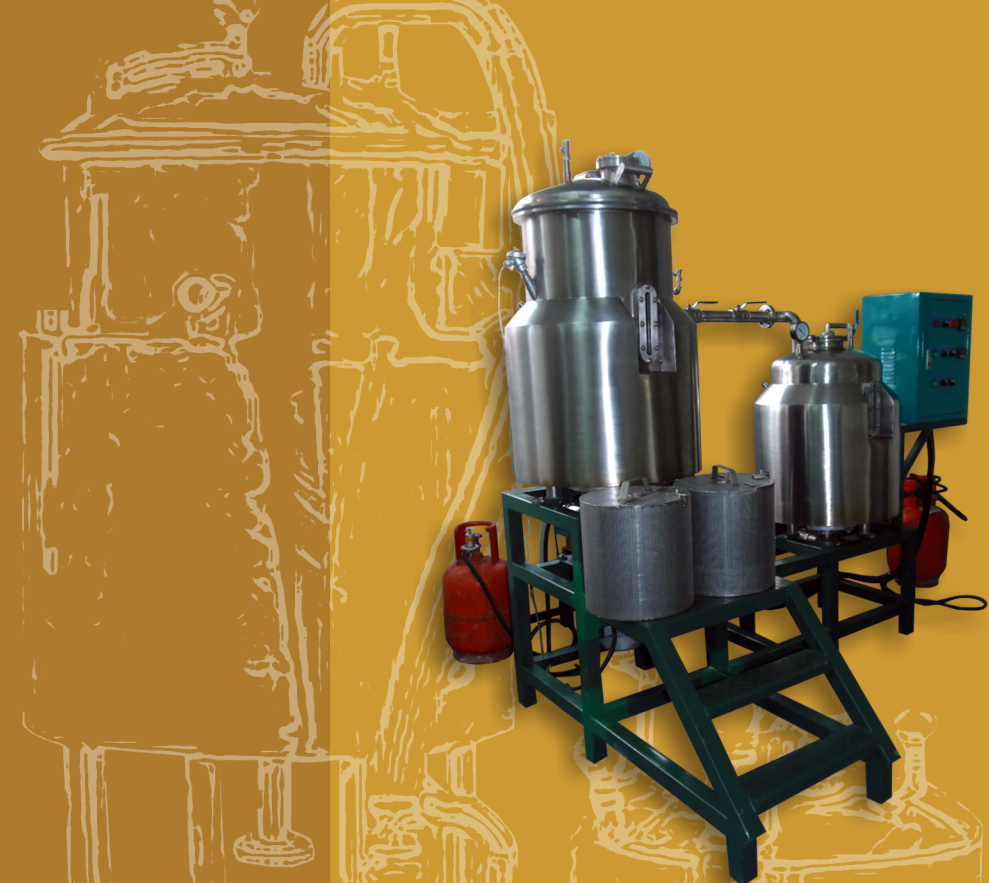


## Technical Specifications

Temperature Sensor	RTD PT-100
Temperature Control/ Monitoring	Digital temperature controller
Frying Capacity	10 kg per batch
Frying Tank Volume	110 liters
Pre-heating Tank Oil Capacity	80 liters
Frying Basket Volume	17 liters
Cooking Temperature	90 – 100°C
Maximum Vacuum Pressure	6 Kpa
Vacuum Pump Rating	5 hp
Fuel	LPG
Burner Rating	10 kW



# VACUUM FRYER



for more information, please write, fax, call, or email:



**DEPARTMENT OF SCIENCE AND TECHNOLOGY  
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The **Vacuum Fryer** is one of the food processing equipment designed and fabricated to substitute imported equipment. Its use can help improve the performance and productivity of the country's micro, small, and medium enterprises (MSMEs) engaged in food processing.

#### What It Can Do:

- It deep-fries food inside a closed system under reduced pressure, lowering the boiling point of both oil and water in food.
- It allows dehydration of food at a lower temperature in order to retain natural color and flavor of food.

#### How It Works:

- It is equipped with an LPG, along with an improved burner controlled by a solenoid valve, that supplies the desired heat to the oil pre-heating tank and frying vessel for optimum heating and energy saving.
- A spinner, which adopts the principle of a centrifuge, is located inside the frying chamber and efficiently removes excess oil content of the product.
- The equipment can be modified to use other fuel source, i.e. biomass through gasification process, etc.

Prospects: Vacuum-fried local fruits and vegetables like banana, mango, pineapple, durian, jackfruit, papaya, okra, and carrot.

Vacuum frying may also be used for string beans, sweet potato, taro, green pepper, garlic, and onion.

Marine products like tahong or green shells, squids and crablets can also be subjected to vacuum frying.

Benefits: Final products are crunchy. They have low fat and moisture content.

Natural color and flavor of food are retained with very minimal changes.



The "Design and Development of Process Equipment for Food Processing Firm" is a project implemented by the Metals Industry Research and Development Center (MIRDC) in cooperation with the Project Management Engineering Design Service Office (PMEDSO) and the Industrial Technology Development Institute (ITDI) in support of the High Impact Technology Solutions (HITS) Program of the Department of Science and Technology (DOST).

