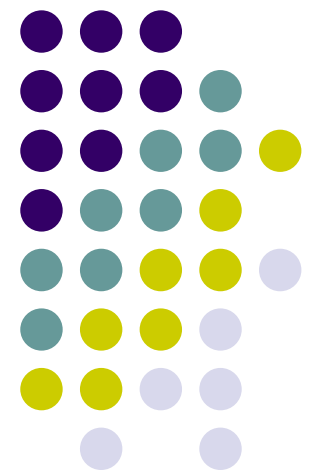
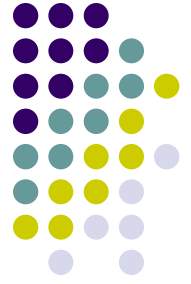
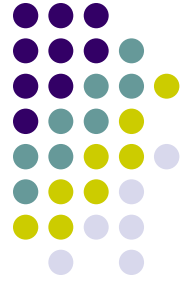


AREPA BURNER



Traditional Arepa Burner



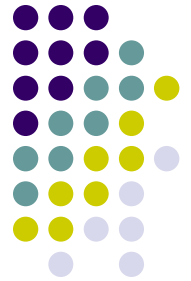


Problem statement

The arepa in Colombia is one of the foods more old of the country. It has become a culinary symbol of Colombia. The arepa in Colombia usually eats with cheese, although many variants exist depending on the region. In Santander, they eat arepa of chicharrona, in Boyacá and Cundinamarca, they eat roasted, in Antioquia they are called arepita of Medellin, in San Juan of Arama (Meta) they eat arepas of rice and in Barranquilla the arepa of egg.

It would be important to design an arepa burner to permit make an arepa easy and fast for some people that have difficulties for making arepas of the traditional way; these difficulties could be: there are people that don't know how a determined kind of arepa is made and there are people that don't have time for monitoring the state of arepa. Another justification for this design is the application for people that make arepas with commercial purpose.

User description



It is believed that the arepa was born more than 2.000 years ago, soon after the discovery of the corn for the indigenous towns. It is an important food in the gastronomy of some countries like Venezuela and Colombia.

The arepa can eat alone or filled at any hour of the day. There are different ways to create an arepa, each region has its own style, although in general all are made with flour of corn precooked that can be white or yellow.

The mass of the arepa can get ready with different types of corn, receiving each arepa, a different name:

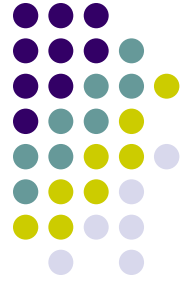
- Arepa of Chócolo or choclo. It is elaborated with tender sweet corn.
- Arepa white: It is elaborated of white corn or you their precooked flour, it is usually filled of cheese or the cheese can put above it.
- Arepa of Pounded Corn
- Arepa Yellow: It is elaborated with yellow flour of corn.
- Arepa of Egg. It is an arepa with an egg added to the mass and then it is fried. It is typical of the coast of the Colombian Caribbean. Also it can eat with meat.
- Arepa Paisa. White arepa, a little thinner that gets ready without salt and without filler. It is used to accompany the food.
- Arepa of Mote.
- Parboiled arepa.



Design requirements

Performance:

- Locking lid :The lock ensures the complete closure of the unit. This will allow it to maintain the appropriate temperature and cooking uniformity.
- Non-stick surface : The non-stick cooking plates allow for easy release of the Arepas.
- Graduation of heat: A heating controller for the plates. While the control dial is in the zero position, the plates will not heat.
- Automatic control with thermostat
- Heat resistant handle and legs
- Electrical plugging at 110V, heating by electrical resistances
- Regulation of time of burning
- Interchangeable modules to obtain different sizes, amounts and shapes of arepas.
- The cavities must be easy for cleaning
- A system that permits easy removal and immediate storage of the arepas.
- An arepa burner where all parts be easy accessible for maintenance.

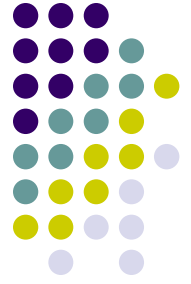


Design requirements

Performance:

- Resistant metallic body
- Convenient locking system located by handle
- Durable stainless steel heating elements that heat up fast
- Ideal for home use and pymes of arepas
- Super fashionable design, stainless steel or painted body. Color: white, black, chrome, metallic gold and silver
- Coolers: In wood and plastic mesh
- A controller capable of calculate the time and temperature necessary to obtain different kinds of arepas, according with the following variables: type of arepa (mote, corn, white, others), initial conditions of arepas (frozen or environment temperature) and the final conditions of arepa (tosted, soft and medium).

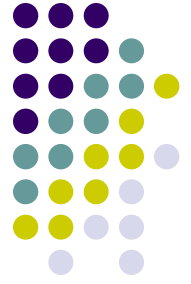
Design requirements



Value:

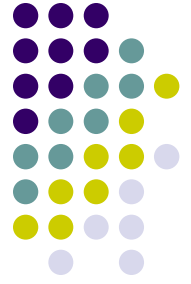
- Time average: 7 minutes. However, if you prefer darker, golden brown Arepas, you can leave them for a few minutes longer.
- Power: 1400W
- Prices: 20 to 60 US\$

Design requirements



Size:

- Common arepa makers are of circular shape with 12 in of diameter.
- Low weight to transport it.



Design requirements

Safety:

- Indicator lights : it has two indicator lights as follows:

Red: Indicates that the burner arepa is plugged into an electric source.

Green: Lights after the toast control dial is turned and begins warming the plates. When the toast control dial reaches the zero position, a bell rings.

Once the green light turns off the plates begin to cool down.

- Effective isolation of metallic parts that can be in contact with human body.