

Technical Specifications

Orientation	Vertical
Operating Temperature	120°C to 140°C
Compressed air supply during cooling (counter-pressure)	40 psi
Heat source	LPG
Design volume	120 liters
Working volume	100 liters
Capacity	200 cans of sardines (18 cases); 60-pint jars; 50-quart jars; 288 pieces of suman sa lihiya per batch
Dimensions	18" inside diameter; 34" length



WATER RETORT

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



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P2014.08



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The **Water Retort** 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.

The Water Retort is:

- Manually-operated.
- A batch-type, non-agitating pressure cooking vessel used to thermally process food packed in sealed containers such as metal cans, glass bottles, retortable pouches/plastics.
- Modular. Its set-up allows easy transport to where it may serve its purpose.

Features of the Water Retort

A high pressure LPG burner underneath the vessel heats water, thereby using a mixture of water and steam as heating medium for thermal processing.

It is capable of withstanding extreme pressures. Counter-pressure is applied so as to prevent containers from rupturing or bursting.

Benefits/Advantages

It is designed to destroy microbes in the food to prolong shelf-life.

Its use results in savings due to: reduced process time; less storage space needed; lower cost of utilities; and lesser transportation costs.

Food processing with the Water Retort provides an opportunity for MSMEs to shift to the use of retort pouch, which comes along with other added benefits.

Advantages of using retort pouches:

- They conform to regulations for thermally processed food.
- They are convenient for consumers.
- They are light-weight and easy to open.
- They come with better package presentation.
- There is available local expertise and technical support.



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).

