

# A COMPREHENSIVE RANGE OF ADVANCED PATENTED TECHNOLOGIES FOR HIGH QUALITY FILLING & CAPPING

MONOBLOCKS/ MULTIBLOCK MACHINES 6 to 90 VALVES FILLING SPEEDS FROM 800 TO 20,000 BPH



INNOVATION THAT PRESERVES THE ORGANOLEPTIC & PHYSICAL CHARACTERISTICS OF PRODUCTS TO BE BOTTLED ELVIRA LP STILL WINE ISOBARIC (SPARKING & STILL) VOLUMETRIC (High Viscosity & difficult foaming products) HOT FILLING for sensitive pulpy fibrous products MULTIPLE CLOSURE SYSTEMS PATENTED CIP WASHING & RECYCLING without FALSE BOTTLES



Self- levelling filling heads
Zero oxygen Pick-up
Patented Double Deox eliminating 99 % air before filling
Innovative pre-evacuation of air from bottles (Deox) Eliminating any dissolved oxygen in the bottle.
Patented Antiox & Deox advanced System®
No bottle No fill System
Compact design
High functionality Easy Operation
Adjustable filling turrets
Easy adjustment for different size bottles
Minimizing microbiological growth
90 degree or Linear Machine configuration *CUSTOM MADE TO YOUR SPECIFICATION*

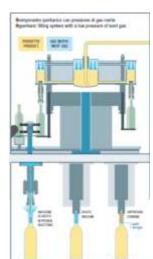


## ANTIOX DEOX PATENTED SYSTEMS





ALFATEK ROTARY TURRETT PRE- EVACUATES 99% OF AIR FROM BOTTLE WHILE SIMULTANEOUSLY INJECTING INERT GASES AT LOW PRESSURE



Antiox (®) designed for bottling high quality products. Applied to the delicate filling phase it provides adequate protection of the product preventing the introduction of oxygen and preserving unaltered fragrances, aromas and dissolved gases.

**Deox**® technology works before the filling tank, through a Rotary turret positioned above the filler to pre-evacuate air from the bottle up to 99% of the volume while simultaneously injecting inert gases at low pressure.



In addition the system integrates an inert gas injection device immediately before the capping. In the product bottled it is possible to obtain zero-zero oxygen uptake.

The worktop can be completely wrapped in a stainless steel structured sterile chamber and transparent Lexan panels.

# MONOBLOCK L.P ELVIRA SERIES

**LP ELVIRA & ELVIRA ANTIOX** - Designed for filling high quality products.

It represents the most advanced technology level achieved By Alfatek.

Maximum precision filling levels with

patented self-levelling filling valves avoiding the use of a vacuum filling systems.

The light pressure in the filler's bowl avoids loss of flavours, aromas and dissolved gasses in quality products.

Zero oxygen pick up for products which are sensitive to Oxidation thanks to the light pressure filling system and the innovative pre-evacuation technology (Deox®).



The rotary Turret Deox system uses a high vacuum pump for removing air from the bottles followed by an injection device for flooding the bottle with inert gas.

Cleaning and sterilization system under pressure for total sanitization. State-of-the-art solutions for automation programming & quality controls.



# **MULTI CLOSURE SYSTEMS**

- Crown or Aluminium Caps
- Natural, straight, plastic or Mushroom Cork
- Plastic screw cap
- ✤ Aluminium Screw Cap
- Stelvin & Stelvin Lux Foil
- Pre Threated Sport Plastic Caps/Pet
- Pressure Fit Pet
- Plastic Insert (Bidule)
- Long/Short Skirt Ropp Aluminium Caps
- T Caps/ Glass
- Can Caps / Pressure Cover for Can
- Pre-threaded irregular Caps





- 1. MULTI HEAD CORKING SYSTEM (1)
- 2. SINGLE HEADED SCREW CAP SYSTEM (2)
- 3. MULIPLE HEAD SCREW CAP SYSTEM (3)
- 4. SINGLE-HEADED CAPPER WITH PICK & PLACE SYSTEM FOR PRETHREADED SCREW CAPS (4).



IMPIANTI DI IMBOTTIGLIAMENTO BOTTLING PLANTS



# **PATENTED VALVES**

# LP FILLING VALVES FOR STILL PRODUCT

The self-levelling filling valves by Alfatek are the most **INNOVATIVE** feature in the LP Filler. Filling through inert gas, creates a precise and constant fill levels without any need to create a vacuum in the filling tank. Pipes placed outside the valves evacuate the air from the bottle avoiding microbiological pollution and contact between oxygen. The absence of air return pipes inside the tank facilitates the washing and sterilizing operations.

Automatic continuous adjustment of the filling levels during production (exact weight system).

#### **ISOBARIC VALVES (COUNTER PRESSURE)**

Closure, self-levelling and degas are controlled by a single rotating system, free of sliding seats requiring frequent adjustments, eliminating all timing adjustments even when complete dismantling of the valve to simplify maintenance work. Sanitizing and sterilizing is performed simultaneously on all valves while machine is stationary. Isobaric valve is covered by an international patent.





### ELECTRONIC ISOBARIC FILL VALVES

Combined level filling in glass and PET or PVC bottles designed for high density liquids. Degas phase driven by a pneumatic valve controlled by a PLC which can be optimised accordingly to the product in the tank. The degas times can be adjusted to meet the content of carbon dioxide



#### **VOLUMETRIC FILLING VALVES**

The plunger works in a stainless steel cylinder with static sealing (plunger piston), predetermining the volume.

A modulating valve allows the closure of the intake during filling of the container.

Variable product flow by slowing or increasing the fill rate at will - depending on the type of container.

Avoids air into the cylinder & greater precision



# WORKING PHASES OF THE VALVE

Innovative Rotary block located in lower part of the valve control pressure compensation, self-levelling and degassing.

**Advantages** - Filling valve is opened by the pressure of the bottleneck against the mouth-seal of the valve, this systems allows the safest

#### **NO BOTTLE- NO FILL SYSTEM**

Bottles with different heights can easily be adjusted. Quick Degassing times.

Valves can be manually opened to allow CIP washing and steaming with the machine stopped and without dummy bottles.

During washing operations the self-levelling and degassing circuits are fully opened allowing perfect sterilisation.

### LOW PRESSURE FILLING INERT GAS





#### STILL or LIGHTLY CARBONATED PRODUCTS

Constant pressure of inert gas aimed at carrying out important protection actions

- ◆ PREVENTS MICROBIOLOGICAL POLLUTION & OXIDATION.
- ✤ AVOIDS DISPERSION OF VOLATILE COMPONENTS
- ✤ PRESERVES AROMAS, PERFUMES & ORGANOLEPTIC QUALITITES
- ✤ PRECISE & REPETITIVE LEVELS EVERY TIME.
- ✤ VALVES ARE SELF-LEVELLING & ALLOW MANUAL ADJUSTMENT

Machines can be equipped with a device that allows to manage from the control panel the simultaneous variation of the levels on all the valves ( $0 \div 80$  mm), or with the pre-set programming via PLC;

#### **RING SHAPED FILLING TANK**





REDUCES FOAMING

**REDUCED CLEANING** 

HIGHLY POLISHED

PREVENTS CONTAMINA-TION



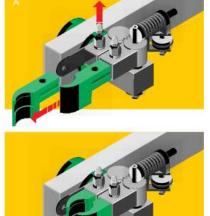
IMPIANTI DI IMBOTTIGLIAMENTO BOTTLING PLANTS

## RINSING





MAXIMISED RINSING & DRAINING
SOLID CONSTRUCTION
AISI STAINLESS 316
EASILY REMOVABLE PINCHERS
RAPID BOTTLE INVERSION



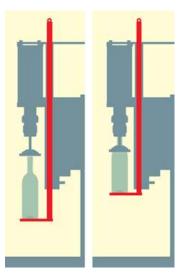
PINCHERS end of pinchers made with anti-slip material.SHAPE GUARANTEES a secure grip on all different bottle Profiles.EXTRACTION Easily released, coupling pins for exchange formats.

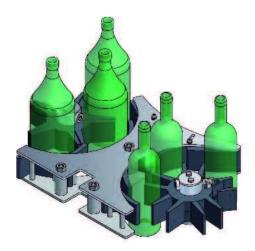
## **BOTTLE LIFTS**

Bottle lifts on all fillers are located above and outside the product spillage areas. This design is convenient as the machine base-plate can be properly

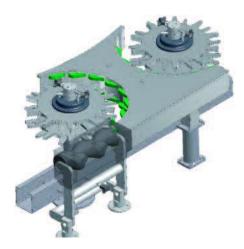
cleaned without the risk of water entering the pistons and causing mechanical damage as well as micro biological pollution inside the machine.

The bottle lift operation is completely mechanical thanks to a spring load system with the lowering done by cam. Each strong spring is submerged in a grease bath. The system does not require any maintenance through the years or any lubrication.





Adustable bottle parts with universal centre guide



Adjustable bottle parts with Inter-changeable centre guide



IMPIANTI DI IMBOTTIGLIAMENTO BOTTLING PLANTS

# **GENERAL DESIGN SPECIFICATIONS**



All Alfatek machines are mounted on high adjustable legs to allow easy cleaning underneath. The entire stainless steel framework has mirror like polished surfaces.

The doors can be supplied in tempered glass instead of LEXAN materials.

This design helps to prevent contamination allowing easy and effective cleaning













# CUSTOM MADE TO YOUR SPECIFICATION ANY CONFIGURATION















