

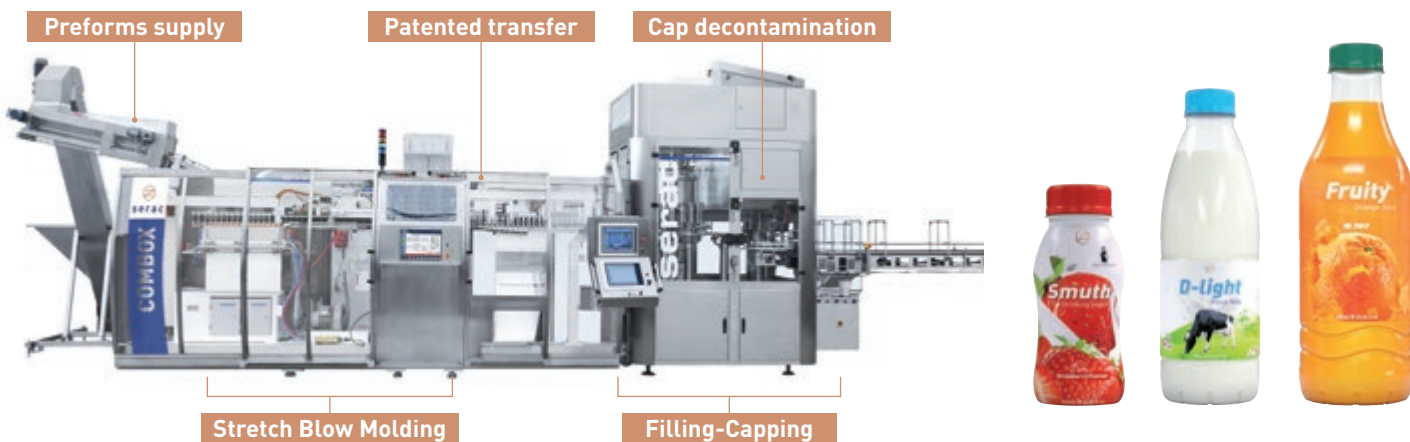
SMART PACKAGING MACHINES

Combox H2F



New opportunities for the chilled drinks markets

Taking into account the benefits brought by PET bottles and the advantages of on-site blow moulding while capitalizing on its proven experience in the field of chilled drinks packaging, Serac proposes Combox H2F a single bloc blow-fill-cap unit tailored to cope the needs of dairy and beverages manufacturers to enter the bottle market with a reduced level of investment.



Up to 18,000 bottles/hour (single serve formats)

The solution provides a blow-fill-cap bloc including the Serac SBL linear blow-molder and the H2F for output up to 12,000 PET bottles per hour for the 1 litre format and up to 18,000 PET bottles per hour for single serve bottle formats.

Benefits of Combox H2F

LOWER COST, HIGHER QUALITY, REDUCED FOOTPRINT

Integrated systems incorporating blowing, filling and capping are growing in popularity as they offer valuable benefits:

- **Lower investment:** No silos, unscrambler, air conveyor..
- **Labor cost savings:** With only 1 operator for 2 machines.
- **Packaging cost savings :** Bottles weight can be reduced as bottles transportation is not required.
- **Improved hygiene:** Less risks of dust present in the bottles, hygienic level of the bottle is naturally insured by PET preform heating and direct transfer to the filler.
- **Reduced footprint:** The Combox offers compact solutions without the need for additional equipment such as bottle palletizer, bottle unscrambler, air conveyor.

COMBOX-H2F APPLICATIONS

Customized to your chilled drinks

The Combox H2F has been designed and developed for the specific requirements of fresh dairy products such as pasteurized milks, flavored or supplemented milks, drinking yogurts, milk-shakes but also chilled juices, smoothies, plant based drinks, milk-juice blends in PET containers.



Perfect shaping of light weight bottles from 60ml to 2 liters

Thanks to stretching rods driven by servo-motors and a perfect closing of the mold, Combox H2F is able to stretch light weight bottles up to their limit with no distortion and no partling.

The whole Combox H2F is designed to produce formats ranging from medium such as 2 liter milk containers, to as small as 60ml for samples or “on the go” drinks.



SMART DESIGN FOR MORE USER FRIENDLINESS

The Combox H2F series immediately distinguishes itself with its innovative SBL blower and H2F filler designs which makes it operator safe and user friendly, increasing production uptime.

High visibility, easy access



Easy access all around the machine with numerous sliding doors and openings

Features

Benefits

Feeding, heating, stretching and blowing operations performed at eye level.



Total visibility of the bottle production process.

Access to internal parts of the machine is simplified with wide sliding doors.



Operators circulate freely around the machine.

The scales of the H2F filler are on the upper part directly connected to the grippers. The electronic controls are under the table.



Easier access below the machine for a fast and secure maintenance outside the filling area.

The mechanical elements of the screw capper are outside the filler.



Eliminates the risk of contamination. Easy access for fast and secure maintenance.

Operator friendly changeover



Mold sliding rack for easy and effortless changeover



Very fast tool changes in the filling zone

Features

Benefits

Main motion components do not require mechanical adjustments.



Plug & play.

Extensive use of brushless technology.



Most operations are handled from the HMI.

Quick changeover parts for spindle nozzles.



Neck change over can be completed in 15 minutes.

Neck transfer technology in the filling zone



Flexible solution with various bottle formats.
Quick change-over and reduced number of change parts (compared to bottom transfer).

Easy cleaning (H2F filling zone)



H2F filling turret with a sloped casing



EHEDG designed load cell in the H2F filling turret

Features

Benefits

The design of surfaces and volumes is simplified in the work zone. There is a tilt table.



EHEDG designed load cell with hygienic design

The machine cleaning operations are more efficient with the deletion of retention zones
Easy long-term maintaining of a high level of cleanliness



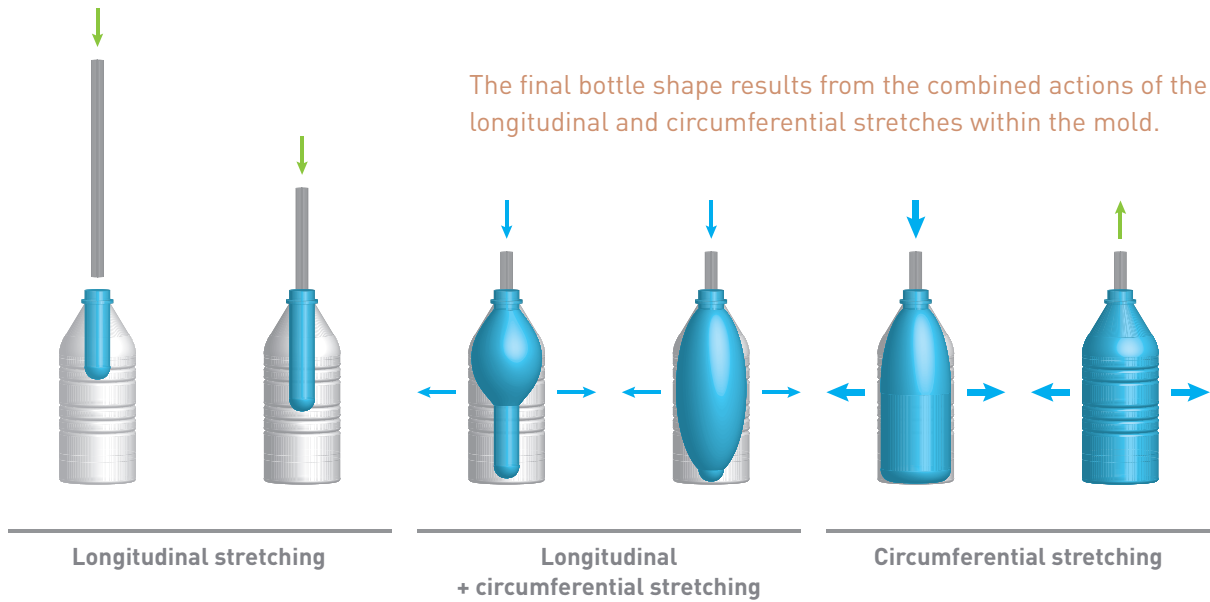
No retention zone, easy to clean



SMART CONCEPTION FOR TOP EFFICIENCY

The Combox H2F machine is equipped with state of the art technology and integrates proven, accurate and long-lasting solutions.

Perfect shaping of light weight bottles



Features

Benefits

The stretching rods are driven by servo-motors.



Accurately stretches your light weight bottles up to their limit without distorting them.

The pressing unit sustains up to 50 tons of force for a **perfect closing of the mold**.



Ensures limited partling lines appear on your bottles.

The mold opens and closes in 0.6 seconds.



Allows for more heating time.

An expansion rate of 16 is required to blow this 2.3g preform into an attractive 50g fruit-shaped flask.





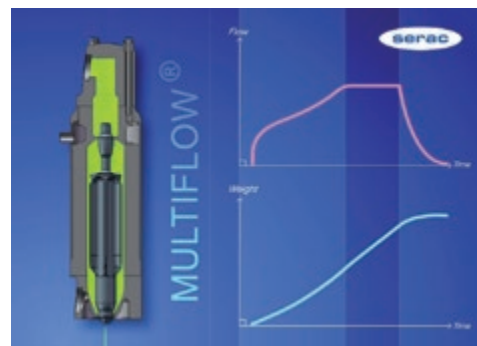
Reliable and smart weigh filling with Multiflow nozzle



Weigh filler with Uphill concept.



Multiflow nozzle



Features

Benefits

Patented technology (neck transfer + weigh filling technologies).

Unique solution by Serac.

Weigh filling technologies.

Accurate and hygienic solution. Filling traceability is available thanks to weigh filling.

Originally designed for aseptic application. The filling valve is actuated by an electro-magnet that allows to monitor the fill flow according to each product characteristics (foaming, viscous, with pulp...).

High hygienic standard. Simple selection of the SKU to be filled by the operator from control panel. Automatic and preadjustment of the nozzles. Handles foamy and viscous products with no valve/nozzle change.

Metal to metal seal (no screen meshes).
Magnetic valves.

Straight forward product circuit. No retention parts. Cleaning in Place. No pneumatics, no membrane on filling valves.

Tank with reduced capacity fitted with rotary joint and remote valves.

Closed tank with comparable features with aseptic filler tank.

Hygienic capping with centralized adjustment of tightening torque



TCS capper

Features

Benefits

Flexible and simple torque adjustments for each cap centralized on FCS HMI thanks to an electrical instead of pneumatical control.

Flexible solution with several type of caps possible.

Pneumatic torque control with torque adjustment on screen.

No manual adjustment by the operator for a new cap.

The cap is taken and the cap gripper is opened only when stopped.

No marks after screw capping, the cap remains intact.



serac

www.serac-group.com
www.dairy-packaging-machines.com