

Automatic Steam Cake Maker

Introducing a Multipurpose Unique device which can upgrade the traditional steam cake maker in to an Ultra modern Highly efficient Steam Cake Maker by keeping all the good traditional aspects.



In simple, The above device can be used to make Steam cake (*Puttu*) in an easy as well as in a dedicated manner. It is portable and can be used where there is a 230V 50Hz socket outlet.

HOW TO USE THIS DEVICE ?

We are just required to fill up the water container with sufficient quantity of water and fill the steam cake container with Roasted Rice flour (*puttu podi*) along with necessary ingredients and just switch ON the device then set it to automatic mode, it will remind you with an alert when the cooking is completed. Now you can release the top cover to have your delicious Steam cake.

SPECIAL FEATURES.

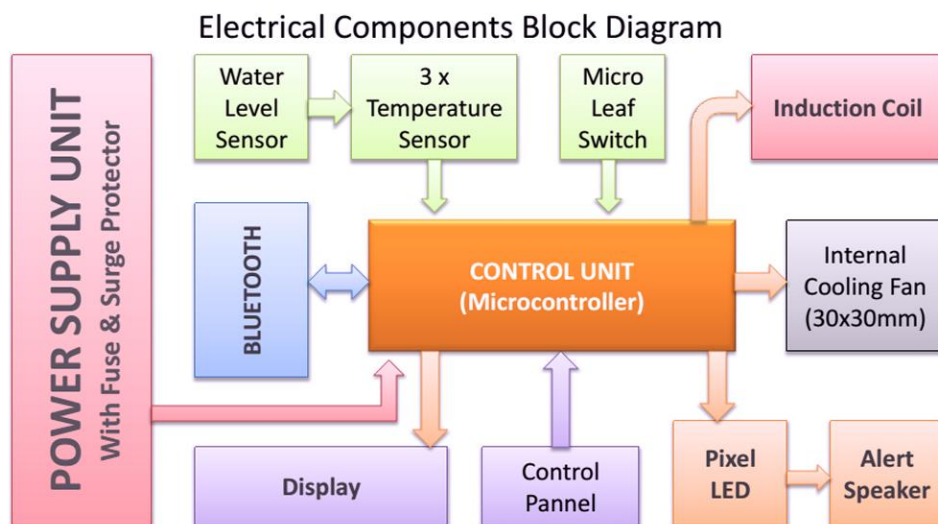
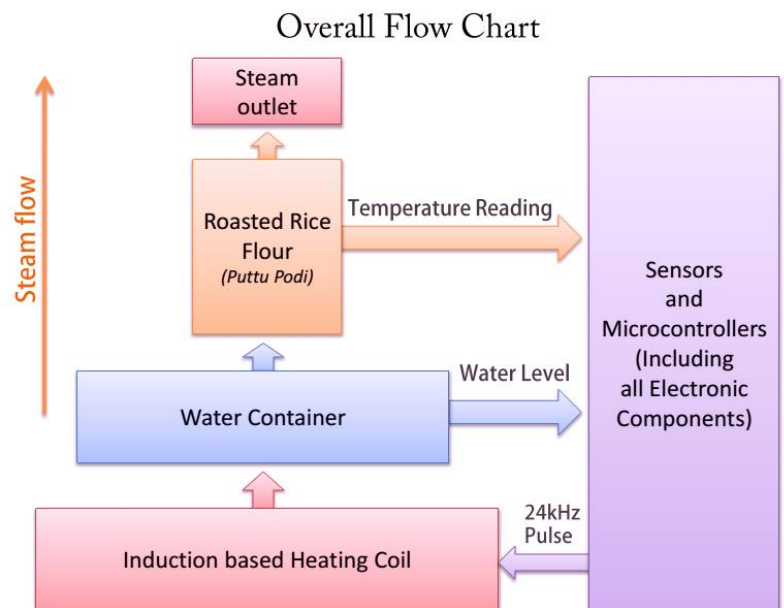
- This device is purely portable. You can use it anywhere as you wish.
- This device has high energy efficiency since it uses Induction principle to work. Compared to traditional methods, its energy consumption is dramatically low.
- No need to check for the status of the cooking. It will notify you when it is done.
- It can be also used as an Electric kettle.
- This device can be connected to smartphones via Bluetooth – for Diagnostic purpose (Like OBD [on-board diagnostics port] in the CAR) as well as device status indication via notification.

- User replaceable Electrical surge protectors.
- Inbuilt presets for different cooking conditions.
- This device works in a well controlled manner since dedicated sensors monitors the live condition of the system and adjust itself to work smoothly.
- The provided display and control switches helps to handle the device easily.
- It gives a visual indication through vibrant colours by using PIXEL LEDs. There for you can easily predict the status of the device by just looking on it.
- Active temperature monitoring for better cooking.
- Active water level monitoring and level indication.

CONSTRUCTION & WORKING.

Within the device shielding it consist of a coil and this coil is energised in a well controlled manner by the help of dedicated sensors and microcontrollers. And thus uses energy only when needed.

On the top of the coil there will be an easily removable metallic flat based vessel for water boiling. It consist of one inlet port and one steam release hole. On the top of it, hollow cylinders are fixed with base cap or base plate. it has holes on them for stream ejection. The whole system is within single strong enclosure.



For the most efficient results we have used 2 thermistors on the surface of the cylinder. One on the top surface and the other on the bottom surface of the cylinder. This is used to read the real time temperature of the cake.

Another temperature sensor is placed on the vessel. A water level sensitive probes are provided to measure the level of water and act accordingly. At inlet opening lid there is a leaf switch to

make sure the lid is closed before operating the device (For Human Safety).

As the coil is energised by controlled 24kHz Pulse, it heats up the Metallic water container and thus boils the water in it and converts it to steam. This steam is directed towards the cylindrical container with roasted Rice flour. This steam cooks it in to a steam cake. When the top surface temperatre is aproximately equal to the bottom surface temperature, The microcontroller will suddenly cuts off the 24kHz control pulse to the coil. The cut off threshold, Temperature, Timings can be manually adjusted (If needed) by the user through the User Interface.