

CLAIMS

1. A milk frothing apparatus which includes
 - a steam probe
 - a jug support
 - 5 a resistance sensor, located adjacent to the steam probe tip, to determine the depth of milk in a jug;
 - the steam probe or jug support being movable, to maintain the tip of the probe below the milk surface;
 - a temperature sensor to monitor the temperature of the milk in the jug;
 - 10 a micro controller which starts the process; maintains the position of the steam probe relative to the milk surface ; stops the process when the milk reaches a desired temperature and is able to record the number of cycles and the quantity of milk treated.
- 15 2. A milk frothing apparatus as claimed in claim 1 in which the depth sensor is the steam probe which is made of stainless steel and electrically isolated to act as a resistive sensor.
3. A milk frothing apparatus as claimed in claim 1 which includes a secondary
 - 20 steam channel or circuit for self- cleaning the probe.
4. A milk frothing apparatus as claimed in claim 3 wherein the secondary steam circuit is fixed and encircles the steam probe and tip.
- 25 5. A milk frothing apparatus as claimed in claim 1 in which the temperature sensor is an infrared temperature sensor located above the jug station to directly monitor the milk temperature.
6. A milk frothing apparatus as claimed in claim 1 in which a non-contact
 - 30 temperature sensor is located adjacent the jug support to monitor the external jug surface temperature.
7. A milk frothing apparatus as claimed in claim 1 which also includes a user
 - 35 interface screen and electro-mechanical key pad and a user interface "touch" screen and virtual key pad.