

GEA VISITRON FILLER ALL-IN-ONE

An ‘all-in-one’ rinse, fill and close solution for cans, glass and PET bottles.

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A FLEXIBLE, TIME-SAVING MULTI-TASKER

A rapid changeover, multipurpose rinse, fill, close solution for cans, glass and PET bottles.

Flexibility is a must for beverage manufacturers and breweries who need to stay competitive in today's fast-moving global markets. Hours of time spent reconfiguring and adjusting complex filling equipment to switch between different bottle and can formats equates to reduced throughput and lost profits.

GEA VIPOLL has addressed this challenge by developing of the ALL-IN-ONE filling system, which can disinfect, rinse, fill, and close a wide range of PET and glass bottle and can formats. Supplied as a complete turnkey solution, the ALL-IN-ONE makes it easy for an operator to switch between different bottle and can formats in just 20 - 30 minutes (depending on the filler size), without the use of tools, which reduces down time and productivity loss.

Key design features

The space-saving ALL-IN-ONE unit represents an ideal choice for small- and medium-sized plants, including craft brewers, who can carry out all necessary functions, from rinsing to sealing, on just one machine. The unit's small footprint is ideal for where space is at a premium, and reliable, user-friendly operation means that maintenance time is also kept to a minimum.

The ALL-IN-ONE system features a multifunctional carousel-type rinser that is equipped with universal grippers and filling valves, plus a capper for crown caps and can lids. The capping turret carries the capping heads for crown caps, and capping units for cans. An additional capping turret can be configured into the housing for PET bottles. Depending on filler size, the turret can be set up to process three different caps (aluminium screw caps, crown corks and plastic caps) without changing the capping heads.

Key operating features

- The machine can be completely washed using water or foam.
- All containers are transferred into the rinser/filler/capper/seamer block via a low infeed, which means that the same depalletizer for glass and cans can be used.
- Both volumetric filling, and exchangeable or height-adjustable filling tube options are available.
- Full automation and user-friendly programming help to ensure precise filling for every bottle and can, which reduces product loss.
- Double air pre-evacuation for all formats helps to minimize oxygen pick-up and foaming during filling, for great product handling and better filling results.



Hygiene without question

Designed to ensure the highest level of hygiene at every step, the ALL-IN-ONE machine is constructed from stainless steel, and features sloped surfaces to reduce the risk of microbiological contamination. Cabling is retained inside of the machine housing, and there is no use of plastic pneumatic tubing, which further minimizes the contamination risk. The ALL-IN-ONE technology is also equipped with a bottle burst system for increased safety. CIP is enabled in every machine, automatic insertion of CIP dummy bottles and clean room housing are also options.

All-In-One at a glance

- Carry out rinsing, filling, capping and seaming of cans, glass and PET bottles using just one machine.
- Switch between bottle and can formats in just 20 – 30 minutes (depending on the filler size), without the use of tools.
- Process from 5,000 to 30,000 cans and/or bottles per hour.

RINSING

Smart options for saving resources



Before filling, all containers need to undergo rinsing to remove dust, dirt, and other potential contaminants. The rinsing nozzles on the ALL-IN-ONE ensure that every internal part of the container is reached, without wasting media. This increases efficiency as well as saving resources.

The rotary two-channel rinser is equipped with universal grippers for different can diameters, glass bottles and PET bottles, and is ideal for applications were two different rinsing media are used.

The system is compatible with a wide range of treatment media, including disinfectants, sterile water or sterile air. Bottles can be preheated in the rinser for hot-filling, which helps to reduce the likelihood of bottle breakage due to temperature differences, and improves filling results.

The ALL-IN-ONE machine can also be configured with an optional water recirculation system that collects the rinsing water and reuses it for the can/bottle shower in the machine's outfeed, and optionally also for cooling the vacuum pump. This reduces water consumption and wastage and can improve sustainability while reducing operating costs.

An optional mechanical or electrical "no bottle no spray" control function for the rinsing settings prevents nearby bottles from being sprayed. This saves on water, but also keeps neighboring bottles dry, which means there is less likelihood of problems downstream, for example, when applying self-adhesive labels.

Benefits

- Switching between containers requires only changes to the infeed screw and format parts but not to the grippers on rinser.
- Optional water recycling system means reduced water consumption and also less waste water.
- Compatible with a wide range of treatment media, including disinfectant, sterile water or sterile air.
- Versatile configuration options allow bottle preheating in the rinser, for hot fill applications.

FILLING

Smart, intuitive multi-tasking





The ALL-IN-ONE is available as stand-alone unit that can be integrated into an existing filling line. The system is ideal for filling a wide range of non-alcoholic and alcoholic beverages, including still and sparkling wines.

All containers, including cans, undergo double air pre-evacuation to help ensure minimal oxygen pick-up and minimal foaming during filling. Versatile filling valves can fill still, carbonated, alcoholic or non-alcoholic products into glass, can and PET containers. Only minimal changes to the setup are required when changing from one format to another or between different containers, which saves on time, reduces the likelihood of operator error, and so helps to keep lines working to design capacity. The most flexible configuration can fill a range of both hot and cold products, including hot juice, cold juice, carbonated products, or water.

Switching formats

Several recipes and product filling parameters can be preprogramed into the system's PLC. This makes changing formats fast and intuitive. Simply select a recipe on the touchscreen, and the machine will automatically adjust the rinser/filler/capper height. Changes to the infeed screw, stars, and outfeed screw can be made without tools, and once the cap and lid supply units have been emptied the system is ready to start filling the new products into the new containers.

Special options for the ALL-IN-ONE

- High grade ultra clean execution.
- Dedicated configurations for sensitive products (milk, yogurt, juices).
- Hot fill with product recirculation – for vegetable/fruit juices and smoothies.
- Configuration for diverse hot fill/cold fill applications
- Configurations with either servo-motor drives, or gear transmission systems are available.

CLOSING

Versatile configuration for capping and seaming

The ALL-IN-ONE features a fully automated capping system for precise alignment of different sizes of caps and lids. Highly flexible, the solution makes it possible to handle and cap various closure types on one turret, in different combinations. The capper is automatically turned to match the container and cap setup, and the combined capper/seamer automatically activates every second capping or seaming head when closing different closure types.

The basic ALL-IN-ONE model for lower capacities is designed to cap one type of lid and one type of crown cork on the same turret. For larger capacities another capping or seaming turret is added. The advanced model offers greater versatility and can deliver a wide range of lid types and closures from the lid/cap supply system to the capper/seamer. The simple lid supply system, introduced by GEA VIPOLL, can be upgraded to disinfect the lids, and there is also an option for disinfecting caps.

Helping to keep your production processes agile and responsive to changing market demands, a second turret can be added to accommodate additional closure types.





Beer
Beer, alcohol-free beer, specialty beer



Alcoholic beverages
Alcopops, cider, spirits, liquors, flavored alcoholic beverages, wine, sparkling wine and champagne



Soft drinks
Still or carbonated



Ready-to-drink teas
Brewed/extracted tea, kombucha, herbal/flower based tea, milk tea, iced tea and fruit infusions, tea concentrate



Juice
Fruit-flavored drinks, juice concentrates



Water
Still or carbonated

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