FACT SHEET

Venus® Vacuum Chambers

Why vacuum pack?

Exposure to air aids the growth of bacteria in most foods. Sealing the food in a bag from which the air has been removed greatly inhibits bacterial growth. Foods stay fresh longer and retain their flavour, nutritional value and sales appeal.

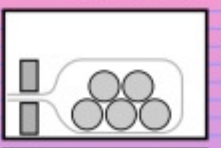
Which foods can be vacuum packed?

Any food can be vacuum packed but the unique characteristics of each food must be considered: for example delicate foods such as berries might be crushed by a high vacuum. This is often overcome by freezing the berries first or using gas. See "Which foods need gas flush?" (Right). T-bone steaks might pierce the vacuum bag. See "Soft air" (below).

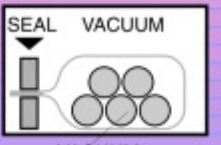
How long do vacuum packed foods last?

Some foods will last up to 5 times longer than without vacuum packing. But it depends on the type of food and its quality before packing. It also depends on the quality of barrier bag used and the strength of the seal. It is important to remember that foods that normally need to be kept cool to prevent spoilage need to be refrigerated or frozen as usual.

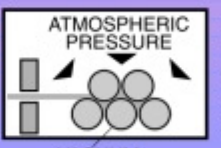
How it works



Air is extracted from the chamber and vacuum bag.



When the desired vacuum is reached the seal bar closes to seal the bag.

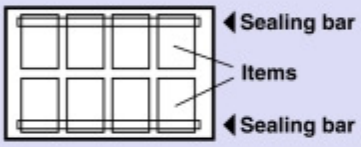


Atmospheric pressure is restored to the chamber and causes the bag to cling to its contents.

The machines

The best size machine for the job is the one that will pack the most items in the one vacuum cycle.

Sealing bars
Some machines have 2 sealing bars. This enables more items to be packed simultaneously.



Soft air
Soft air restores the chamber to atmospheric pressure gradually. This helps prevent soft items from being crushed, sharp items from piercing the bag, and allows the bag to settle flat against the contents without wrinkles.

Chamber lining
The choice is aluminium or stainless steel. Stainless steel is more corrosion resistant and easy to clean, therefore it is best for "wet" items such as fresh meat and fish.

Gas flush
After the air is extracted but before the chamber atmosphere is returned to normal, a gas is added to the vacuum bag. Various gases or combinations of gases including nitrogen and carbon dioxide are used according to the result required.

Why use gas?

Whilst most foods don't require gas flush, it is useful when a soft pack is required.

For example, delicate fruits or berries might lose their appealing appearance under a vacuum. By replacing the air with an inert gas such as nitrogen, the food is protected without the need for a high vacuum.

Meat is particularly prone to spoilage by bacteria when exposed to oxygen. Evan after vacuum packing some bacteria might remain trapped in the meat. Carbon dioxide can be added to further inhibit bacterial growth. Fresh meat absorbs carbon dioxide so the bag will soon regain its vacuum packed form.

Process display
Displays the selected process setting. Shows seconds to go for the active process.

Program display
Displays the selected progam (0 to 9)

Process lights
Indicate which process is selected or active.

Process selectors
Scroll through the program processes.

Program selector
Scroll through to select the program required. The program number appears in the program display (Top left).

Re-program
Press before re-programming. Press after to store the new settings.

The best settings for the job

Vacuum time
Depends on size of item/s in chamber. Use Method 2 in Program Set-up panel (Right).

Seal time
Varies with thickness and type of bag. Test systematically until a strong seal is made.

Soft air and Gas flush
Test systematically until the desired result is achieved. See "Soft air" (Above) and "Why gas flush" (Right).

Increase setting
(Re-programming)
Stop vacuum
Go to next process in program.

Decrease setting
(Re-programming)
Stop program
Immediately stop all processes.

Vacuum gauge
Shows the % vacuum in the chamber.

On/Off

Program set-up

Method 1: Manual

1. Open lid and turn machine on.
2. Press **PROG** to select a program.
3. Press **REPROG** until program number flashes.
4. Press ◀ ▶ to select the Vacuum, Seal or Soft air process.
5. Press **+-** to change the setting.
6. Repeat 4 and 5 for each process.
7. Press **REPROG** to store changes.
8. Machine is ready when program number stops flashing.

Method 2: Sensor

1. Turn machine on.
2. Press **PROG** to select a program.
3. Press **REPROG** until program number flashes.
4. Put the article in a vacuum bag, in the chamber and close the lid.
5. When the Vacuum gauge shows **-1**, press **STOP VAC**
6. If the seal and soft air result is okay press **REPROG** to store the new settings.

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Venus® PACKAGING

FACT SHEET

Venus® Vacuum Chambers

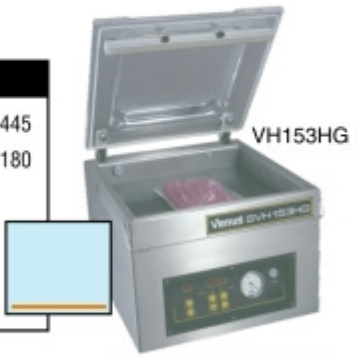
VH43

Machine size (WxDxH) mm	330 x 450 x 295
Chamber size (WxDxH) mm	270 x 310 x 85
Sealing bar length mm	270
Voltage/ph/freq. (V/ph/Hz)	240/1/50
Pump capacity m³/hr	4
Number of gas pipes	0

VH43

VH153HG

Machine size (WxDxH) mm	490 x 610 x 445
Chamber size (WxDxH) mm	420 x 370 x 180
Sealing bar length mm	410
Voltage/ph/freq. (V/ph/Hz)	240/1/50
Pump capacity m³/hr	21
Number of gas pipes	2



VH153HG

VH43H

Machine size (WxDxH) mm	330 x 450 x 295
Chamber size (WxDxH) mm	270 x 310 x 85
Sealing bar length mm	270
Voltage/ph/freq. (V/ph/Hz)	240/1/50
Pump capacity m³/hr	4
Number of gas pipes	0

VH43H

VH163H

Machine size (WxDxH) mm	490 x 610 x 445
Chamber size (WxDxH) mm	410 x 460 x 180
Sealing bar length mm	410
Voltage/ph/freq. (V/ph/Hz)	240/1/50
Pump capacity m³/hr	21
Number of gas pipes	0

VH163H

VH53H

Machine size (WxDxH) mm	330 x 450 x 295
Chamber size (WxDxH) mm	280 x 310 x 130
Sealing bar length mm	270
Voltage/ph/freq. (V/ph/Hz)	240/1/50
Pump capacity m³/hr	8
Number of gas pipes	0

VH53H

VH163HG

Machine size (WxDxH) mm	490 x 610 x 445
Chamber size (WxDxH) mm	410 x 460 x 180
Sealing bar length mm	410
Voltage/ph/freq. (V/ph/Hz)	240/1/50
Pump capacity m³/hr	21
Number of gas pipes	2

VH163HG

VH153H

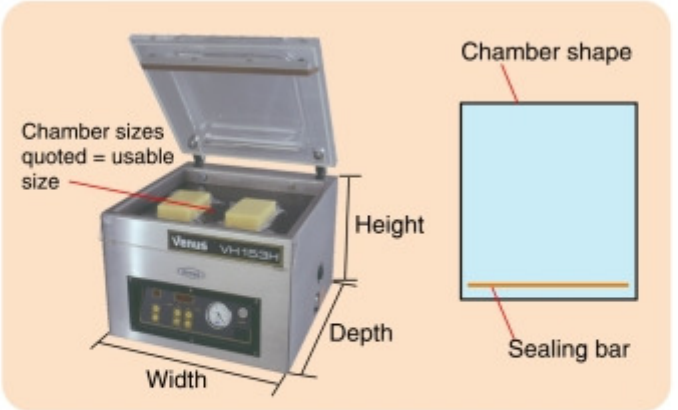
Machine size (WxDxH) mm	490 610 x 445
Chamber size (WxDxH) mm	420 x 370 x 180
Sealing bar length mm	410
Voltage/ph/freq. (V/ph/Hz)	240/1/50
Pump capacity m³/hr	21
Number of gas pipes	0

VH153H

VH203

Machine size (WxDxH) mm	700 x 690 x 1070
Chamber size (WxDxH) mm	510 x 500 x 230
Sealing bar length mm	2 x 510
Voltage/ph/freq. (V/ph/Hz)	415/3/50
Pump capacity m³/hr	63
Number of gas pipes	0

VH203



VH253

Machine size (WxDxH) mm	1545 x 790 x 1090
Chamber size (WxDxH) mm	(2x) 620 x 400
Sealing bar length mm	2 x 610
Voltage/ph/freq. (V/ph/Hz)	415/3/50
Pump capacity m³/hr	63
Number of gas pipes	8 (optional)

VH253

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