK Prestige
2	89	Inalsa	1.8	700	Steam cook DX	Tuareg Marketing
3	88	Maharaja Whiteline	1.8	650	RC - 180 A DLX	Maharaja Whiteline Industries
3	88	Butterfly	1.8	700	3P-001	Butterfly Ghandhimati Appliances
4	87	Panasonic	1.8	650	SRWA18H	Panasonic Home Appliances India
4	87	Next	1.8	650	NXT18DLSS	Next, China
4	87	Morphy Richards	1.8	700	Essentials 100	Morphy Richards India
5	86	Reconnect	1.8	700	RHRCG- 1802	Reliance Digital Retail
5	86	Philips	1.8	700	HD4729	Philips Electronics India Limited
5	86	Usha	1.8	650	MC 2865	Usha International
	79	Bajaj	1.5	350	Majesty New RCX 3	Bajaj Electricals*

Score Rating: >90: very good*****, 71–90: good****, 51–70: average***, 30–50: poor**, <30: very poor* *Model of Bajaj was of lower wattage as one with higher wattage was not available at the time of sample purchase.



PERFORMANCE TESTS

◆ Quality of Rice Cooked and Time Taken

We tested the time taken for switching over from cooking mode to slow mode to cook 350 grams of three varieties of rice – namely basmati, sona and parmal. In this regard, all the brands could cook quite well. While basmati took about 18–25 minutes to cook, cooking time for sona ranged between 20 minutes and 30 minutes, and for parmal it was between 26 minutes and 45 minutes.

PRICES AND WARRANTIES

$Brand \to$	% Weightage	Prestige	Inalsa	Maharaja Whiteline	Butterfly	
MRP		2695	3096	2495	2490	
Retail price (Rs)		2350	2900	2250	2100	
Warranty/Guarantee (Years)		1	1	1	2	

Electric Rice Cookers



- Prestige took lesser time among all, followed by Usha and Morphy Richards.
- In terms of quality, the expert panel found rice cooked by Maharaja Whiteline to be the best.
- The longest time was taken by Bajaj due to lower input power (350 watts). It consumed only 322 watts due to the lower power ratings.
- The power consumed by all cookers, except Bajaj, was between 605 watts and 730 watts.

♠ Momos/Dumplings and Other Foods

There was an additional test to check the cooker's

ability to cook dumplings and other foods including vegetable biryani and pulao.

- All brands performed satisfactorily. Inalsa came on top while cooking foods other than rice.
- ♠ Maximum Temperature Achieved during Rice Cooking | Stay Warm Function/Slow Cooking Function
 - Maximum temperatures achieved by the tested brands were between 93 degrees centigrade and 98 degrees centigrade.
 - All the brands had slow cooking option and thus met their claims.

Panasonic	Next	Morphy Richards	Reconnect	Philips	Usha	Bajaj
2599		2495	1299	2795	1995	1799
2400	1650	2150	990	2550	1900	1650
2	1	2 Guarantee	2	2 Guarantee	2	2

PERFORMANCE TEST SCORES

$Brand o$ $Parameter \downarrow$	% Weightage	Prestige	Inalsa	Maharaja Whiteline	Morphy Richards	
Performance Tests	53	48.72	46.36	46.16	45.85	
Cooking time of rice	15	13.55	10.8	10.53	12.35	
Cooking of rice	15	13.5	13.5	14.25	12.75	
Momos cooking	6	5.10	5.70	5.4	4.5	
Maximum temperature achieved during rice cooking	5	4.85	4.85	4.7	4.8	
Slow cooking operation	3	3	3	3	3	
Input power	6	5.72	5.51	5.28	5.45	
Automatic operation	3	3	3	3	3	

SAFETY TESTS

- ◆ Protection against live parts and electrical shock
- ◆ Leakage current (^A) and electrical insulation
- **♦** Endurance

By now, CV readers would know that all electrical appliances should be constructed in a manner that they have adequate protection against accidental contact with live parts.

- All the brands passed the test and are safe to use.
- Leakage current was within the permissible limits and also passed the stand-in high voltage test at 1000 volts.

In endurance test, the cooker operated under

maximum rated load and at 1.1 time higher voltage than their rated voltage for 50 cycles of 5 hours in ON mode and one hour in OFF mode. The test was conducted with full liquid load and was being topped up regularly.

• All the brands withstood the endurance test.



SAFETY TEST SCORES

Brand → Parameter ↓	% Weightage	Philips	Inalsa	Maharaja Whiteline	Bajaj	
Safety Tests	11	10.5	10.1	10.1	10.1	
Protection against live parts and electrical shock	2	2	2	2	2	
Leakage current and electrical insulation	4	3.50	3.10	3.10	3.10	
Endurance	5	5	5	5	5	

Electric Rice Cookers

Butterfly	Next	Usha	Panasonic	R-connect	Philips	Bajaj
45.69	45.61	45.27	45.09	45.03	42.97	39.28
12.4	10.89	12.91	12.25	10.71	9.72	8.13
12	13.5	11.25	11.25	12.75	11.25	10.5
5.1	5.4	5.1	5.1	5.1	5.1	4.8
4.65	4.7	4.75	4.75	4.9	4.9	4.85
3	3	3	3	3	3	3
5.54	5.12	5.26	5.74	5.57	6.0	5
3	3	3	3	3	3	3



Next	Morphy Richards	Reconnect	Butterfly	Usha	Panasonic	Prestige
10.06	10.02	10.02	9.92	9.9	9.88	9.88
2	2	2	2	2	2	2
3.06	3.02	3.02	2.92	2.90	2.88	2.88
5	5	5	5	5	5	5

QUALITY TESTS

♦ Input Power at Full Capacity | Automatic Operation

The input of the appliance at rated voltage and at normal operating temperature shall not deviate from the rated input by more than +5%-10%.

• All the brands had provision of slow cooking and automatic operation as claimed.

Brand	Input Power Claimed	Cooking Mode (Watts)	Score out of 3	Warm Mode (Watts)	Score out of 3	Total Score out of 6
Philips	700	730	2.75	0	3	5.75
Panasonic	650	622	2.74	41	3.0	5.74
Prestige	650	630	2.81	40	2.92	5.72
Reconnect	700	693	2.94	36	2.63	5.57
Butterfly	700	702	2.98	35	2.56	5.54
Inalsa	700	678	2.81	37	2.70	5.51
Morphy Richards	700	662	2.67	38	2.78	5.45
Maharaja Whiteline	650	605	2.58	37	2.70	5.28
Usha	650	610	2.63	36	2.63	5.26
Next	650	612	2.64	34	2.48	5.12
Bajaj	350	322	2.52	34	2.48	5.0

PHYSICAL TESTS

- Capacity: All the brands have the claimed capacity.
- Net weight: Prestige is heaviest at 3,064 grams; Bajaj is lightest at 1,720 grams.
- Service cord length: Reconnect has the longest service cord and Next has the shortest.
- **Aesthetics:** The ones with hinges fared better than the ones without hinges.
- Additional accessories: While all brands give a measuring cup and a spatula, there are a few







that give a trivet, a wholes separator, a food tray, etc., and were given a higher score.



Ease of Maintenance

Reconnect, Morphy Richards, Next, Panasonic and Maharaja Whiteline scored highest.

Ease of Upkeep/Cleaning

Maharaja Whiteline and Next were found more convenient in terms of ease of cleaning and upkeep.

Electric Rice Cookers



Brand	Additional Accessories
Bajaj	Trivet, measuring cup, spatula
Butterfly	Spatula, food tray, wholes separator cup
Inalsa	Food tray, separator cup, spatula
Usha	Separator cup, spatula
R-connect	Spatula, separator cup
Morphy Richards	Cup, spatula
Next	Food tray, spatula, measuring cup
Panasonic	Scoop-measuring cup, cooking plate, recipe book
Philips	Food tray with holes, spatula cup
Prestige	Food tray, scoop, measuring cup, cooking plate
Maharaja Whiteline	Cup, spatula, separator, one additional bowl

