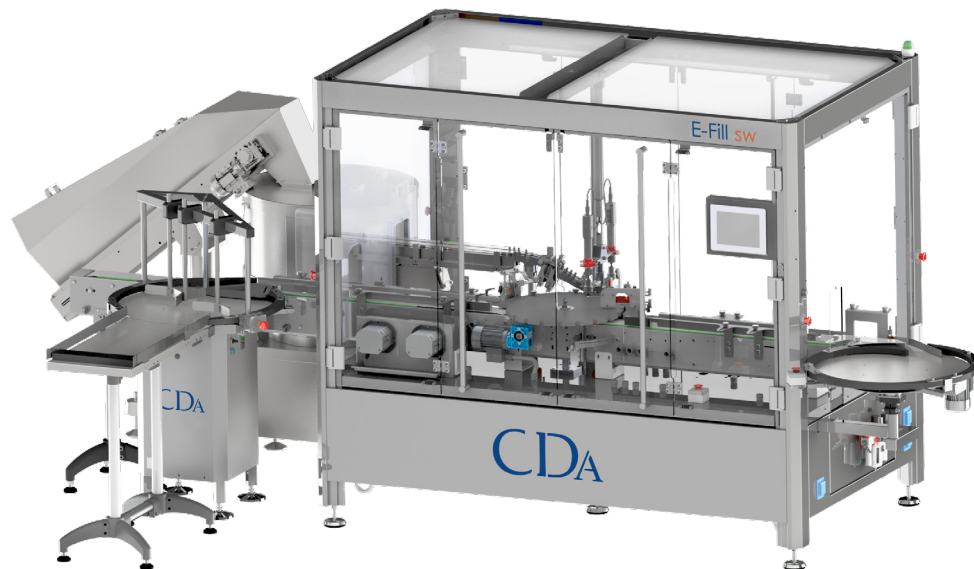


E-Fill SW Dropper

Automatic filling, screwing and labelling machine

Filling, screwing and labelling machine for cylindrical bottles with a pipette cap.



The E-Fill SW Dropper is equipped with :

- 304 stainless steel welded frame on feet.
- 304 stainless steel conveyor with 82.5 mm ACETAL chain.
- Induction motors on variable speed drives.
- 304 stainless steel watertight electrical box.
- Intuitive colour touch screen with memory for recipes and self-diagnostics.
- Timing star for successive filling and capping.
- Automatic distribution of caps.
- Checks for presence of reducer in cap.
- Non-compliant cap ejection system (if reducer missing).
- 1 Pick and place automatic dispensing and screwing station
- 1 labelling station for cylindrical products.
- A Ø700 mm rotary table for receiving products.
- Plexiglas cover over the top of the frame.

Available options

- A container feed system (TRI, vial unscrambler or high-capacity vial unscrambler).
- A mass flow meter or electromagnetic flow meter.
- A centrifugal, positive displacement pump with flexible impeller or eccentric screw.
- A peristaltic pump.
- A piston (different dosing devices possible).
- An additional dosing nozzle (short, standard, swivel, etc.).
- VS400 screw capping station.
- A VS500 screw capping station.
- A VS600 screw capping station.
- A cap pushing station.
- A crimping station.
- A cylindrical crimping station
- A container receiving system (cylindrical table, rectangular table, transfer plate).

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 E Fill SW Dropper

APPROXIMATE MASS (LBS)	1000 kg (depending option)
DIMENSIONS (WITH FRAME)	2000 mm in width 2100 mm in height 5000 mm of depth
POWER CONSUMPTION	5 kW
POWER SUPPLY	220V Single phase 50Hz
FREQUENCY	~ 50 Hz 16 A
CONTROL	Touch screen
IDEAL OPERATING TEMPERATURE	from 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 220-230 volts single phase - length 6m - domestic plug.

Technical focus n°2

DIGITAL DISPLAY

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

- The selection of the station and the options.
- Setting of time delays (label output, spacing).
- Daily product counter.

Technical Focus n°3

RECOLLECTION TABLE

- Recollection table \varnothing 700mm (at machine exit)
- Output transfer belts
- Output module for marking underneath bottles (printing system not supplied)

Technical Focus n°4

PERISTALTIC PUMP

- Dosing from 0.5 ml to 1 litre with an accuracy of \pm 0.5%.
- Keyboard and LCD screen control.
- Anodised aluminium pump head with 12 offset 304 stainless steel rollers mounted on ball bearings.
- Tools for use with silicone tubes \varnothing 0.5 - 0.8 - 1.2 - 1.6 - 3.2 - 4.8 - 6.0 - 8.0 mm.
- Supplied with 1 x \varnothing 4.5mm dosing needle with 2.1 certificate, 2 x 600mm 316L stainless steel suction nozzles and 30 metres of hose per pump head.
- Correction, re-suction, speed and acceleration control functions.

Focus technique n°5

FLOWMETER DOSING

Flowmeter dosing is generally used for fluid to slightly thick products without lumps in suspension. Flowmeter dosing is carried out by the action of a rotary pump, a flowmeter and a dosing head (which can be of several configurations). The mass flowmeter is compatible with all types of product, while the electromagnetic flowmeter is only compatible with conductive products.

Focus technique n°6

PISTON DOSING

Piston dosing is generally used for packaging liquid to dense products or products in suspension. Using a suction system, the product is introduced into the dosing chamber of the piston. When the magnetic sensors detect that the pre-set quantity has been reached, the piston pushes the product towards the valve and then towards the dosing head. In some cases, the piston can be fitted with a hopper to facilitate suction. Regulators are used to adjust the speed at which the piston moves. The piston cycle consists of dispensing, then suction until the next dose is dispensed.

Technical Focus n°8

CAP DISPENSER

- 1 automatic cap lifter to feed the orientation bowl.
- 1 single-format automatic orientation bowl.
- 1 automatic dispensing ramp for screw caps, comprising :
 - A reducer presence control system.
 - A Pick and Place for the stopper.
 - Bottles blocked under the Pick and Place.

Technical Focus n°9

VS400

VS400 screwing station including:

- A product detection and stopping device for manual capping with a cap presence control sensor.
- A product detection and stopping device under the screwing head, with a pneumatic cylinder with a V-shaped end and an anti-rotation plate.
- Electric height adjustment.
- A pressure-start screwdriver, torque range: 1 Nm to 4.41 Nm.
- One screwing head, for one cap format.

Technical Focus n°10

VS600

VS600 screwing station including:

- Screwdriving system with height-adjustable double guide.
- Screwdriver with brushless motor.
- Tightening torque adjustable from the touch screen (0.7 to 3Nm).
- Screwdriving pliers with 3 fingers.
- Screwdriving unit mounted on electric actuator.
- Screwdriver finger tooling machined to match the geometry of your cap (diameter, height, type of grooves, etc.).

Technical Focus n°11

PICK AND PLACE

- Bottle locking system using a guided pneumatic cylinder with a cylinder head adapted to the product and an anti-rotation device.
- Screwing system with motorised axis for rotation and height translation, equipped with two screwdrivers.
- Brushless positioning can be set from the touch screen.
- Low-voltage electric screwdriver (320 rpm) with toolless adjustable screwdriving torque (1 Nm to 4.41 Nm).
- Screwdriving unit mounted on a pneumatic cylinder.
- Screwing head machined to match the geometry of your cap (diameter, height, type of grooves, etc.).

Focus technique n°12

CAP PUSHING STATION

Cap pusher station including:

- A bottle detection and stop device for manual capping.
- Cap presence control unit.
- A bottle detection and stopping device under the driving head, with pneumatic actuator and centring V.
- A height-adjustable pneumatic cylinder to press the cap onto the neck of the bottle.

Technical Focus n°13

CRIMPING

Crimping station including:

- Bottle locking system using a guided pneumatic cylinder with a cylinder head adapted to the product
- Crimping system on electrically height-adjustable double guide
- Crimping assembly mounted on pneumatic cylinder
- Crimping head adapted to the geometry of your cap (diameter, height, etc.)
- Crimping station can be dismantled

Technical Focus n°14

LABELLING STATION

3-POINT TECHNOLOGY :

The 3-point technology positively grips the bottle between 3 rollers as it rotates, ensuring better application and smoothing of the label on the body of the bottle, limiting bubbles, creases and other deviations.

TECHNICAL DESCRIPTION :

- Rotary labelling stations mounted on electric columns that can be controlled from the touch screen and fitted with asynchronous motors on frequency inverters.
- Adapter mandrel for label rolls from $\varnothing 40$ to $\varnothing 76$ mm.
- Industrial product cladding system with interchangeable guided pneumatic cylinder. Rolls adapted to the material, shape and rigidity of the product to be labelled.
- $\varnothing 61$ mm smoothing roller adapted to the product.
- Different time delays can be memorised and recalled from the touchscreen, depending on the desired finish.
- Detection of transparent labels by ultrasonic gap sensor (optional).
- Automatic height recall (optional).

WINDING DIRECTION: OUTSIDE LEFT

Coil dimensions:

- a : max. chuck diameter = 76 mm
- b : max. coil diameter = 260 mm
- c : max. labelling height = 190 mm (290 mm en option)
- d : label gap = 3-5 mm

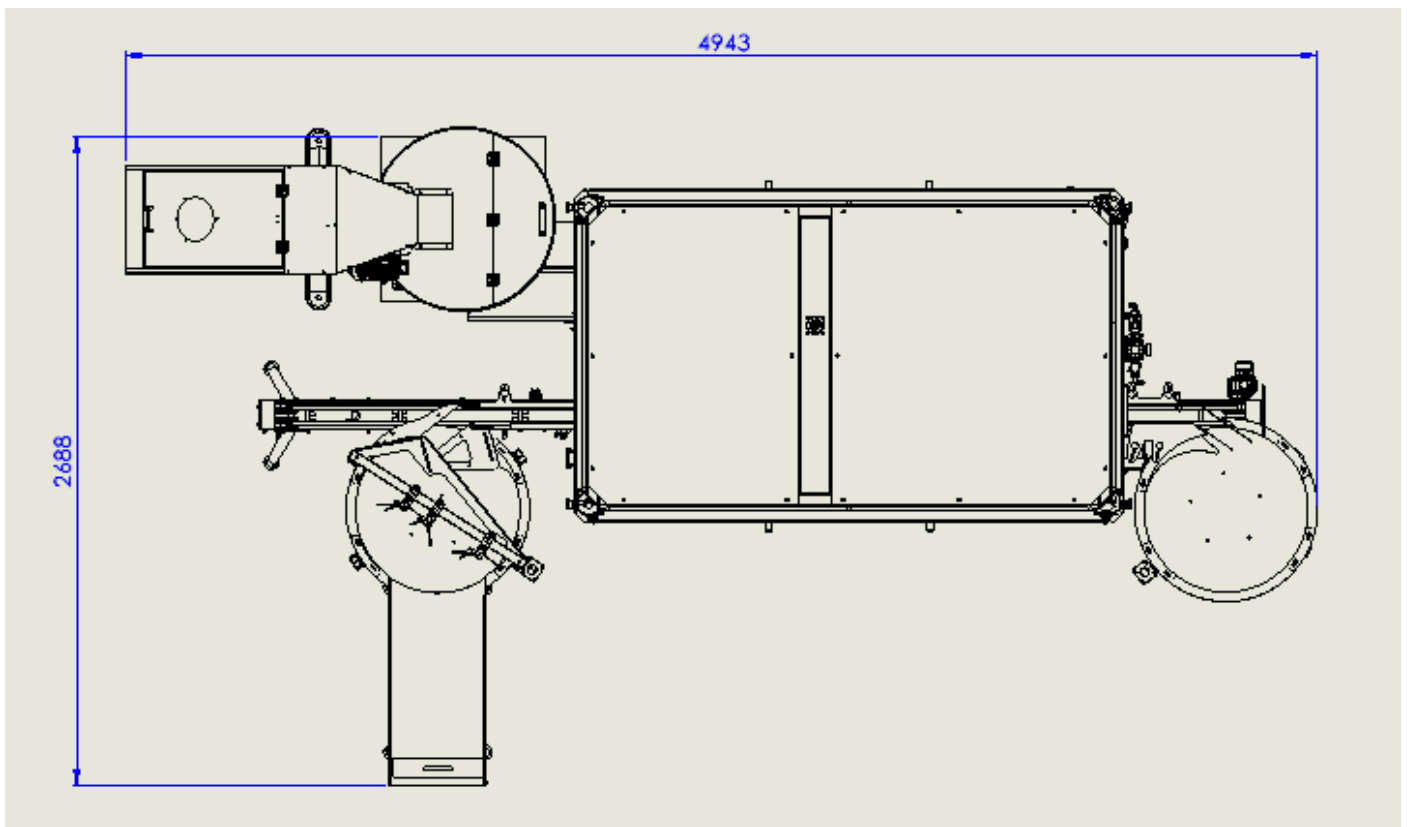
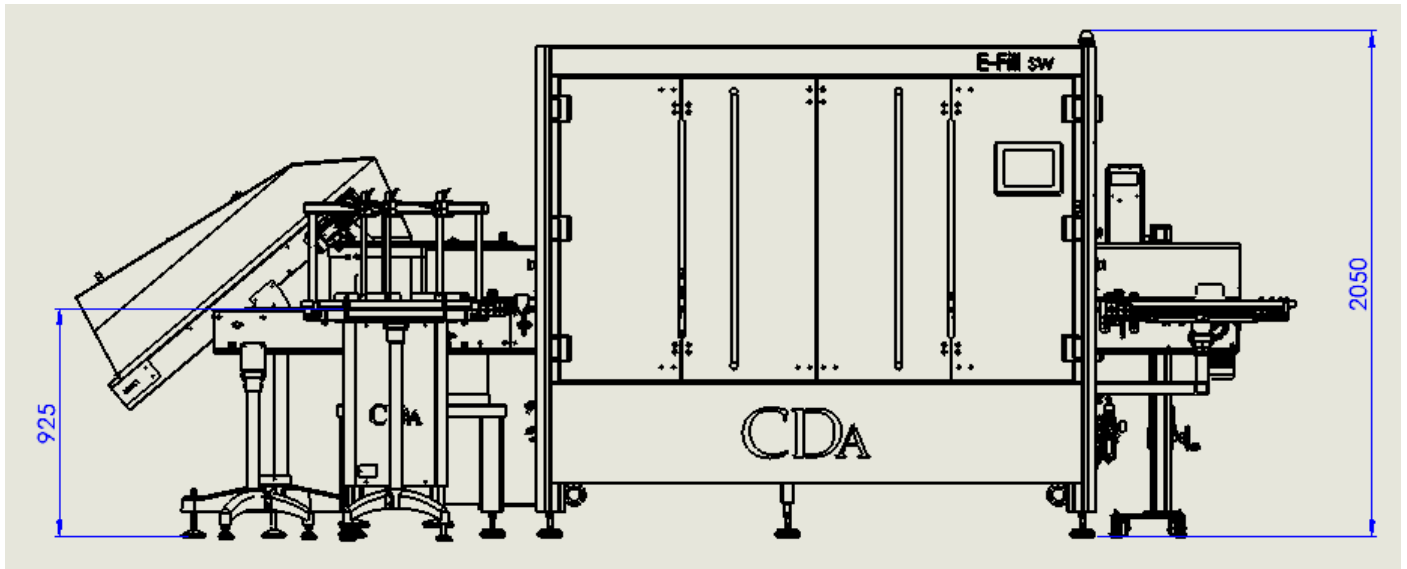
Minimum quality of the tape used : 90 g

Important : Label reels should be stored in a dry place between 15°C and 18°C

Technical Focus n°15

RECOLLECTION TABLE

The recollection table is installed at the machine exit to collect the labelled bottles. The 700 mm diameter table can receive up to 60 bottles. The receiving table saves the operator a considerable amount of time.



Pictures, production rates and technical descriptions for information