The present tendency of CSD products is to emerge as a healthier product, thereby reducing or eliminating the use of preservatives. In order to comply with the need of a cleaner filling process within a hygienic environment, GEA Procomac introduces the new range of counterpressure fillers Fillstar LXi.

Fillstar LXi, a volumetric type filler machine fitted with electronic filling valves, is suitable to fill carbonated and non-carbonated products into PET bottles. It is specifically designed to be coupled with the Airstar blow moulder to create the ONE bloc. Fillstar LXi machines offer:

- fast changeover;
- automatic CIP;
- accurate volume measurement to minimize product losses;
- small footprint;
- higher speed with a low number of valves and the highest flexibility to run bottles of different shapes.

The product tank can be either annular or central depending on the dimension of the machine. Each filling valve is equipped with a magnetic flow meter which measures the volume of product. Prior to filling, the bottle is raised by the lifting jack to get in contact with the filling nozzle. After the pressurization phase with carbon dioxide, the filling valve stem is opened in order to start filling.

The air return is performed with a dedicated separate channel. Even difficult foaming products – such as diet CSD - can be filled at temperatures close to ambient, with no loss of speed. This reduces the need for chilled water thus attaining savings in power consumption and costs.

The complete bottle “neck handling” system allows very quick changeover for any container with the same neck design. The CIP cups insertion and extraction for closed-loop internal cleaning is completely automatic.

Fillstar LXi provides excellent safety and hygiene for both still and carbonated liquids owing to its clean, hygienic design.
Fillstar LX is available in AERO (open machine with separated guards) and AERORING (micro-isolator in slight overpressure) version and in stand-alone configuration with or without rinser.

Fillstar LX series is equipped with GEMS

- An integrated system which, connected to the standard operator interface (SCADA), allows to identify and foresee plant maintenance intervention
- Taking into account the production hours and the number of Cleaning cycles, the system is able to focus on the needs for maintenance of each single component, proposing its replacement using simple reminder panels

Features

- Volumetric electronic filling head with magnetic flow meter
- Continuous flow control (via new hardware and customized software algorithm) during the filling phase to guarantee the highest filling accuracy
- Full pneumatic control of filling cycle
- Rotating product tank
- Bellow valves are used for pressurisation, separate air return, sniff
- Pipelined “sniff”
- All parts in contact with products are made in AISI 304 (AISI 316 available)
- Carousel drive: brushless motors with electronic synchronization
- Automatic CIP cups insertion and extraction for closed-loop CIP
- N. of valves: from 50 to 160

Advantages

- Complete neck handling system: any container with the same neck finish can be filled with fast changeover
- Product measurement with magnetic flow meters: product losses are minimized; can adapt to container with variations in shape without mechanical intervention
- Pneumatic valves: filling cycle can be optimised for any product/container combination to obtain best filling performance or smallest footprint for the required speed
- Easy tuning of filling cycle: difficult foaming products i.e. diet CSD can be filled at ambient temperature with no loss of speed: cost reduction (no product chilling)
- Clean design: filler is easy to clean and “hygienically correct”
- Easy access: the machine’s design allows an easy access to all the components for maintenance purposes