

# K-Line S

## Automatic filling machine

Automatic filler - Type of filling: Piston, flowmeter pump or peristaltic pump. Minimum dosage: 50 ml and maximum dosage: 20 L (depending on configuration and options chosen).



### The K-Line S is an automatic filling machine equipped with :

- A chassis with side closing glass doors.
- A motorised stainless steel conveyor of 3000 mm length for a 1500 chassis (For a 1000 chassis, 2500mm conveyor; For the 2000 chassis, 3500mm conveyor)
- The machine has been designed to accommodate 2, 4 or 6 dosing nozzles.
- Standard conveyor width 82.6mm.
- Neck centring devices for correct positioning of the bottle under the filling spout.
- Drip catcher.
- The height of the dosing spouts can be adjusted to suit different containers.
- A tray and spouts for collecting liquids under the conveyor.
- A jamming cell at the exit of the machine.
- A touch screen for easy operation with a product counter.

## Available options

- A system to feed the containers (cylindrical table, rectangular table, parallel transfer, additional straight or curved conveyors, transfer plate).
- A conveyor chain width is 114mm or 190mm.
- A 49 L or 120 L pressurized tank.
- Mass flow meter(s) or electromagnetic flow meter(s).
- A centrifugal, volumetric pump with flexible impeller, pneumatic or progressive cavity pump.
- A piston (different dosing devices possible).
- Additional dosing nozzles (short, standard, swivel...).
- One VS400 capping machine.
- A VS500 capper.
- A crimping machine.
- A crimping station.
- An induction sealing machine.
- An accumulation system to receive containers (cylindrical table, rectangular table, additional straight or curved conveyors).

## Limits of the K Line S:

- Dosing volumes of less than 50ml and more than 20L. (in pump / flow meter circuit)

*Before placing an order, we can carry out tests free of charge to ensure the feasibility of your project. Do not hesitate to contact us!*

## Technical characteristics K-Line S

APPROXIMATE MASS (KG)	500 kg (depending option)
DIMENSIONS (WITH FRAME)	1150 mm in width 2200mm in height 2950mm in height (K-LINE with tank option) 2100 mm of depth for the K-LINE S 1500
POWER CONSUMPTION	1 kW
SUPPLY VOLTAGE	380V Triphasée 5 fils 50Hz
FREQUENCY	~ 50 Hz 16 A
CONTROL	by tactile screen
IDEAL OPERATING TEMPERATURE	from 50°F to 90°F (10°C to 30°C)

**Please note that this machine requires an electrical and pneumatic power supply**

## Technical focus n°1

### *PNEUMATIC / ELECTRICAL CONNECTION*

Pneumatic connection: 1 air connection on pressure gauge - Under 6 bars constant (Hose to be provided  $\varnothing$  Int/Ext = 8/10 mm).

Electrical connection: 1 Cable 220 volts - length 6 metres - Domestic socket.

## Technical Focus n°2

### *TACTILE SCREEN*

The colour touch screen allows easy adjustment of several parameters such as:

General filling settings (pump speed, timers, etc.).

The cleaning cycle with the tank option.

Daily product counter.

## Technical Focus n°3

### *FLOWMETERING*

Flowmeter metering is generally used for free-flowing to slightly thick products without lumps in suspension. It is carried out by the action of a rotary pump, a flow meter and a dosing head. The mass flowmeter is compatible with all types of product and allows dosing by mass, while the electromagnetic flowmeter is only compatible with conductive products and allows dosing by volume.

## Technical Focus n°4

### *PISTON DOSING*

Piston dosing is generally used for packaging liquid to dense products or with pieces in suspension.

By means of a suction system, the product is introduced into the dosing chamber of the piston. When the predefined quantity is reached, the piston pushes the product towards the valve and then towards the dosing head. In some cases, the piston can be equipped with a hopper to facilitate the suction of the piston. The speed of the piston movement is adjusted by means of regulators. The piston cycle consists of dispensing and then suctioning while waiting for the next dose.

## Technical Focus n°5

### *PRESSURIZED VESSEL*

- Cylindrical tank with curved bottom for easy emptying and cleaning.
- Tank pressurisation system managed by the PLC (0 to 1 bar) - safety valve.
- Constant level management in the tank - level detection.
- Cleaning ball on lid.
- Total emptying valve.
- Pilot controlled levelling valve for level detector.

## Technical Focus n°6

### *VS400*

VS400 screwing station including:

- A product detection and stopping device for manual cap application with a cap presence control cell.
- A product detection and stopping device by symmetrical bottle centring under the screwing head.
- Screwing machine with electric height adjustment equipped with a screwing head for one cap format.

## Technical Focus n°7

### VS500

VS500 screwing station including:

- A jar holding and stopping device for manual capping with a cap presence control cell
- A jar holding and stopping device by symmetrical bottle centering under the screwing head.
- Screwing of the pump/caps with two belts (lateral movement of the belts).
- Tightening torque and screwing height adjustment.

## Technical Focus n°8

### ENFONCEUR

Sinking station including:

- A bottle detection and stopping device for manual cap placement.
- Cap presence control cell.
- A device for holding and stopping the jars by symmetrical centring of the bottles under the screwing head.
- A height-adjustable pneumatic cylinder to push the cap onto the neck of the bottle.

## Technical Focus n°9

### CRIMPING

Crimping station including:

- Pneumatically guided bottle clamping system with product-specific cylinder head.
- Crimping system on electrically height adjustable double guide.
- Crimping unit mounted on pneumatic cylinder.
- Crimping head adapted to the geometry of your cap (diameter, height, etc.).
- Crimping station can be dismantled.

## Technical Focus n°10

### HEAT SEALER

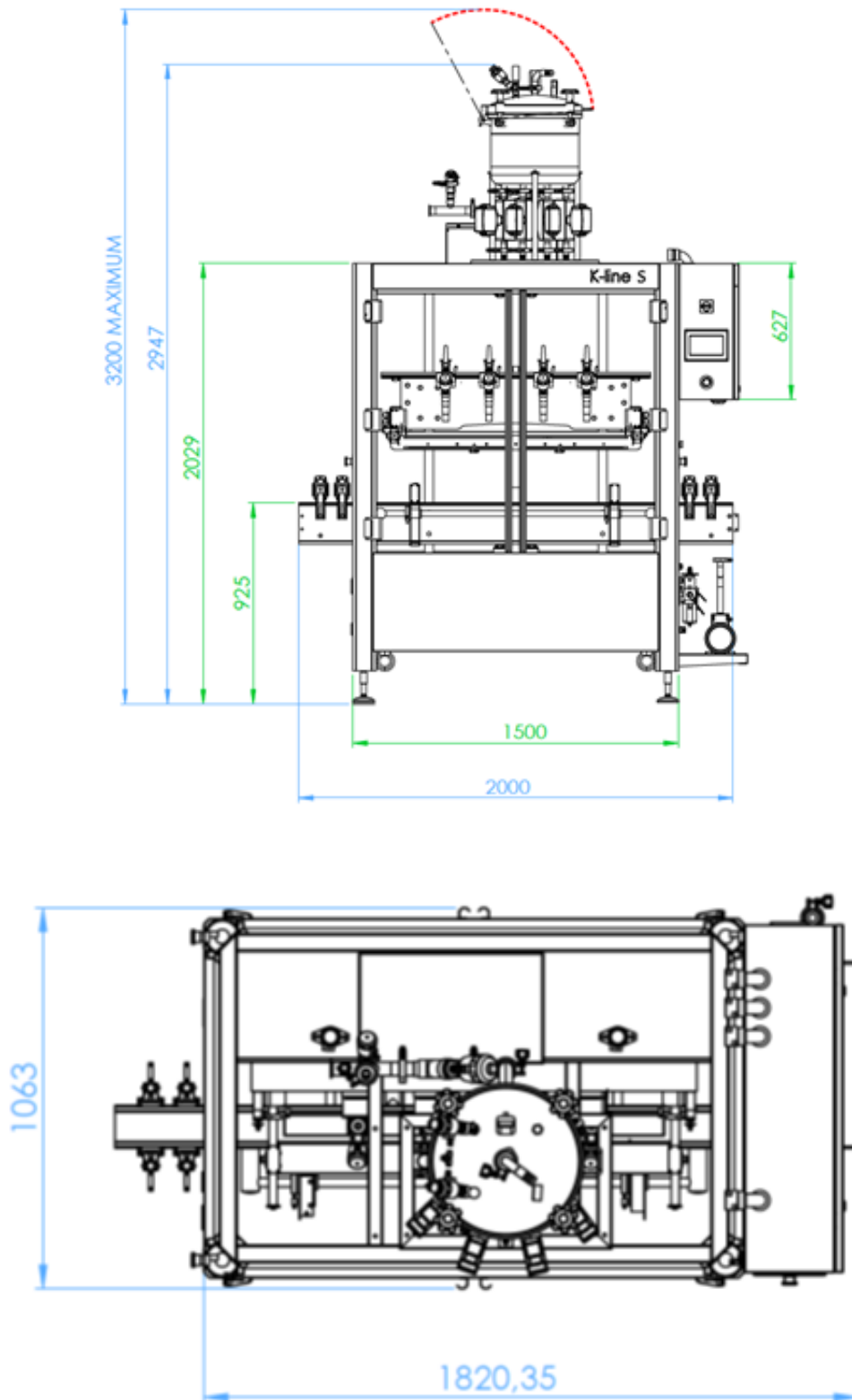
Heat sealing station comprising:

- A 3.6 kW induction heat sealing generator.
- A universal inductor (for sealing flat caps).
- A height adjustable mobile jib.

## Technical Focus n°11

### RECEPTION TABLE

The reception table is installed at the machine exit to collect the labelled bottles. The 700 mm diameter table can receive up to 60 bottles. The reception table allows the operator to save considerable time.



*Pictures, production rates and technical descriptions for information.*