


Specifications

	HLM-36EF	HLM-36ELB
Outside dimension	W602 x D679 x H1064	
Inside dimension	Φ360 x D620 (Effective volume : 63 liters)	
Net weight (approx)	120kg	
Power supply (heat source)	AC200V Single phase 5kW (25A)	
Pressure vessel category	Small sized pressure vessel	
Chamber material	Stainless steel (SUS304)	
Sterilization temp. range	Mode 1 : 100 - 125°C Variable Mode 2 and 3 : 70 - 125°C Variable	Mode 1 : 105 - 134°C Variable Mode 2 and 3 : 105 - 125°C Variable
Sterilization timer	(Mode 2 & 3) 1 - 250 min. The remaining time is displayed	1 - 250 min. The remaining time is displayed
F-value setting range	1 - 99 Addition system (Mode 1)	—
Cooling timer	10 - 250 min. The remaining time is displayed	10 - 90 min. The remaining time is displayed
Programmable auto-start	Settable range: from 1 min. to 1 week The start time is set	
Operating mode	Mode 1 : Standby→Heating/Pressurization→Sterilization(Cooking)→F-value with F-value control →Shower cooling→Drainage→Completion Mode 2 and 3 : Standby→Heating/Pressurization→Sterilization(Cooking) →Shower cooling→Drainage→Completion	Mode 1 : Standby→Heating→Sterilization(Cooking)→Natural cooling→Warming→Completion Mode 2 : Standby→Heating→Sterilization(Cooking)→Shower cooling→Drainage→Completion Mode 3 : Standby→Heating/Pressurization→Sterilization(Pressure cooking) →Shower cooling→Drainage→Completion
Working pressure of safety valve	0.235MPa	
Thermometer	Chamber temp. : 5 - 129°C / Core temp. : 45 - 129°C	Chamber temp. : 5 - 136°C
Pressure gauge	0 - 0.4 MPa	
Clock	24-hour clock Date and time are alternately displayed	
Safety devices and alarms	Pressure safety valve, Earth leakage breaker, Low water cut off device Error display: Low water heating, Temperature sensor wire disconnection, Over temperature, Over pressure, Abnormality in the lid lock	
Supplied accessories	Adapter for pack (5), Stainless steel wire basket (3) Packing for adapter (100), Bottom plate (1), Gasket for adapter (5) Pressure gauge (1), Check valve (1), Piping for water supply (1)	Stainless steel wire basket (3), Bottom plate (1), Pressure gauge (1) Check valve (1), Piping for water supply (1)
Power supply terminal	Ring terminal 	

Installation requirements

- Power supply: AC200V, Single phase, 25A or more
- Water supply : Water supply port : 3/8" female thread
Connect it to the water supply facility having water pressure of 0.23-0.40MPa and flow rate of 6 ℓ / min or more
- Drainage : Drain outlet : 3/8" female thread
Connect it to drainage facility with a heat-resistant and pressure-resistant hose
※Exhaust and drainage are hot and high pressure, be careful of burns.
※Connect the hose so that exhaust and drainage are not disturbed.

* A crimp terminal is attached to the power cord. Please note that a plug is not supplied.
* When the apparatus is used at a place which is more than 800 m above sea level (low atmospheric condition in the mountainous area), please contact us or our distributor before using. The specification change is necessary.

Optional devices and accessories



① Printer
The elapsed time from a start, chamber temp. core temp. chamber pressure and F-value are printed. (With printer cable)

② Core-temperature sensor



Round wire basket (SUS)
① Φ330xH195 (I.D.)
② Φ330xH270 (I.D.)
※① standard



Bucket (SUS)
Φ330xH270 (I.D.)



Tray (SUS)
① Tray : type38 Φ320xH 38 (I.D.)
② Tray : type38 Φ320xH 38 (I.D.) 15 sets, for standard basket
③ Tray : type48 Φ320xH 48 (I.D.)
④ Tray : type48 Φ320xH 48 (I.D.) 12 sets, for standard basket

Specifications and appearance are subject to change without notice due to continuous product improvement.



Manufacturer : **HIRAYAMA** Manufacturing Corp.

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Distributor :



ISO 13485 CERTIFIED
Products shown in this brochure are manufactured by the company, ISO 13485 certified.

Applicable to a wide range from High Temperature Vacuum Cooking to Retort Food Processing

Capable of heating, cooking and sterilizing foods while maintaining the good taste
As it is reliable food safety management with F-value control
Usable as a retort sterilizer as well as a high temperature vacuum cooker



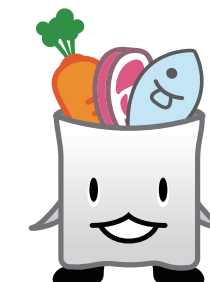
HLM-36EF
equipped with
F-value control



HLM series

HLM-36EF with F-value control

HLM-36ELB



Heating, Cooking and Sterilization

COMPACT RETORT COOKER

Usable for high temperature vacuum cooking as well as retort food processing

STERILIZING
SIMPLY AND WELL

A variety of foods can be cooked easily with high-pressure steam generated in a pressure vessel !!

High temperature vacuum cooking or retort processing to develop and sell retort foods becomes possible at low cost



Foods are heated, cooked and sterilized while the delicious taste is kept

Suitable for small lot production.

Foods can be preserved for a long period, so it becomes possible to reduce the cost by selling products as scheduled.

The Purpose of this compact retort cooker is to manufacture the tasty food easily, such as the original food of local specialty, or sample food which is made in a food manufacturer.

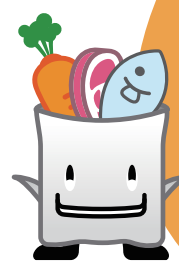
Advantages when this compact retort cooker is introduced

- Small lot production
- Manufacturing the original food products of local specialty
- Sample food production in a food manufacturer
- Developing the processed foods
- Developing the safe foods in which additives or preservatives is not used
- Long term preservation
- Reduction of disposal loss

Users

- Agricultural and livestock industry, Fishery industry, Household dish producer
- School food service provider, Lunch manufacturer
- Food service provider for hospitals, nursing homes, and medical care sanatoriums
- Hotel, Restaurant
- University, Cooking school, etc.

You can easily cook a variety of foods with this retort cooker



HLM-36EF
with F-value control

Setting F-value is easy, so the safe food supply is ensured.



Cooking procedure and mode selection

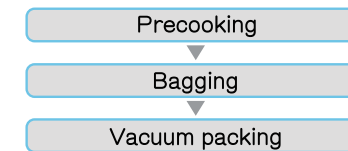
Once a mode is selected, cooking is performed automatically. User-friendly setting with microcomputer control.

HLM-36EF

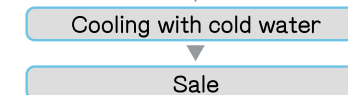
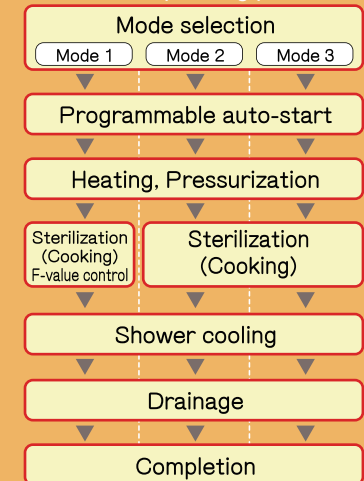
Setting F-value is easy. Food safety is secured.

with F-value control

Mode No.	Temperature setting range
Mode 1	100°C - 125°C
Mode 2 / Mode 3	70°C - 125°C



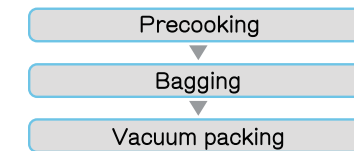
HLM-36EF Operating processes



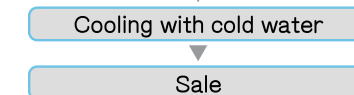
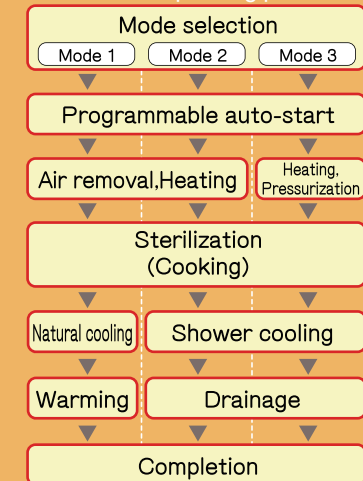
HLM-36ELB

All stages from pressurization to sterilization (cooking), cooling and warming are carried out automatically. The most appropriate apparatus for high temperature vacuum cooking.

Mode No.	Temperature setting range
Mode 1	105°C - 134°C
Mode 2 / Mode 3	105°C - 125°C



HLM-36ELB Operating processes



Cooked food samples

Original foods which were made easily by using high temperature vacuum cooking and retort processing



Indian curry (Retort pouch)



Boiled pork (Retort pouch)



Rice (Heat-resistant bag)

Features

F-value control (HLM-36EF)

- F-value which is important for the retort sterilization is calculated and controlled.
- The sterilizing condition of retort foods is controlled safely with the simple setting.

About F-value

F-value shows the safety of retort foods. When the core-temperature of foods is kept at 121°C for one minute, F-value is assumed to be 1. The Food Sanitation Act in Japan prescribes that F-value of retort foods shall be 4 or more.

Core-temperature sensor (HLM-36EF)

- The internal temperature of foods is measured with a core-temperature sensor and F-value is calculated and displayed.
- It is possible to terminate the sterilization (cooking) process when temperature of a core-temperature sensor reaches the target F-value. (In case of the Mode-1)
- It is possible to print data by connecting an optional printer.



Core-temperature sensor

The core temperature of a food pack is measured. When temperature reaches the set temperature, sterilization (cooking) is started.

Functions and Features

- The appropriate pressure control and shower cooling prevent a retort pouch from being damaged.
- The equipment is controlled by microcomputer, so settings of temperature, time, F-value, etc. are easy.
- All stages from pressurization to sterilization (cooking), cooling and warming (HLM-36ELB only) are performed automatically.
- The vacuum cooking is performed safely by the equipped various safety mechanisms.
- When the optional printer is connected, data such as the elapsed time from a start, chamber temperature, core temperature, chamber pressure, F-value are printed.
- Compact design for space-saving and cost reduction
- Installation is completed by connecting the power supply source, water supply port and drainage port only.
- Qualifications to operate a boiler or pressure vessel are unnecessary.

Capacity

Pouch volume	Loading capacity (pouches)
250 - 300 cc	30 - 45P
400 - 500 cc	15 - 30P
1000 cc	15P



A wide opening for easy loading and unloading of objects



Wire basket (Standard, 3 pcs)



Tray (Option)

To a person who is interested in the advancement of primary industry

We recommend this retort cooker as one of the most useful food processing apparatus to a person who is engaged in the food manufacturing industry, agricultural industry or fishery industry, and is interested in the advancement of primary industry.