



Dairy Products

www.dairy-filling-machines.com



Expertise in Dairy Products

Serac Group remains committed to its motto “we honor our commitments” and has become the privileged partner of major dairy product producers throughout the world.

From the high-speed Serac rotary aseptic filling machine right up to the Nova linear machines for filling floating island desserts, Serac Group offers a wide range of machines meeting the demands of numerous applications.

A wide variety of container and products

Serac Group machines may be used to fill most types of dairy product such as: UHT milk, sterilized milk, pasteurized milk, ESL milk, flavored milk, drinking yogurt, yogurts, fresh cheese, melted cheese, dessert creams, fresh desserts, cooked desserts, whipped creams, spreads etc...

With suitable containers of all sizes: HDPE, PET, PP, PS, glass bottles, preformed cups, various glass bottle sizes, aluminum cups and metal aerosols.





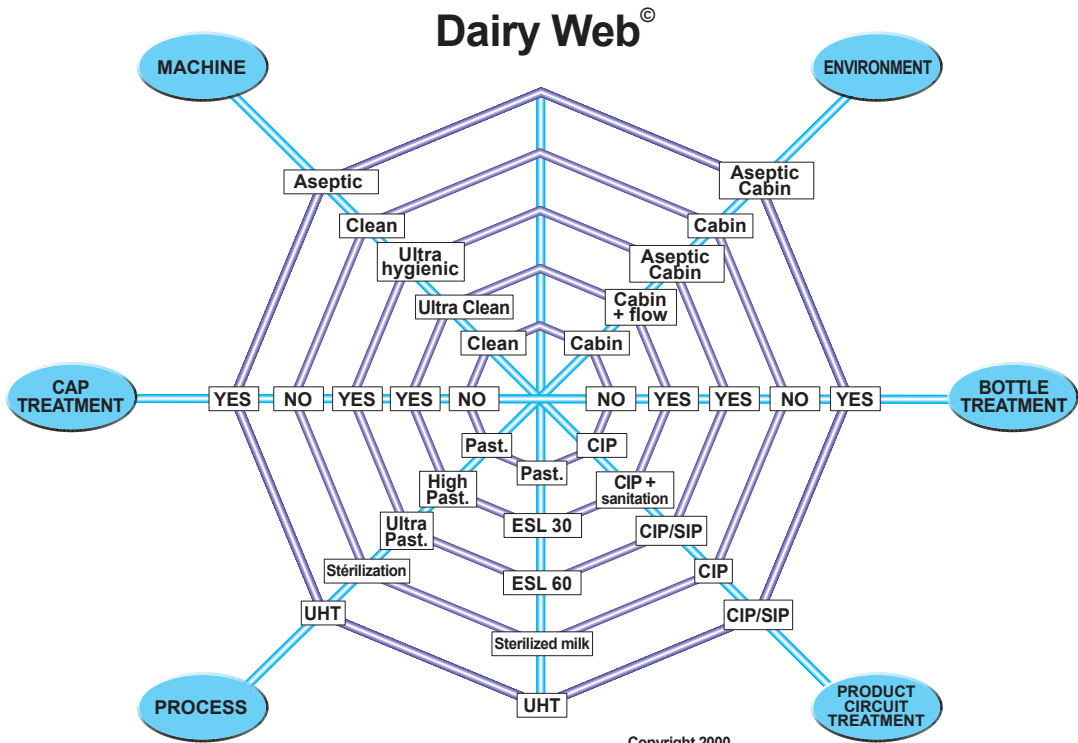
Since 1969, when Serac released its very first milk weigh filler, we have continued to invent new devices to make the filling of dairy products better, safer, easier and more economical. Today, Serac is a worldwide leader in the development of new technologies linked to the ESL and aseptic filling of dairy products in stable containers. Serac's R&D keeps its momentum in order to remain a major trendsetter in the industry.

Serac has designed a large range of filling and capping machines able to cover all types of dairy products from fresh milk to aseptically filled products. The chart below shows the different technologies that can be used according to the expected shelf-life required. For any of these five possibilities, Serac will have the perfect answer in terms of equipment and engineering.



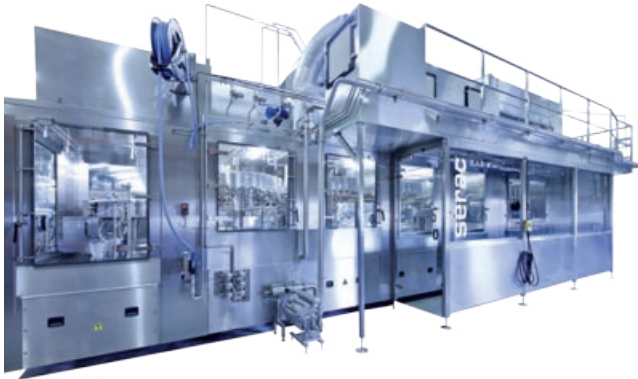
Nevertheless, Serac is the only company that can propose tailor-made filling solutions which are not based on a fixed range of machines but rather a modular design process using the Dairy Tree.

If you are interested to know more, ask us about our Dairy Tree.



Various types of Serac filling machines

Serac adapts its products to each industry dairy process and offers a wide variety of technologies and high-performance filling solutions for various bottle materials.



Aseptic Filling

SAS4

Serac presently proposes a wide range of packaging sterilization for filling in an aseptic environment.

Up to 36 000 bottles per hour. (1L)



Ultra-clean Filling

H2F

New generation of filler, inspired by aseptic filling, extremely modular and easy to upgrade. Available in Block version with bottle blowing.

Up to 24 500 bottles per hour. (1L)



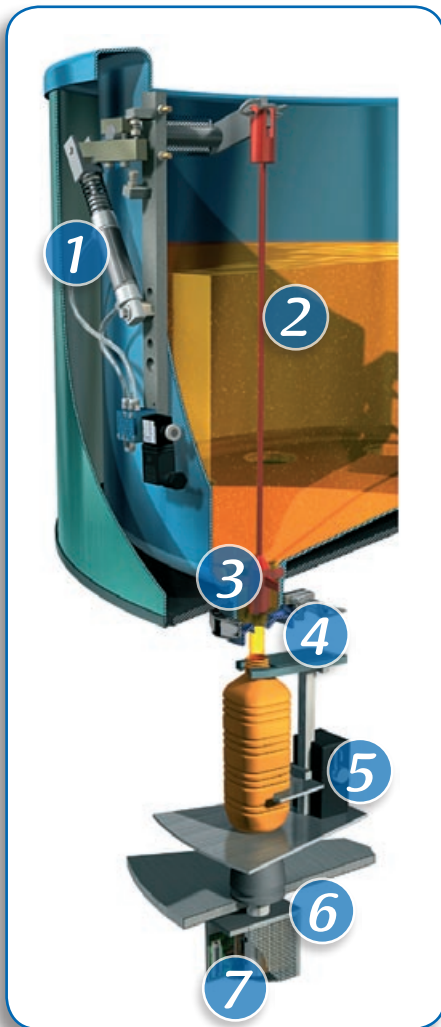
Dairy Standard Filling

RB/RT

Filling, capping and heat-sealing machines.

Up to 36 000 bottles per hour. (1L)

Dairy Standard Filling



RB/RT



FILLING

1. Actuators separated from the product circuit
2. A single moving part in contact with the product
3. Fully opening nozzle with metal to metal closure and pneumatic command
4. No contact between nozzle and container
5. Quick and easy size changeover
6. Net weigh electronic control
7. Measuring devices separated from the product cycle and the sanitation circuits.

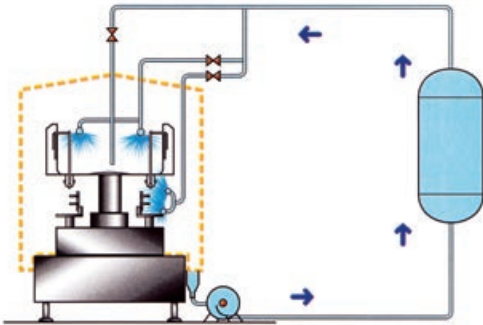


Heat-sealing

Serac has developed a heat-sealing system allowing for perfect sealing and a good peeling ability. There is individual control of the temperature, the pressure and the heat-sealing time for each head regardless of the machine rotation speed. The two parameters temperature and time are independently monitored. The data is displayed on screen. Presses can achieve 600 bottles per minute, producing a skirted foil cap which is perfectly centered.

Induction Sealing

Serac can propose an induction tunnel for caps which have an inner foil liner.

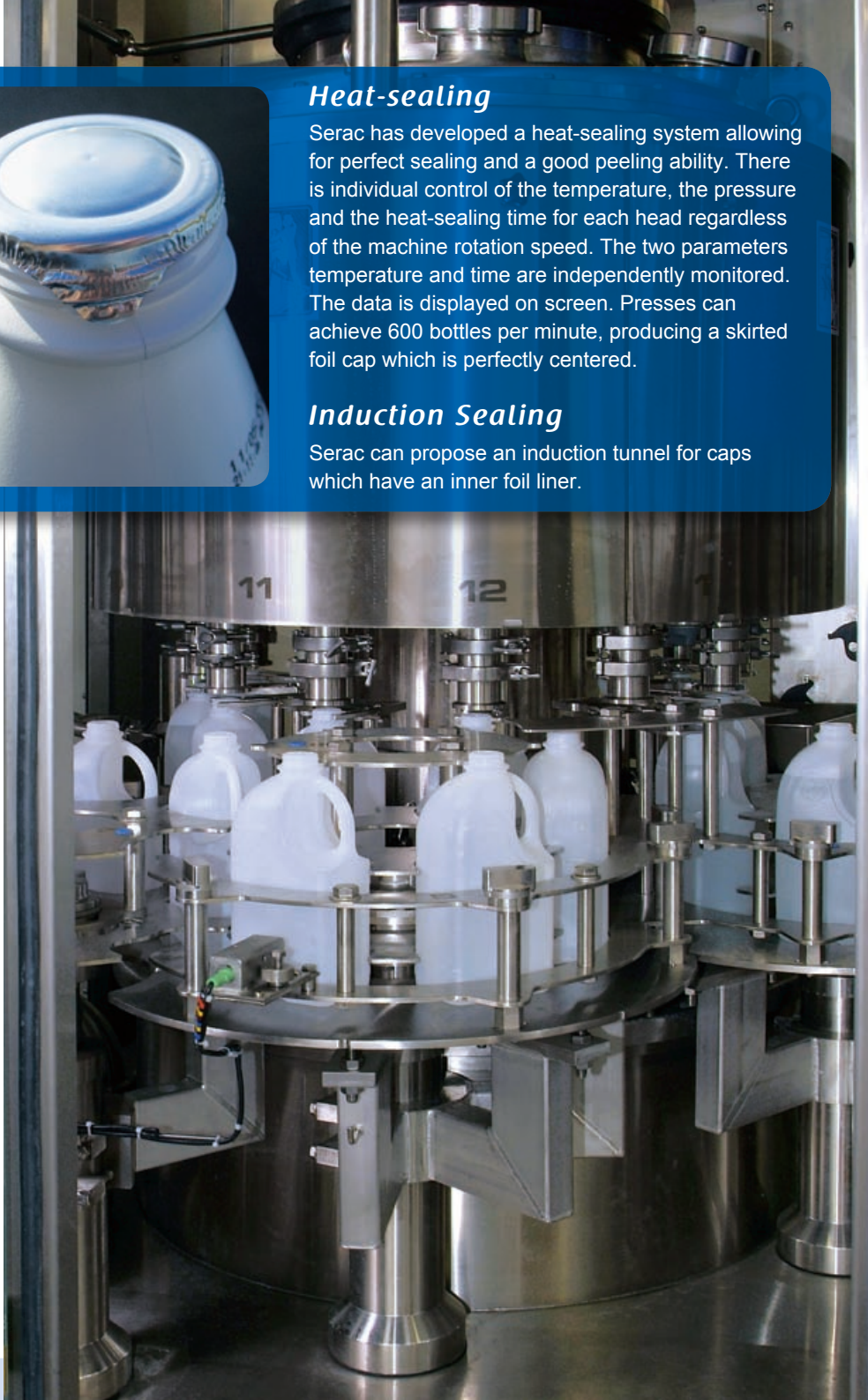


Cleaning

A cleaning in place tailored to everyone's needs and a machine designed without any area where product could be retained.



Screw-capping / Plugging



Ultra-clean Filling

Filling and controlling of every filling environment impacts greatly on food safety and longer shelf-life.

The extension of a dairy products shelf-life could represent a significant economic advantage for a dairy company.

And when filling in an ultra-clean environment becomes imperative, Serac offers tailor-made solutions according to the initial contamination level of the raw milk, the type of treatment applied to the product (pasteurization, high pasteurization, microfiltration...), the quality of the cold chain...

H2F in “classic filling” version

New generation of fillers with a highly hygienic and protected environment



Easy to clean conveyor





Weigh filling and nozzle Multiflow®. Uncluttered volumes and surfaces in the filling area.



The MTC capper mechanism is easily accessible and is located outside the ultra-clean area





Cap Treatment

Caps are treated by pulsed light, without the use of water or chemicals.

*Entrance of the
blown bottles
into the H2F filler*



Bottles after blowing



*Blown bottle transfer
within the Block system*

Ultra-clean Filling

H2F in "Block" version



With the production of bottles on site.

This solution is particularly interesting for manufacturers who want to enhance their dairy plant production line thanks to a compact and friendly system equipped with bottle blowing production and filling.



Choice of pre-forms

The Block system is available for any type of pre-forms already available in your markets: PET, HDPE, PP, PS ...

Aseptic Filling

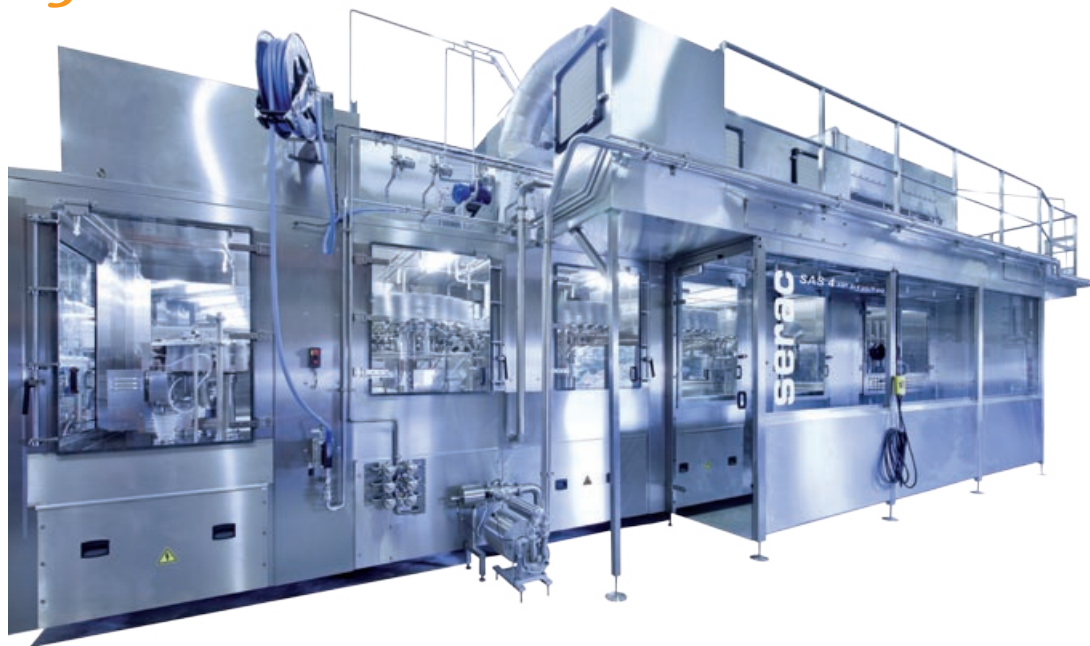
Serac has been manufacturing aseptic filling machines since 1978.

Over a period of 35 years, the company has gained a reputation as the specialist for aseptic filling applications.

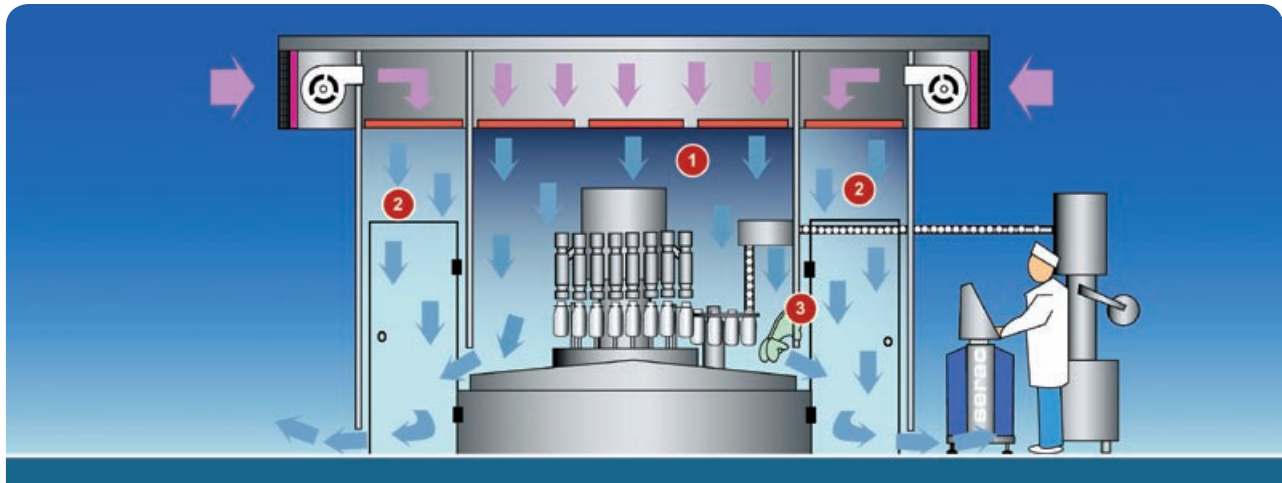
The latest version of aseptic SAS4 was developed for the specific needs of your dairy drinks with high added-value, outside the cold chain. Aseptic pilot lines are also possible so you can test your new product developments or new markets .

SAS4 / Latest generation

It complies with FDA standards for filling dairy beverages and low acid products, a reference in the field of food safety



RABS Isolator



1 Filling carousel
(Iso 4 ou 5)



2 Barrier Zones (Iso 6)



3 Glove box

The RABS isolator represents a significant improvement in the aseptic filling sector.

- It optimizes the aseptic conditions in and around the sterile enclosure.
- It offers the operator the opportunity to intervene on the machine without risk of compromising its sterility.
- It extends production times by extending the period during which the aseptic conditions are maintained.

Aseptic filling

UPFILL Concept

*Weigh filling with load sensor
at the neck (Patented system)*



Neck transfer



*Electronics and drive
under the machine table*



Benefits of the UPFILL Concept

- Easy cleaning
- Improved hygienic conditions
- Facilitate the laminar air flow
- Improved access to electronics and drives (out of the sterile enclosure)
- Higher flexibility

The different types of Nova machine.

Nova possesses the expertise and know-how necessary to fill simple dairy products but also elaborate dairy desserts for leading brand names in this sector . It requires the design of a filling machine and, in particular, filling nozzles perfectly adapted to each “difficult” product to be filled.



NEO

Indexed rotary filler for preformed cups.

Up to 7,500 cups per hour.



LINEA

Linear filler for preformed cups.

From 7,500 cups per hour.



Filling station

Dosing station for existing mobile filling line.

Up to 24 heads

Filling in preformed cups

Neo

Indexed rotary packaging machine range from 1,500 to 7,500 cups per hour

Simple

Its simplicity of design makes it a reliable machine whose maintenance is as simple as possible.

Multi-format

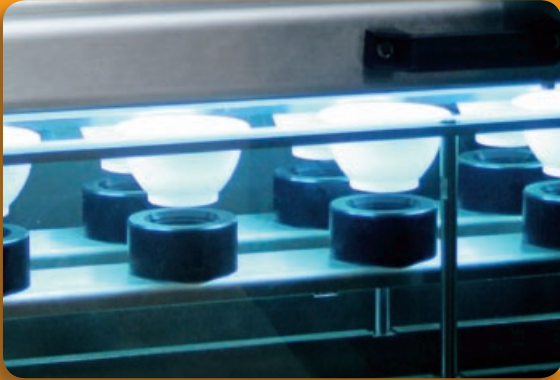
The Neo range accepts numerous types of preformed packages (PET, PP, PS, CPET, aluminum, glass, carton,...). Changes of format are quick and easy.

Clean

Depending on the products to be filled and the shelf life used, the machine can be equipped with a filler unit that can be washed, cleaned, or sterilized in place.



Yogurt, cream, cheese, spreads, mousse, custard, rice pudding, kefir, labneh ...



Cup decontamination by UV



CIP

A wide choice of functions can be incorporated depending on your needs:

- Cup dispensing
- UV, H₂O₂ Decontamination
- Cup detection
- Filling
- Pre-cut aluminum foil dispensing
- Foil detection
- Heat-sealing
- Date coding
- Eject on conveyor

Additional equipment:

- Pre or post-filling
- Temperature control in the product circuit
- Clip-on overlid
- Crimping
- Inkjet coding
- Laminar air flow

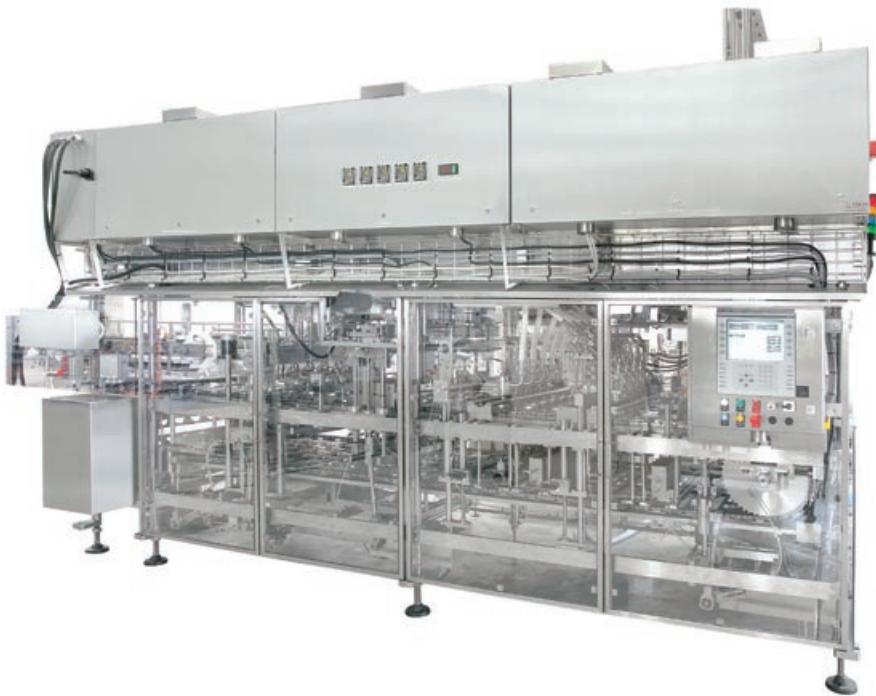
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Filling in preformed cups

Linea

Linear packaging machine range for preformed packages (PET, PP, PS, CPET, aluminum, glass, carton,...) from 7,500 cups per hour.



Adaptable

Thanks to their modular design, machines adapt to your production.

Multi-products

The Linea can be equipped with several dosing units for filling the simplest or most complex products.

**Floating island desserts,
profiteroles, desserts,
yogurts, mousse, caramel,
kefir, spreads...**



Filling



CIP



Heat-sealing

A wide choice of functions can be incorporated depending on your needs:

- Cup dispensing
- Cup detection
- Filling
- Pre-cut aluminum foil dispensing
- Foil detection
- Conduction or induction heat-sealing
- Discharge onto conveyor

Additional equipment :

- UVC, H₂O₂ decontamination
- Additional dosing units
- Temperature control in the product circuit
- Clip-on overlid
- Crimping
- Inkjet coding
- Laminar air flow
- ...



Nova Filling station

It is possible to quickly adapt your filling line and add new elements such as filling stations.

As far as product filling is concerned, these high-performance and versatile volumetric filling stations, are designed for complete autonomous function and to run from 2 heads as per your requirements. The filling station is controlled by a brushless motor. A more economical, pneumatic control version is also available.

Advantages

This mobile filling station may be quickly disconnected from the line and cleaned independently from the machine.

A change of product on the line may be carried out very quickly and requires only 5 minutes.



Filling of products with various properties

During product filling or injection, the specificity of each product must be taken into account and the appropriate solution adapted e.g.:

- A filling system which guarantees product homogeneity and consistency for expanding products (foams, whipped egg white, whipped cream...)
- Optimized filling of thick, laden products (rice puddings, custards, ganache, puff-pastry mix, margarine, products containing fruit pieces ...)
- An efficient system enabling the filling of viscous and “thick-flowing” products (honey, caramel, chocolate sauce, processed cheese...)



Services



Engineering, complete line

Your turnkey production line

Serac's complete line engineering know-how gives you access to the best deals from primary packaging and secondary packaging, to end of line.

Line audit

The audit is the first function of an overall service contract.

It includes:

- Analysis of the production and machine.
- Identifying items to be found outside normal specifications.
- Propose and implement solutions to maximize efficiency.





Shipment of spare parts within 24 hours

The pneumatic and electric components that we use are chosen in relation to their quality and their local availability. Our five production sites (France, USA, Brazil and Malaysia) and our three offices (England, Japan and China) have spare parts in stock which can, in most cases, be shipped out within 24 hours.



Other services

- **Maintenance contracts**
- **Training of maintenance and operating personnel**
- **Design and manufacture of tools**

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