FILLING OF CARBONATED DRINKS INTO GLASS AND PET BOTTLES

FILLING METHOD
- volume filling with a flowmeter

FILLING OPTIONS
- mineral water
- still water
- soft drinks
- sparkling wine
- carbonated and non-carbonated liquids
- filling to PET or glass bottles

BASIC PRINCIPLE OF FILLING
- after pressurising the bottle, the drink flows through a tube into the valve which is equipped with an inductive flowmeter that scans the flow of liquid and transmits impulses to the valve’s control system
- after recording the relevant quantity of impulses (volume), the flow meter closes the filling valve
- the liquid pours into the bottle along the walls and while the bottle is being filled, the air is removed outside of the tank space

PRINCIPLE AND PARAMETERS
- speed performance about 15-20% greater than with the mechanical volume valve
- minimum residue of the beverage after the end of the operation
- the outflow of the air from the bottle during filling is directed to another area outside the tank
- no adjustment of the valve is required when changing the size of bottle or the volume to be filled
- the filling process is controlled from the control system of the filling machine and therefore is not dependent on the current performance of the filling machine or affected by the stopping of the machine
- possibility of automatic employment of sanitation adapters
- better sanitation of the filling valve, in comparison with the mechanical volume valve (simpler mechanical design) - the design of the fluid valve cone and the valves for evacuation, pressurisation and release of pressure, using bellows and membrane seal

FILLING OF THE SENSITIVE BEVERAGES
- for filling of sensitive beverages the filler can be supplied with a casing and air filtration

SPHERICAL TANK WITH A CIRCULAR CROSS-SECTION
- cylindrical design of the tank
- utilisation of admission nozzles accelerates and improves the sanitation of the filler
- at the end of filling there remains only a minimal residue of the beverage

THE SIEMENS SIMATIC CONTROL SYSTEM
- colour touch screen 10” terminal
- signalling of status of individual machine’s functioning and malfunctioning (code number and description of failure) on the terminal
- output and archiving of data for the monitoring and visualisation system
- remote administration and servicing through a telephone connection or via the internet

EXAMPLE OF SOLUTION
- PET PACK Kft., Hungary
- PETBLOK 48/80/10