

Eurostar EV

Electro-pneumatic filler



Eurostar EV

Great versatility is the hallmark of the Eurostar EV. The machine comes in both glass and PET bottle versions and is designed to fill carbonated and still beverages, beer and wine.

Eurostar EV is a fully automatic rotary electro-pneumatic filler, specifically designed and manufactured for filling in glass bottles for high cadence filling lines. Eurostar EV is based on proven technology guaranteeing reliability, high performance, product quality and easy sanitization. This machine, thanks to the electro-pneumatic control of filling valves, offers high-speed precision filling and, in the case of beer, minimal oxygen in the bottle.

Main features

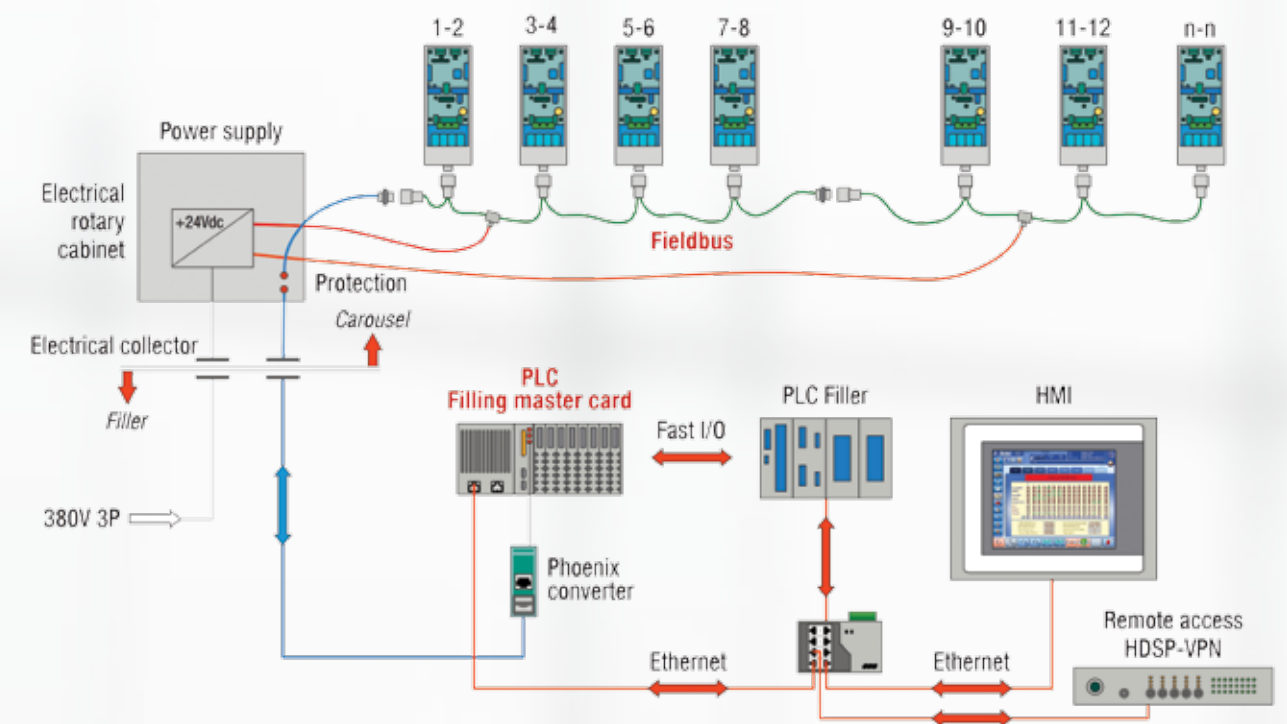
- High performance
- Reliability due to simple, proven mechanics
- Flexibility: handles glass or plastic bottles
- Easy sanitization
- Hygienic
- Easy machine access
- User-friendly operation
- Can be attached to a rinser



Control system

The filling parameters and control signals required for the correct functioning of the filling valve are situated in an electronic card (master) in the control PC – the control signals are sent to each individual electronic card (slave) by field bus data transmission, one electrical box every two filling valves. The system has simplified cabling of the rotary parts and makes troubleshooting much easier.

The system provides continuous monitoring of each individual valve with the possibility of modifying the working parameters automatically. Thanks to independent valve control, in case of malfunction, an individual valve can be switched off without affecting the overall working of the machine.



Filling valve

SIMPLE DESIGN FOR EASY CLEANING AND MAINTENANCE

The electro-pneumatic filling valve has an extremely simple design with a limited number of components and gaskets.

Each filling valve is operated by an electro-pneumatic system which receives data from the recipe on the touch screen.

This guarantees easy sanitization and minimizes maintenance.

The decompression gas leaked from the filling valves is collected in a room and then ducted outside of the filler.

The valve components can be dismantled independently, a maintenance advantage.

The interchangeable vent tubes are attached to the body of the valve ensuring rapid assembly and dismantling.

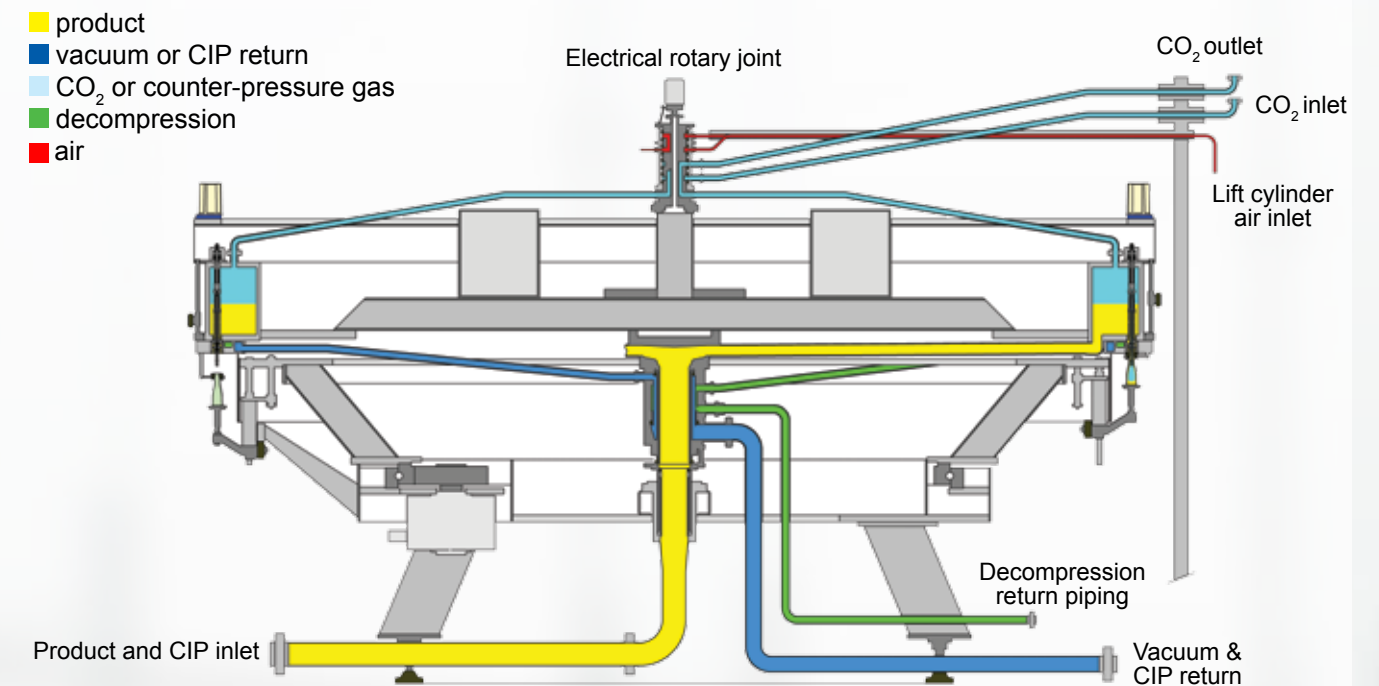
FLEXIBILITY

The Eurostar EV has a wide range of applications. In addition to beer, wine and carbonated beverages, still products can be filled at atmospheric pressure thanks to the special valve design. Depending on the product and container to be filled, various versions of the valve are available:

- Without pre-evacuation: carbonated beverages or still water in glass or PET bottles
- With pre-evacuation: beer or CSD in glass bottles
- With double pre-evacuation: beer in glass bottles
- With self-leveling: wine in glass bottles
- With pre-evacuation and self-leveling: still or sparkling wine in glass bottles.
- Up to two closing devices (crown and/or capper) can be located on the extended base-frame (available as an option).

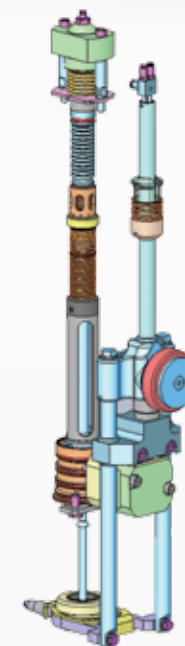
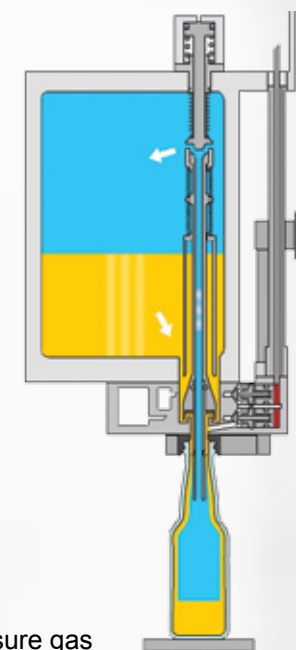


Section of the filler



Filling phase

- product
- CO₂ or counter-pressure gas



3D view of a filling valve

Format changeovers

Bottle handling

The format changeover is completely tool free, thanks to a quick turn of the handles of the starwheel and guides.

Optional guides quick changeover system with a quarter turn



Automatic height adjustment

The EUROSTAR EV is standard equipped with an automatic height adjustment system to adapt to the various bottle formats. This feature guarantees high precision, repeatability, easy operation and minimal changeover times.



Bottle lifts

The bottle lifts are raised from above and are located inside the carousel where they are well protected. The design of the bottle lift makes for easier, faster assembly and dismantling, as these operations are carried out with the bottle lift completely assembled.

If a bottle bursts, the fragments of glass and product fall directly to the floor without coming into contact with the sliding parts of the bottle lift.

At the same time, an automatic wash-off system is switched on to spray high-pressure water jets onto the bottle lift plates, the filling valves and the centering bells which are lifted into the wash-off area, where any remaining glass debris is completely removed.



Closing systems

Variable pressure foaming system

Crowner

The crowner offers both speed and flexibility as it can be adjusted according to the application.

- The machine can be fitted with a double hopper and double cap infeed chute to enhance efficiency: if the main chute jams, the second chute automatically starts, avoiding machine downtime.
- Also available in an ultra-clean version, the crowner is perfectly suited to applications requiring higher hygiene as it is specifically designed to make cleaning operations easier.
- As an option, both crown caps and ring-pulls can be used with quick changeovers.



Crowner with double cap infeed chute



Crowner

Capper

As an alternative or in addition to the crowner, one or more cappers can be installed to handle all types of screw caps:

- Aluminum caps
- Plastic caps
- Sport caps
- Special caps.



Capper



Detail of capper

Quality Filling

This foaming system is installed on fillers dedicated to beer. Residual air is eliminated from the bottle neck by injecting high pressure water before crowning. As an option, this system can be automated.

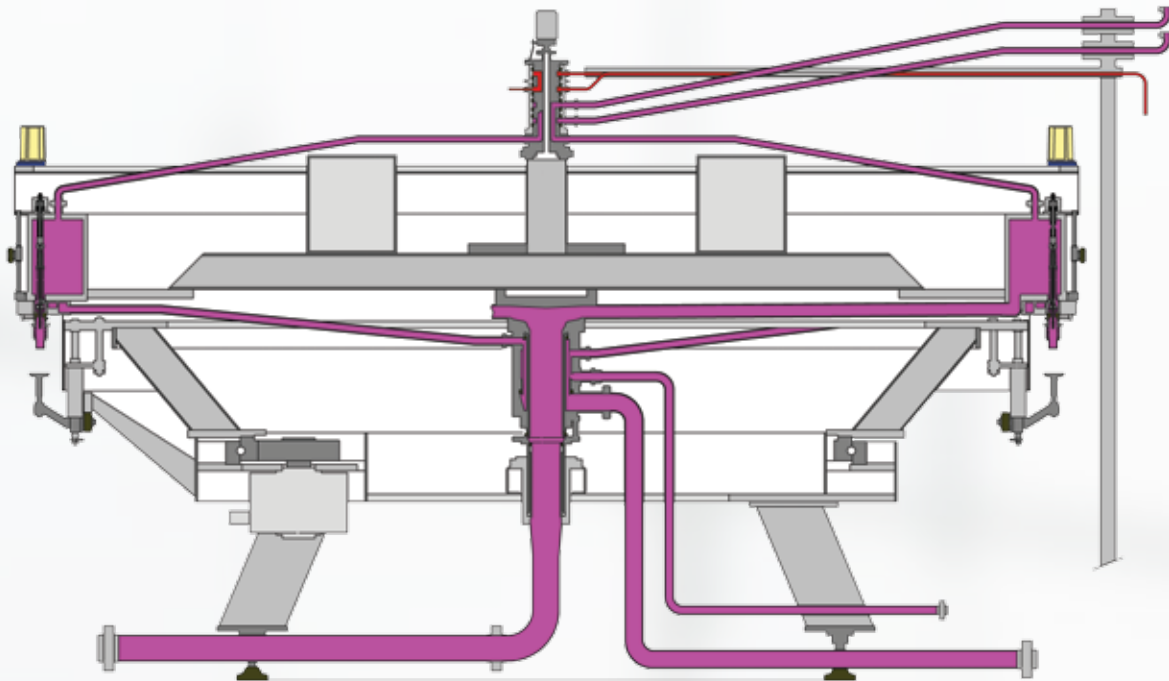
The PLC software adjusts the pressure according to a pressure/speed graph set by the operator interface terminal. By memorizing the graphs, proper foaming is guaranteed in all working conditions. The system can also be integrated with an automatic device controlling the foam water temperature.



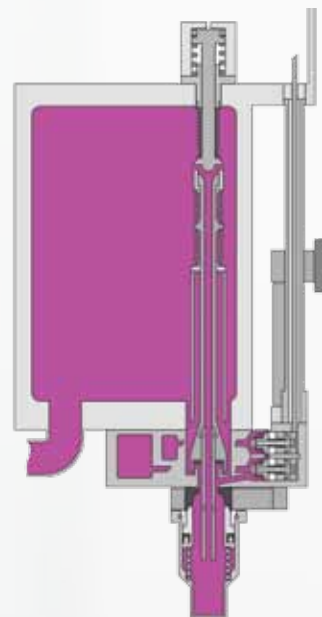
Detail of foaming system

Sanitization

The machine is designed to be washed and sanitized in a closed loop, installing dummy bottles applied to the filling valves.



All parts in contact with the product are treated in the sanitization cycle. On request, an external sanitization system can be provided for the filler carousel and base frame. Any residue is removed by foaming products and water rinsing.



Ultra-clean base frame

Base frame in AISI 304 stainless steel and self-draining slopes avoid water retention.

The front base frame is supplied in an ultra-clean version, AISI 304 stainless steel and self-draining featuring a double sloped upper surface.

This special design allows complete and rapid draining of all product residues, water, and broken bottles.

This makes cleaning operations easier, more effective and guarantees optimal hygiene conditions in the filling area.



Operator interface

Touch screen B&R 15» Color TFT

1024X768

SW HMI Zenon

Practical control over machine.



First in line

In a complex industry where know-how is everything, Gebo Cermex is formed from the union of two strong brands: Gebo & Cermex, gathering packaging line engineering experience across a range of market segments from beverages and food to pharmaceuticals, via home and personal care.

For over half a century, our experts have improved the performance of production and packaging lines in some of the most demanding industries.

Today **more than 37,000 equipment & systems installations bear our signature**. We add value to our customers' business in four dimensions, from equipment design and manufacturing to line engineering, services and asset performance.

Gebo Cermex, headquartered in France is a people-centric organization with **1800 employees and over 20 commercial & manufacturing sites** in all major regions around the world.

No-one knows packaging lines like we do. We are first in line.

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