We can describe every product in many different ways. It has an unlimited number of attributes and benefits, which are more or less critical for producers, consumers, commerce, retailing, society, etc. Although the product specifications are usually considered secret documents, we can identify plenty of information from indirect sources—a product review belongs to the easiest way to get information openly.

Read an example with solutions to the following tasks. After that answer similar tasks by a product of your choice.

#### Tasks:

- Choose one product you will analyze for the seminar. You can use the same good as you will explore as part of the semester paper. Recommended is to find a product where you can find a review or product description as it allows you to collect information about attributes. One source we have used, for example, is the page https://www.cnet.com/. Warning for you: By more complex products (i. e. cars, computers much more attributes are essential)
- 2. The name of the category characterizes your product. As we mentioned, in reality, products are consisting of various components. Can you identify hardware and software parts by the good, services, and processed material?
- 3. Collect information and select for them attributes from materials (form example in the form of highlighting.
- 4. From highlighted attributes, select those that are objective and measured, and those where individual perception is the base for evaluation!
- 5. From highlighted attributes, select those quantified parameters! Which metrology units use the description for quantification of parameters? Belong those units to the category of SI units? If not, it is because of the market (i.e., review for the American market)? Is it a traditionally used unit?
- 6. Select those attributes from the list that characterize the product's core, the actual, and augmented product!
- 7. Which attributes consider the reviewer as the most important by consumer decision? Are those attributes which, in your opinion, are base on the consumer decision process by purchases of this category of goods?

# **Breville Precision Brewer review:**

Makes drip precisely how you want it

Brian Bennett



May 3, 2019 1:12 p.m. PT.

Breville Precision Brewer Thermal (Part #: 89438560)

WHERE TO BUY<u>SEE</u> <u>All</u>

\$299.95Amazon

**The Good** The Breville Precision Brewer brews coffee quickly and with superb consistency. It lets you control water temperature, flow rate and presoak time. It makes cold brew automatically and without special filters. It accepts both cone and flat-bottom filters.

**The Bad** You need to buy an extra accessory to best use its pour-over mode. It's expensive.

**The Bottom Line** Coffee tinkerers will love the Breville Precision Brewer's impressive level of control, but it's overkill for most drip drinkers.



- PERFORMANCE8
- DESIGN7.5
- FEATURES**9**
- MAINTENANCE7.5

The \$300 <u>Breville</u> Precision Brewer is not your average drip coffee maker. It doesn't just brew big pots of tasty joe. It does so quickly and with robotic consistency, but it's

also incredibly flexible. The Precision accepts both cone and flat-bottom filters. It lets you customize key brewing factors, too. That includes water temperature, flow rate and length of presoak. The Precision creates cold brew as well, automatically and without making a mess. (It's AU\$400 in Australia, but isn't widely available in the UK.)

Still, \$300 is a lot to pay for any drip machine. If you have no desire to play home barista and just want tasty joe fast, this gadget is overkill. The better deal for you is the dead simple \$190 <u>Bonavita Connoisseur</u>. You should also consider the \$300 <u>Technivorm Moccamaster KBT 741</u>. It's swift, just as easy to use plus keeps its coffee hot all morning long.

| CO<br>MP<br>ARE | Breville<br>Precision<br>Brewer | Oxo Brew 8-   Cup Coffee   Maker | Enavita<br>Connoisseur     | Technivorm   Moccamaster   KBT 741 | Ninja Hot and   Cold Brewed   System |
|-----------------|---------------------------------|----------------------------------|----------------------------|------------------------------------|--------------------------------------|
| PERFORM<br>ANCE | 8                               | 9                                | 9                          | 9                                  | 7                                    |
| DESIGN          | 7.5                             | 8.5                              | 8                          | 9                                  | 7.5                                  |
| FEATURE<br>S    | 9                               | 9                                | 8                          | 7                                  | 8                                    |
| MAINTENA<br>NCE | 7.5                             | 8                                | 9                          | 8                                  | 7.5                                  |
| OVERALL         | 8.0                             | 8.7                              | 8.6                        | 8.4                                | 7.4                                  |
| PRICE           | <b>\$300</b> <u>Amazon</u>      | <b>\$170</b> <u>Amazon</u>       | <b>\$150</b> <u>Amazon</u> | <b>\$302</b> <u>Amazon</u>         | <b>\$199</b> <u>Amazon</u>           |

#### Breville's Precision coffee maker gives you almost total control





# Ordinary only on the outside

The Breville Precision Brewer shares the same basic shape of other premium drip <u>coffee makers</u>. Like the <u>Bonavita Connoisseur</u> and Technivorm Moccamaster models, the Precision's parts sit on a long, narrow base. On the machine's left side is a tower that houses the heating system, supporting electronics and controls. Above that is a water reservoir constructed of clear plastic.





brewer comes with a filter basket, cone filter adapter and a permanent flat-bottom metal filter. Brian Bennett/CNET

Resting on the base to the right of the tower is the Precision's thermal carafe. Placed directly over the pitcher is the brewer's massive filter basket. It's big for a reason. The roomy basket accepts a special adapter for cone-style paper filters. Or if you prefer, remove the adapter and brew with flat-bottom style filters. Additionally the coffee maker comes with a metal permanent filter (flat bottom).

The filter basket is also large enough to brew full <u>12-cup (60 ounces, 1.8-liter)</u> pots at once. How much coffee you make though is entirely up to you. No matter what you

decide, the Precision Brewer's reservoir has handy labels to help. The side of the tank has water level markings for full carafes, 8-cup pots and single cups.

## Brews drip like no other

On the outside, the Breville Precision Brewer <u>looks like an ordinary drip machine</u>. Its stainless steel exterior though gives it away as a premium appliance. Inside, however, is a radically new approach to coffee maker design.

The Precision is equipped with a sophisticated PID (for "proportional, integral, derivative") controller. It's a component that's usually only onboard fancy espresso machines. The PID electronics drive a heating element that handles water temperature directly. The circuitry is also coupled with a motorized water pump system. The result: the Precision commands all aspects of its brewing cycle including its water flow.

This is a big difference from even elite brewers like the Technivorm Moccamaster and the Bonavita Connoisseur. They're entirely mechanical and at heart simple contraptions. They rely on powerful heaters plus the natural boiling point of water to function. This combined with clever plumbing help them operate within an ideal temperature range.



Choose the "my brew" setting to tweak coffee brewing parameters. Brian Bennett/CNET

## Many coffee makers in one

Because of its advanced hardware, the Precision Brewer is extremely flexible. You have six automatic brewing modes to choose from. A "fast" cycle pushes hot water through the machine as swiftly as possible. The "gold" setting tells the machine to brew according to the strict "gold cup standard" as defined by the Specialty Coffee Association (SCA). Using the "strong" mode lengthens the brew time and increases the temperature. In this way, the grounds are extracted more thoroughly.

When you choose "my brew," you can tweak the brewer's many parameters to your



liking. For instance you can increase the "bloom time" (0 to 5 minutes). It sets how long your grounds sit in hot water before full brewing begins. You're able to play around with both the brewing temperature (80 to 98 degrees Celsius) and water flow rate (fast, medium and slow) as well.

You can toggle the "pour over" mode on or off here too. This function is designed for small brew sizes of up to 4 cups (20 ounces, 0.6 liters). The machine also assumes you're brewing through a separate pour over drip cone. Third-party vendors such as <u>Melitta, Kalita Wave</u>, Hario and <u>Oxo</u> all sell these sort of <u>gadgets</u>.

Breville also says the pour over function requires its <u>Pour Over Adaptor</u>. The \$35 accessory is sold separately and customizes the coffee maker for pour over duty. The kit includes a special shower head, plus bases for the filter and your mug.



The Precision Brewer has a pour over mode but Breville says it works best with its adapter accessory. Brian Bennett/CNET

Perhaps this coffee maker's most innovative feature is its dedicated cold brew mode. Place a large paper filter and coffee grounds in the empty filter basket. Fill the Precision's tank with up to 20 ounces (0.6 liters) of cool water. Next choose a target brew time. Typically that's 12 to 14 hours though the machine goes up to 24 hours. The Precision then pumps water into the brewing chamber.

There it steeps in the grounds. When the timer hits zero, the brewer automatically drains the filter basket. You basically get cold brew coffee without a big mess. Straining liquid cold brew from spent grounds is always a challenge, one the Precision tackles well.

The Precision's "over ice" brewing feature though is its least useful in my view. The mode is for making hot coffee in small, concentrated amounts. You then chill the liquid in the fridge and pour over ice later. It's no different though than doing the task yourself.

### Performance and taste

True to its name, the Breville Precision Brewer demonstrated rock solid temperature control in the lab. In fact it had the most accurate and stable heat levels I've yet recorded in a coffee maker. I measured readings via a thermocouple placed deep in the center of the coffee grounds.

Within the first minute of brewing, average temperatures had already hit 200.2 degrees Fahrenheit (93.4 Celsius). By the second minute, conditions had reached 202.2 degrees F (94.6 degrees C), almost the target temp of 203 degrees F (95 degrees C). That's where they stayed too. During the rest of the brew cycle (6 minutes, 31 seconds total) temperatures never fluctuated beyond 2 degrees F.

Strict water temperature (197 to 205 degrees F; 92 to 96 degrees C) control is a must for making superb coffee. To put things in perspective our Editors' Choice winner, the Bonavita Connoisseur, took 2 minutes to climb to 194.6 degrees F (91.3 degrees C).

After that, the Connoisseur's internal temp swung in a slightly wider arc of 4 degrees F. Of course, that's still a fantastic showing and well within the ideal range.

For my coffee maker tests I used my standard brewing ratio. This is 40 ounces (1.2 liters) of water to 2.3 ounces (66 grams) of medium ground coffee. I also ran trials with my defacto whole bean coffee, Costco Kirkland Colombian Supremo. Additionally I selected the Precision's "Gold" brewing mode unless otherwise noted.



The Breville Precision Brewer kept the tightest control on its brewing temperature I've seen yet. Brian Bennett/CNET

Both the Bonavita Connoisseur and Breville Precision took about 6 and a half minutes to brew my test pots of joe. The Connoisseur's average time (6 minutes, 25 seconds) was a tad shorter than the Precision (6 minutes, 35 seconds). The older <u>Bonavita BV1900TS</u> powered through the

same task in just 6 minutes or less.

The Technivorm Moccamaster KBT-741 was faster still, with an average brew time of 5 minutes, 45 seconds. Regardless, all these machines have brewing times under 8 minutes. That puts the machines under the 8-minute time limit that the SCA recommends for excellent drip.

Refractometer tests confirmed the laser-like consistency of the Precision Brewer. Over three runs, the coffee maker notched nearly identical TDS (total dissolved solids) percentage results (1.7, 1.7, 1.6 percent). This converts to an average

extraction percentage of 26 percent. It's a little high and slightly outside of the ideal range. That's commonly thought to be between 18 and 22 percent.

My taste buds agreed with the test data. Coffee made in the Precision this way had lots of flavor but also tasted bitter on the back end. That unpleasant aftertaste is the hallmark of over extracted coffee.

On the next pot, I increased the grind size (more coarse) on my test burr grinder several notches. The larger the particle size, the less available surface area from which to extract flavor. The result, a lower extraction percentage of 20 percent. I logged a TDS percentage of 1.3 percent too. Both numbers were spot on, dead center of the ideal spread. Smooth and drinkable, this brew had much better flavor too.

If you tend to linger over your pots, you'll appreciate the Precision's thermal carafe. It consistently kept its contents hot for over three hours. We consider coffee above 150 degrees Fahrenheit (65.6 Celsius) to have sufficient heat. Still, for a brewer this expensive I wish the carafe could perform better. For instance the \$299 Technivorm's thermal pitcher conserves hot coffee for over 6 hours.

## Best for home baristas

The \$300 Breville Precision Brewer is without a doubt an impressive coffee maker. It has the most accurate brewing temperatures I've ever seen in any drip java machine. The Precision is also the most flexible home coffee appliance I know of. It's almost as sophisticated as fully automatic espresso machines.

Of course, all of the Precision's extra functions and settings aren't for everyone. Those who love to tinker and experiment will love it. Do you just need a relatively affordable coffee maker that slings delicious pots ASAP? If so then the \$100 <u>Bonavita Metropolitan</u> and the \$190 Bonavita Connoisseur will satisfy for hundreds less. You should also consider the \$299 Technivorm Moccamaster KBT-

741. It's pricey but it brews quality drip fast and is a breeze to use. It also comes with thermal carafe that can't be beat.