

# PRODUCTION VACUUM PACKAGING MACHINES

Fit for  
food  
processing





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HenkelmanVacuum

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CombiVac explained

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# Why vacuum packaging in food processing?

Vacuum packaging is a crucial part of every food process, regardless the product. From fish and meat to cheese, nuts, potatoes and other vegetables. Choosing the right vacuum packaging machine depends on the type of food, size and characteristics.

## 1 EXTEND SHELF LIFE WITHOUT ADDING PRESERVATIVES

Vacuum packing your food products reduces bacterial growth and thereby extends the shelf life, without the necessity of adding preservatives. You then have the advantage

of processing, transporting and delivering your vacuum packed products for an extended period of time within a larger market.

## 2 ENSURE FOOD QUALITY IMPROVE FOOD SAFETY

Hermetically sealing the bag prevents cross-contamination and improves food safety. Furthermore, food is being protected from atmospheric dehydration, freezer burn and mold. Products mature without mass nor aroma loss.

## 3 OPTIMIZE STORAGE AND TRANSPORT

Optimizing the use of your valuable storage and truck space, ensures all available shelves to be used efficiently by stacking different foods together. No spoilage of your products and no cross-contamination nor odors!

## 4 PROFESSIONAL PACKAGING

From processing to presentation. Vacuum packaging always ensures the best condition of food freshness and a professional presentation. Furthermore, as a food processing professional you must comply with the current hygiene and safety standards. Therefore, only use quality vacuum packaging machines for your process.

## 5 FLEXIBILITY IN FOOD PROCESSING

Vacuum packaging enables you to be flexible while processing your food products. Only one machine to process a wide variety of products, regardless the quantities, specifications and other requirements.

#reducebacterialgrowth  
#freshness  
#foodconservation  
#noadditives  
#nofreezerburn  
#noweightloss  
#aging #nomold  
#nodehydration #nowaste  
#nocrosscontamination  
#foodsafety

# CombiVac control

It's advanced. It's next generation. It's the future of control. Henkelman's CombiVac technology is more than a control system. It includes unique features, special options and intelligent functions.



## STANDARD FEATURES

### 1 LCD PANEL

- Full color 4.7 inch LCD screen
- Alphanumeric display
- Standard in 5 languages, more languages optional
- Animated packaging cycle
- Current time/date

### 2 20 PROGRAM MEMORY

- Personalized and programmable on a computer
- Product name entry
- Import and export of data

### 3 STANDARD SENSOR CONTROL

- Detection of the pre-set vacuum percentage in the chamber, listed in mbar, hPa or %

### 4 SECURE ACCESS

- Multilevel access (distributor, owner, operator) with different user rights
- For safety and security

### 5 CUSTOM DESIGNED SOFTWARE

- Possibility to integrate a corporate distributor's logo

### 6 USB CONNECTION

- Upload programs through a USB stick

### 7 PRINTER COMPATIBILITY

- Direct thermal label printer compatibility to print product name, packing and shelf life date, storage temperature, gas mix

### 8 HACCP COMPLIANCE

- Possibility to log and export maintenance activities and machine maintenance history
- Accessible on dealer level
- Service data storage

### 9 SERVICE AND MAINTENANCE

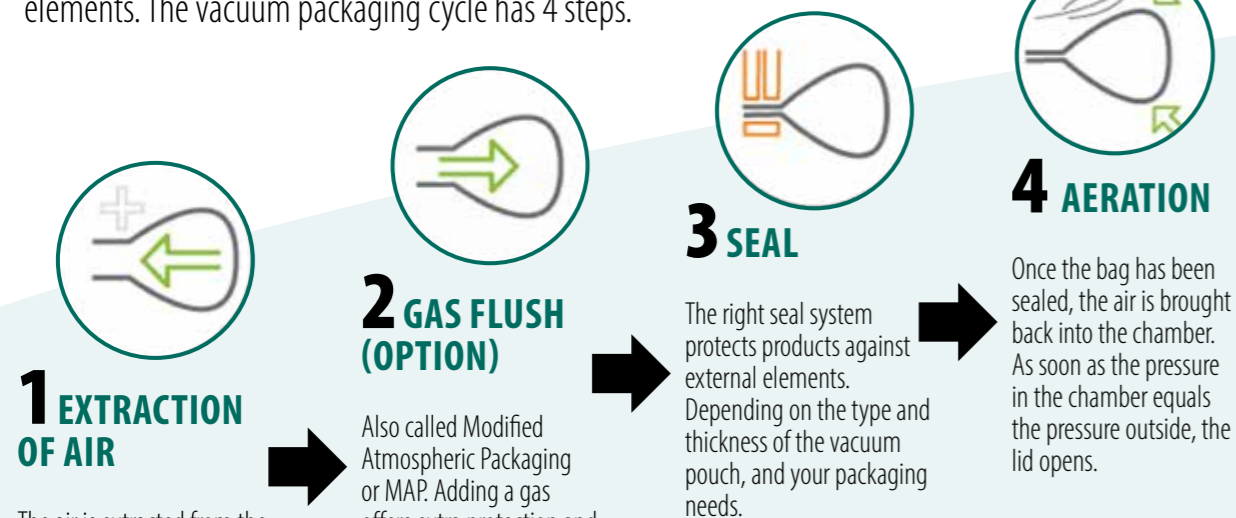
- Detailed oil warning indicator (possibility to shut down, reactivation by distributor)
- Clean pump program with maintenance alarm

### 10 GATE CHECK/ MAINTENANCE ALARM

- Easy diagnostics service tool called Gate Check (at distributor access level).

# Vacuum packaging cycle

In many commercial and commissary kitchens, vacuum packaging is an efficient way to extend the shelf life of food products and offer protection against external elements. The vacuum packaging cycle has 4 steps.



**1 EXTRACTION OF AIR**  
The air is extracted from the product, the bag and the chamber up until the pre-set time or vacuum percentage has been reached or the boiling point has been detected, in case of liquids. An optimal end vacuum is guaranteed at all times.

**2 GAS FLUSH (OPTION)**  
Also called Modified Atmospheric Packaging or MAP. Adding a gas offers extra protection and prevents the product from coloring. It's usually a gas mixture.

**3 SEAL**  
The right seal system protects products against external elements. Depending on the type and thickness of the vacuum pouch, and your packaging needs.

**4 AERATION**  
Once the bag has been sealed, the air is brought back into the chamber. As soon as the pressure in the chamber equals the pressure outside, the lid opens.

#combivac  
#vacuumsealing  
#chefs



## OPTION LIQUID CONTROL

Liquid or wet products quickly reach their boiling point during the vacuum cycle. Reducing the pressure below atmospheric pressure causes fluids to boil at room temperature. Prevent your soups, sauces and marinades from boiling with Henkelman's Liquid control option. As soon as the boiling point is detected, the machine stops extracting the air and starts the sealing of the vacuum bag.

Main advantages: no loss of moisture, weight nor flavors, protection of both product, pump and vacuum chamber, no dehydration due to the boiling and an optimal cycle time. Always combine Liquid control with an inclined insert plate for perfect product positioning and the ability to fill the bag.

# Gas flush & Soft Air

## GAS FLUSH

Prior to the seal phase, adding a gas or nitrogen is a possibility. Henkelman CombiVac sealers can be equipped with the option Gas flush or Modified Atmosphere Packaging (MAP).

## WHY INJECT A GAS?

Injecting a gas increases the product's shelf life, gives extra protection and prevents the product from coloring. Usually, a mixture of nitrogen (N<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>) is used. Oxygen (O<sub>2</sub>) can also be added to this combination. The use of argon (Ar) has been increasing, as this contains the same properties as nitrogen (N<sub>2</sub>).

## GAS MIXTURES

It depends on the product which gas mix is most suitable. Your supplier can inform you best which is the optimum composition for your application.

## AERATION

Once the cycle has been completed and the vacuum bag has been sealed, air is brought back into the chamber through the aeration valve. As soon as the atmospheric pressure inside equals the pressure outside the chamber, the lid opens. This works through normal aeration or through aeration with Soft Air, standard on all Henkelman machines, except the Jumbo series.

## SOFT AIR

Using Soft Air, the air is gradually and gently returned into the chamber. In a controlled way, the vacuum bag envelopes the product. For optimal protection of both product and vacuum bag. Suitable for the vacuum packing of food products with sharp edges, such as saté, T-bone steaks, racks of lamb, lobsters and spare ribs.

**NEW FUNCTIONALITY AND AN EXTRA OPTION**  
Jars function and option liquid control

## EXAMPLES



# Polar

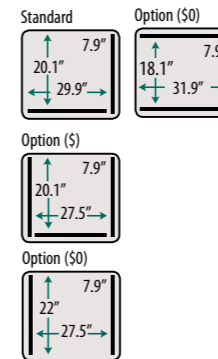
Complete range of single and double chamber equipment for MAP and vacuum packaging. Stainless steel series with a flat work plate and extensive program and option possibilities, such as the automatic lid. User friendly, low maintenance and fully HACCP and cold room compatible.

“Robust and durable series that ensure premier quality for optimal packaging efficiency.”

## Polar



### POLAR 80



#### PUMP CAPACITY

4,237 cf/h (120 m<sup>3</sup>/h)

#### MACHINE CYCLE

15-40 sec

#### CHAMBER DIMENSIONS

20.1" x 29.9" x 7.9"

#### MACHINE DIMENSIONS

31.1" x 35.4" x 43.3"

#### SEAL BARS

30" front, 20" right

#### WEIGHT

547 lbs

#### VOLTAGE

208/220V-3-60 Hz

#### POWER

4.6 HP

#### AMPS

21/22 C

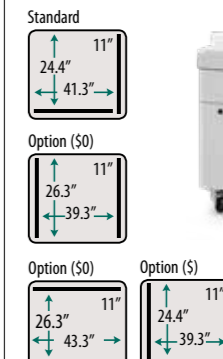
#### STANDARD

COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, 2 SEAL BARS, EXTRA HIGH CONTRA BARS, HEAVY DUTY, SERVICE KIT

#### OPTIONS

LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL, BI-ACTIVE SEAL, PREPARATION FOR EXTERNAL PUMP, 3RD SEAL BAR, EXTRA HIGH CONTRA BARS

### POLAR 110



#### PUMP CAPACITY

6,709 cf/h (190 m<sup>3</sup>/h)

#### MACHINE CYCLE

15-40 sec

#### CHAMBER DIMENSIONS

24.4" x 41.3" x 11"

#### MACHINE DIMENSIONS

37.3" x 47.2" x 45.3"

#### SEAL BARS

41" front, 24" right

#### WEIGHT

1024 lbs

#### VOLTAGE

208/220V-3-60 Hz

#### POWER

5.7 HP

#### AMPS

29/29 C

#### STANDARD

COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, 2 SEAL BARS, EXTRA HIGH CONTRA BARS, HEAVY DUTY, SERVICE KIT

#### OPTIONS

LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL, BI-ACTIVE SEAL, 6709 CF/H (190 M<sup>3</sup>/H) OR 12,713 CF/H (360 M<sup>3</sup>/H) PUMP, PREPARATION FOR EXTERNAL PUMP, 3RD SEAL BAR

The machine dimensions listed refer to the usable space in the vacuum chamber (length x width x height). The chamber dimensions listed refer to the usable space in the vacuum chamber (length x width x height). The machine dimensions listed refer to length x width x height. Other voltages available. Textual and printing errors reserved.

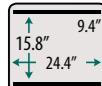
# Polar



## POLAR 2-40



Standard P2-40



### PUMP CAPACITY

2,780 cf/h (75 m<sup>3</sup>/h)

### MACHINE CYCLE

15-40 sec

### CHAMBER DIMENSIONS

15.8" x 24.4" x 9.4"

### MACHINE DIMENSIONS

32.3" x 58.7" x 52.4"

### SEAL BARS

2 x 24.4"

### WEIGHT

684 LBS

### VOLTAGE

208/220V-3-60 HZ

### POWER

3.2 HP

### AMPS

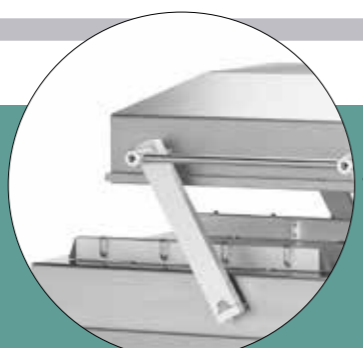
20/20 C

### STANDARD

COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, 2 SEAL BARS, HEAVY DUTY, SERVICE KIT

### OPTIONS

LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL, BI-ACTIVE SEAL, EXTRA SEAL CAPACITY, PREPARATION FOR EXTERNAL PUMP

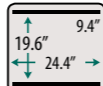


The smart design and hygienic construction ensure reliability in operation and low maintenance costs.

## POLAR 2-50



Standard P2-50



### PUMP CAPACITY

4,237 cf/h (120 m<sup>3</sup>/h)

### MACHINE CYCLE

15-40 sec

### CHAMBER DIMENSIONS

19.6" x 24.4" x 9.4"

### MACHINE DIMENSIONS

36.2" x 58.2" x 52.1"

### SEAL BARS

2 x 24.4"

### WEIGHT

761 LBS

### VOLTAGE

208/220V-3-60 HZ

### POWER

4.6 HP

### AMPS

24/24 C

### STANDARD

COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, 2 SEAL BARS, HEAVY DUTY, SERVICE KIT

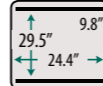
### OPTIONS

LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL, BI-ACTIVE SEAL, EXTRA SEAL CAPACITY, PREPARATION FOR EXTERNAL PUMP

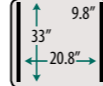
The chamber dimensions listed refer to the usable space in the vacuum chamber (length x width x height). The machine dimensions listed refer to length x width x height. Other voltages available. Textual and printing errors reserved.

## POLAR 2-75

Standard



Option (\$0)



### PUMP CAPACITY

6,709 cf/h (190 m<sup>3</sup>/h)

### MACHINE CYCLE

15-40 sec

### CHAMBER DIMENSIONS

29.5" x 24.4" x 9.8"

### MACHINE DIMENSIONS

47.4" x 58.4" x 52.8"

### SEAL BARS

2 x 24.4"

### WEIGHT

1,183 lbs

### VOLTAGE

208/220V-3-60 HZ

### POWER

5.7 HP

### AMPS

26/26 C

### STANDARD

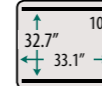
COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, 2 SEAL BARS, HEAVY DUTY, SERVICE KIT

### OPTIONS

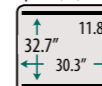
LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL, BI-ACTIVE SEAL, EXTRA SEAL CAPACITY, 12,713 CF/H (360 M<sup>3</sup>/H) PUMP, PREPARATION FOR EXTERNAL PUMP

## POLAR 2-85

Standard



Option (\$0)



**NEW OPTION**  
Automatic lid

### PUMP CAPACITY

12,713 cf/h (360 m<sup>3</sup>/h)

### MACHINE CYCLE

10-30 sec

### CHAMBER DIMENSIONS

32.7" x 33.1" x 10"

### MACHINE DIMENSIONS

51" x 74.8" x 57"

### SEAL BARS

2 x 33.1"

### WEIGHT

1,510 lbs

### VOLTAGE

208/220V-3-60 HZ

### POWER

8.9 HP

### AMPS

37/44 C

### STANDARD

COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, 2 SEAL BARS, HEAVY DUTY, SERVICE KIT

### OPTIONS

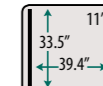
LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL, BI-ACTIVE SEAL, AUTOMATIC LID OR EXTRA HIGH LID, EXTRA SEAL CAPACITY, PREPARATION FOR EXTERNAL PUMP

## POLAR 2-95

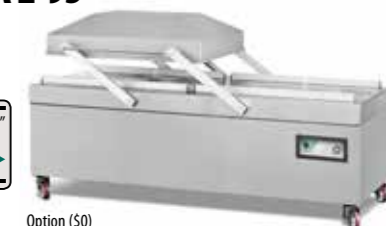
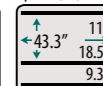
Standard



Option (\$0)



Option (\$0)



### PUMP CAPACITY

12,713 cf/h (360 m<sup>3</sup>/h)

### MACHINE CYCLE

15-40 sec

### CHAMBER DIMENSIONS

28.7" x 43.3" x 11"

### MACHINE DIMENSIONS

47.7" x 95.3" x 62.8"

### SEAL BARS

2 x 43.3"

### WEIGHT

1,510 lbs

### VOLTAGE

208/220V-3-60 HZ

### POWER

8.8 HP

### AMPS

37/44 C

### STANDARD

COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, 2 SEAL BARS, HEAVY DUTY, SERVICE KIT

### OPTIONS

LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL, BI-ACTIVE SEAL, 3RD SEAL BAR, AUTOMATIC LID, EXTRA SEAL CAPACITY, PREPARATION FOR EXTERNAL PUMP

The chamber dimensions listed refer to the usable space in the vacuum chamber (length x width x height). The machine dimensions listed refer to length x width x height. Other voltages available. Textual and printing errors reserved.

# NEW: Automatic lid

Henkelman has integrated its automatic lid in the Polar double chamber models 2-85 & 2-95. This advanced option includes a foot pedal to enable semi-automatic operation. Perfect for the industrial packaging of food products. The automatic lid is only available on new models.

## IMPROVED ERGONOMICS

Operators experience a huge ergonomic advantage with the automatic lid. Less weight has to be lifted, which improves the working conditions of individual operators and reduces sick leave.

## OPERATIONAL ADVANTAGE

From an operational perspective, preset packaging cycle times guarantee a constant and high production output. The automatic lid contributes to a more productive workforce.

## GUARANTEED SAFETY

The automatic lid is equipped with a sensor that activates the emergency stop in case of entrapment. This guarantees the highest protection levels during the complete vacuum packaging process.



# Heavy duty technology

Henkelman provides specific solutions for heavy duty industrial packaging processes. These solutions enable operators to work up to 20 hours a day in different shifts with high quality materials, the best available in the field of vacuum packaging technology. All our Polar machines are standard equipped with heavy duty technology.



PATENTED

## HEAVY DUTY SEAL BAR WITH ALUMINIUM END BLOCKS

The smart construction and robust materials of these heavy duty seal bar with aluminium end blocks ensure an efficient vacuum packaging process under the most extreme conditions.

## DOUBLE SEAL CAPACITY

Double seal capacity involves extra transformer capacity for a constant operational output during a longer period of time. Because heavy duty processing requires heavy duty solutions...

## NEW BUSCH VACUUM PUMP 360 M<sup>3</sup>/H

This innovation belongs to the Busch product family of proven R 5 rotary vane vacuum pumps, specifically designed for use in Heavy duty vacuum packaging machines and fast packaging cycles. Main advantages: energy-efficiency, reduction of heat emission, optimized heat direction, easy cleaning, robust construction and a proven performance.



# Marlin

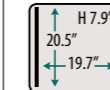
Perfect fit for greater packaging needs and high volumes of food products. Absolute must-have for large-sized, companies that process food products such as meat, fish, fruit, vegetables and nuts. Standard equipped with a high capacity 75 m<sup>3</sup>/h pump.

## Marlin



### MARLIN 52 1-PHASE

Standard



#### PUMP CAPACITY

2,780 cf/h (75 m<sup>3</sup>/h)

**MACHINE CYCLE** 15-40 sec

**CHAMBER DIMENSIONS**

20.5" x 19.7" x 7.9"

**MACHINE DIMENSIONS**

28" x 27.4" x 40.4"

**SEAL BAR** 2 x 20.5"

**WEIGHT** 364 lbs

**VOLTAGE** 220V-1-60 HZ

**POWER** 2.8 HP

**AMPS** 21/21C

#### STANDARD

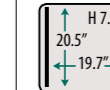
COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, SERVICE KIT

#### OPTIONS

LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL

### MARLIN 52 3-PHASE

Standard



#### PUMP CAPACITY

2,780 cf/h (75 m<sup>3</sup>/h)

**MACHINE CYCLE** 15-40 sec

**CHAMBER DIMENSIONS**

20.5" x 19.7" x 7.9"

**MACHINE DIMENSIONS**

28" x 27.4" x 40.4"

**SEAL BAR** 2 x 20.5"

**WEIGHT** 364 lbs

**VOLTAGE** 208/220V-3-60 HZ

**POWER** 3.2 HP

**AMPS** 17/17 C

#### STANDARD

COMBIVAC PANEL, SENSOR CONTROL, DOUBLE SEAL, OTHER SEAL OPTIONS ON REQUEST, SOFT AIR, SERVICE KIT

#### OPTIONS

LIQUID CONTROL, GAS FLUSH, 1-2 CUT-OFF SEAL

The chamber dimensions listed refer to the usable space in the vacuum chamber (length x width x height). The machine dimensions listed refer to length x width x height. Other voltages available. Textual and printing errors reserved.

# Seal systems

After completion of the vacuum packaging cycle and the possible adding of a gas, the bag is ready to be sealed. The right seal solution protects your food products effectively against external elements. Double seal is standard, the other seal options are on request.



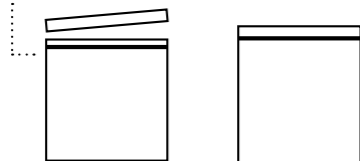
**HENKELMAN'S  
STANDARD**

## DOUBLE SEAL

Double seal is Henkelman's standard. It consists of two 0.14" convex seal wires, especially suitable for basic sealing needs. For every application in every branche, from food service to the vacuum packaging of both food and non-food.

## CUT-OFF SEAL

Henkelman's Cut-off seal system consists of one 0.14" convex seal wire and one 0.04" round cutting wire. So you can easily tear off the residual plastic bag. Henkelman's Cut-off seal technology is available for free on all models.



## BI-ACTIVE SEAL

Bi-active seal is used when vacuum packing aluminium or thicker bags. This seal system has seal bars on both the inside of the lid and on the front of the vacuum chamber, so the vacuum bag is sealed from both sides of the bag.



## 1-2 CUT-OFF SEAL

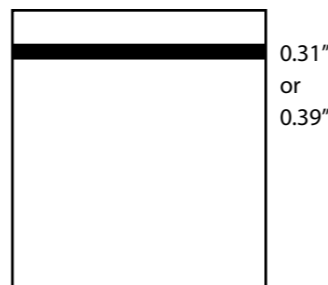
This seal system has one 0.14" convex seal wire and one 0.04" round cutting wire. The only difference with Cut-off seal is the possibility to adjust the time settings of the seal and cutting wire separately.

## #Shrinkbags

Shrink bags in general and some vacuum pouches are made of very resistant but thin foil. Henkelman specifically developed this seal system for the easy removal of the rest foil of shrink and thicker bags.

## WIDE SEAL

Certain types of vacuum bags have been pre-sealed on three sides. For a professional and aesthetic result, the seal on the remaining side, to be sealed by the vacuum packaging machine, equals the width of the other three pre-seals. Henkelman uses 0.31" Wide seal on all table-top models and the Marlin 52, the Polar models all have a 0.39" Wide seal.



## CONVEX SEAL WIRES

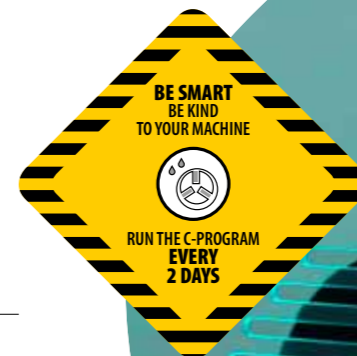
Henkelman works with convex seal for its Double seal, Cut-off seal and 1-2 Cut-off seal. This ensures the food residue being pressed out from between the foils of the bag during the sealing proces. Flat wires smash the food residu between the foils of the bags. This increases the risk of leakage. Henkelman's convex seal wire empowers a stronger and safer seal.

FOOD PROCESSING

# Technical support

## HOW TO PERFORM MAINTENANCE?

Be smart, be kind to your machine. Run the Pump Cleaning (C-Program) at the end of the shift or at least every 2 days. For more information about maintenance check [www.henkelman.com/us/maintenance](http://www.henkelman.com/us/maintenance)



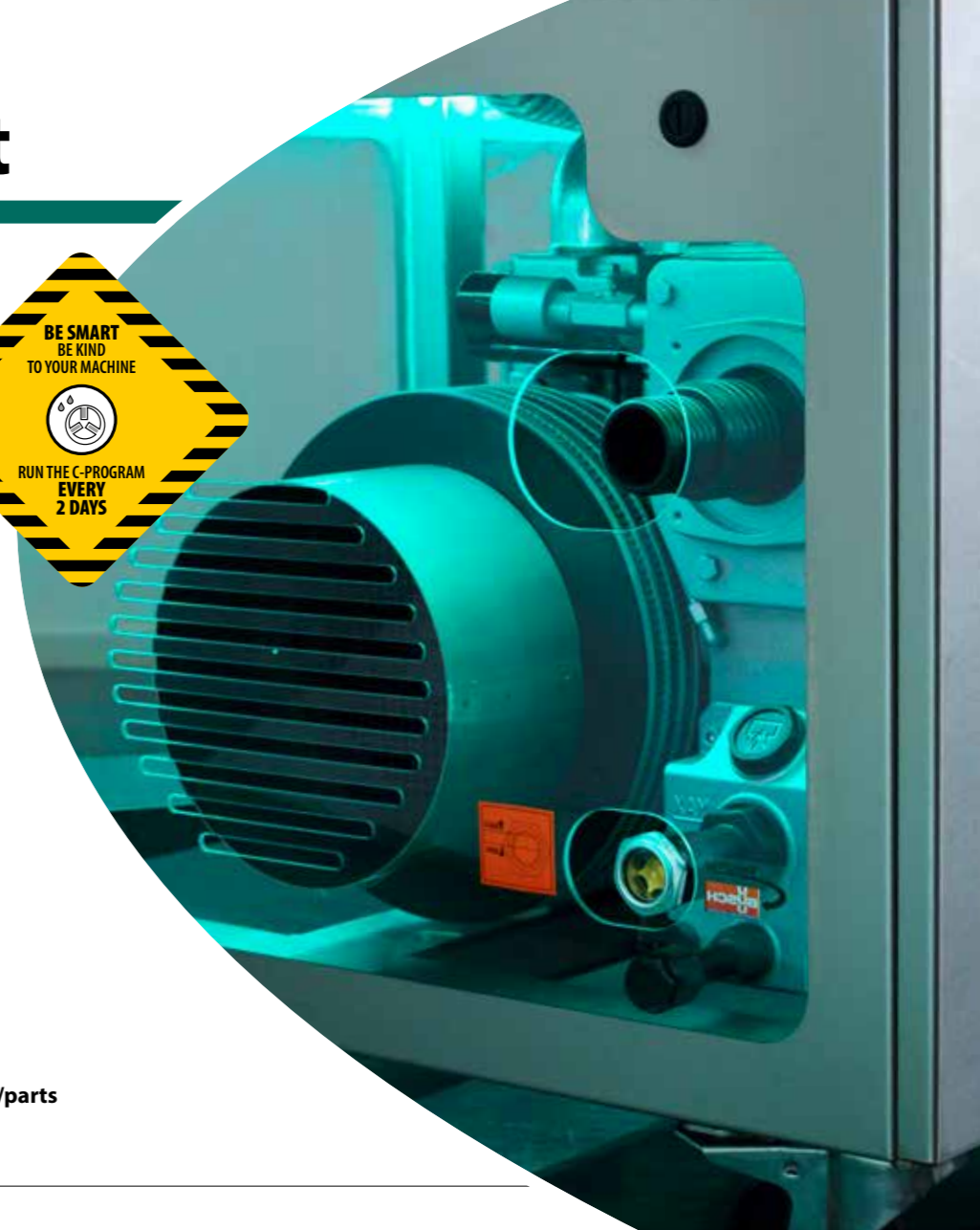
**Parts**Town

For parts inquiries and/or warranty issues on table-top models and Marlin 52, please contact Parts Town Part hotline 1-800-458-5593 or Tech Support 1-877-592-3229. For technical support on your Polar machines, please contact team Henkelman USA directly.



scan this code to go to [partstown.com/henkelman/parts](http://partstown.com/henkelman/parts)

FOOD PROCESSING



# About Henkelman

FIND A REP OR  
DEALER NEAR YOU  
[www.henkelman.com/  
us/rep](http://www.henkelman.com/us/rep)



**HENKELMAN WAS FOUNDED IN 1994** and since that moment a specialist when it comes to the development, production and distribution of professional chamber vacuum sealers. Our leading position in vacuum packaging technology sets us apart from the competition with the largest and most diverse range of solutions to vacuum pack both food and non-food. From the smallest table-top vacuum packer up to the largest heavy duty double chamber industrial model. For that reason, companies in all types of sectors across the world rely on Henkelman.

**HENKELMAN IS A FAMILY OWNED COMPANY**, located in 's-Hertogenbosch, the Netherlands and in Elmhurst, Illinois, United States. With 60 employees, we produce more than 14.000 vacuum packaging machines a year. For that we use premium parts from the Netherlands and Germany. Our most valuable asset is our extensive network of approximately 450 exclusive and authorised distributors in more than 80 countries.

**SINCE 2015, HENKELMAN INC** operates as a satellite trade office to distribute our vacuum sealers in the United States. Our small team works closely together with a network of reps and dealers.

**#fastdelivery #service #technicalsupport #sales  
#marketing #valueformoney #combivac**



[WWW.HENKELMAN.COM/US](http://WWW.HENKELMAN.COM/US)

# PROFESSIONAL VACUUM PACKAGING MACHINES

Fit for  
food  
processing



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HenkelmanVacuum