

Comments and Clarifications to:



**ENERGY STAR[®] Commercial Coffee Brewers
Draft Specification
Framework Document
August 2014**

I. Definitions

“Commercial Coffee Brewer Products”

BUNN recommends adding another product category of “Liquid Coffee Dispensers” these dispensers use a coffee concentrate to mix with hot water before delivery to the cup. They are typically used for high volume applications. An example of a liquid coffee brewer can be seen here: http://www.bunn.com/products/liquid_coffee/lca_2.html

“3. Type I: A single serving commercial coffee brewer designed to use brewer-specific single-use packages of pre-ground coffee and has a standard brew volume of 6 to 12 fluid ounces per brew event.”

BUNN recommends increasing the range of single cup coffee brewers to include up to 24 fluid ounces.

“4. Type II: A batch commercial coffee brewer designed to use loose, ground coffee and use a single-use paper coffee filter...”

BUNN notes that there are “batch style” coffee brewers that may use re-usable and washable filters. They are often constructed of a wire mesh material/screen. These methods likely should not be disqualified from being *Type II*.

BUNN suggests ensuring that the *Type II* coffee brewers not use disposable packages of pre-ground coffee. Using disposable packages and would not produce data comparable to

There are products that fit the designation for *Type II*, however, they may also contain two dispense stations for simultaneous dispensing. An example of this type of product can be seen here: http://www.bunn.com/products/automatic/axiom_42_Twin.html

BUNN would recommend adding a clause to the framework document or ASTM spec that indicates that a single “brew event” is defined as each station brewed serially (immediately brewing the next station when the previous station has finished dispensing).

“5. Type III: An urn or satellite commercial coffee brewer and has a standard brew...”

There are products that fit the designation for *Type III*, however, they may also contain two dispense stations for simultaneous dispensing or serial dispensing into two holding reservoirs. An example of this type of product can be seen here:

<http://www.bunn.com/products/automatic/u3.html>

BUNN would recommend adding a clause to the framework document or ASTM spec that indicates that a single “brew event” is defined as each station brewed serially (immediately brewing the next station when the previous station has finished dispensing).

“9. Satellite Coffee Brewers: Bulk commercial coffee brewers that brew into large, removable vessels **without internal heating elements**. May include a separate heated docking station for remote use.”

BUNN recommends revising this statement to read “with or without internal heating elements.” Many products use a vacuum sealed, or highly insulated tank so heat does not need to be applied to keep coffee warm for extended periods of time. An example can be found here: http://www.bunn.com/products/satellite/dual_tf_dbc.html

“10. Urn Coffee Brewers: Bulk commercial coffee brewers that brew into large, self-contained, insulated warming vessels with **internal heating elements to maintain product temperature.**”

BUNN notes that the warming vessels may use the heat from the hot water reservoir to hold the brewed coffee at serving temperature.

“Modes of Operation and Metrics”

BUNN recommends adding an additional metric: Preheat. This will capture the amount of energy and energy rate required for the system to turn on and reach a “Ready-to-Brew” state. This test is described in §10.3 of *ASTM F2990-12 Standard Test Method for Commercial Coffee Brewers*.

This test should also be completed to quantify the amount of energy required to return from Energy Save mode to Read-to-Brew.

D. Discussion Questions:

1. See the above comments to the applicable sections.
2. BUNN is not aware of any overlap between *Type I* and *Type II* brew volumes. Closing this gap is recommended.
3. UL has a standard (UL 197) that applies to commercial rated equipment. It does not apply to residential equipment (this is covered by UL 1082). However, some coffee brewers may be rated for both. In such a case, BUNN recommends testing these as commercial brewers. Amperage rating may also be used to further designate residential from commercial (i.e. >15 Aac is considered commercial).
4. The model identifications are clear.
5. None noted at this time.

II. Eligible Products

E. Discussion Questions:

1. Yes.

III. Energy Efficiency Criteria

D. Discussion Questions:

1. Coffee holding method (i.e. glass carafe or insulated), Product availability (brew time excluding recovery), and hot water reservoir vs. burp-and-boil.
2. Agree with heavy-use brew rate and ready-to-brew idle rate metrics.
3. RFID identification tags to determine if a warmer is in use by a carafe or not. PTC based warmer stands. Insulation for hot water tank and coffee carafes.

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