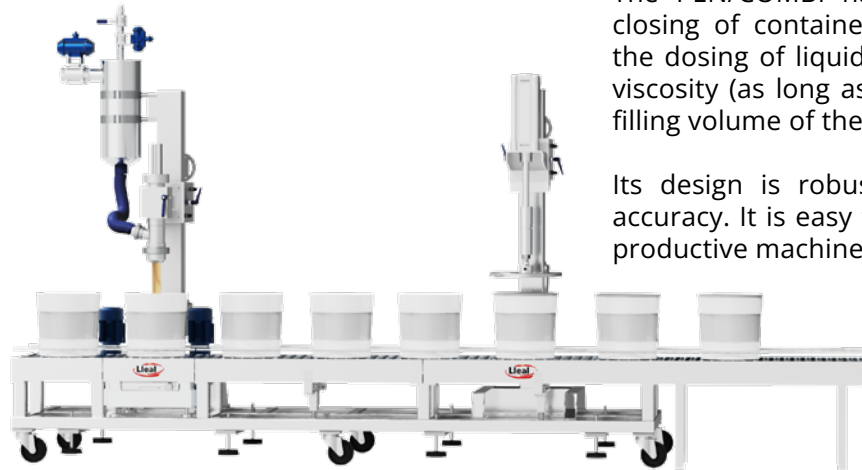


PEN/COMBI gravimetric packaging machine

general features

The PEN/COMBI has been designed for packaging and closing of containers in a single unit. It is prepared for the dosing of liquid or pasty products of medium or high viscosity (as long as they can be pumped), controlling the filling volume of the containers through a platform scale.

Its design is robust, with high throughput and dosing accuracy. It is easy to handle and clean, making it a highly productive machine.

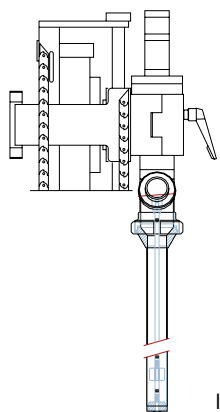


We offer two models based on the installed dosing head:

- » **PEN-30/COMBI:** dosing from 3 to 30 kg.
- » **PEN-60/COMBI:** dosing from 5 to 60 Kg.

FILLING STATION

- » Equipped with a platform scale with a tray to collect possible product spills, and a roller conveyor, which can be gravitational or motorized, depending on the automation needs of the equipment.
- » To adapt to different container formats, the platform has a height adjustment system.
- » The dosing head is easily removable so as to facilitate cleaning and exchanging different types of nozzles.
- » The nozzle can be fixed or mobile by means of a pneumatic piston and has three opening positions: closed, fully open and half-open, depending on the proximity to the pre-set weight.



Immersion nozzle

» According to the type of product, three different types of nozzles can be installed:

- **Immersion nozzle** for foaming products. The nozzle is inserted into the container until it reaches a few millimetres from the bottom, starts dosing, and once it is partially covered, the head lifts slowly, without exceeding the liquid level until reaching the preselected amount of product.

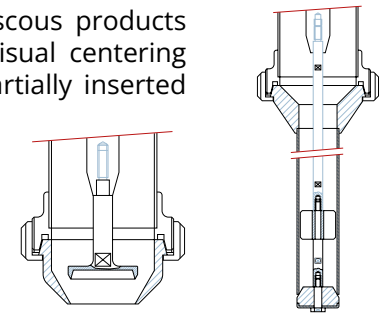


PEN-60/COMBI packaging machine with automatic lid feeding and pressure closing system for plastic containers. Compact equipment with protective casing.



- **Retractable nozzle** designed for dosing non-foaming liquid or viscous products into narrow-mouthed containers. This nozzle has a cannula and a visual centering mechanism. Once it is positioned, the cannula descends until it is partially inserted inside the container, doses the product, closes the valve, and returns to its initial position.

- **Wide-mouthed nozzle** suitable for high and medium viscosity pasty products. This nozzle doses in a fixed position and is equipped with a non-drip plug closure.



Wide-mouthed nozzle

Retractable nozzle

CLOSING STATION

- » Two types of locking modules can be installed, which can be used for wide-mouthed containers: a **metal disc** with different contours, according to the type of lid, for pressure closure of plastic containers or a **pail lid crimping device** for metal containers.
- » Upon request, for packaging in tins or jars, the equipment may be fitted with a pneumatically operated screw capper head.
- » Lids feeding can be manual or automatic. Optionally, a lid dispenser can be supplied. It comprises a stacking column and a robotic arm, equipped with a suction cup, prepared for working with lids of different diameters.

PRODUCT FEED SYSTEM

For product feeding to the packaging machine, we can provide different types of feeding pumps: positive displacement ones of Salomon type, with Archimedes screw for high viscosity products or pneumatic pumps of Depa type, suitable for less viscous products.

CONTROL PANEL

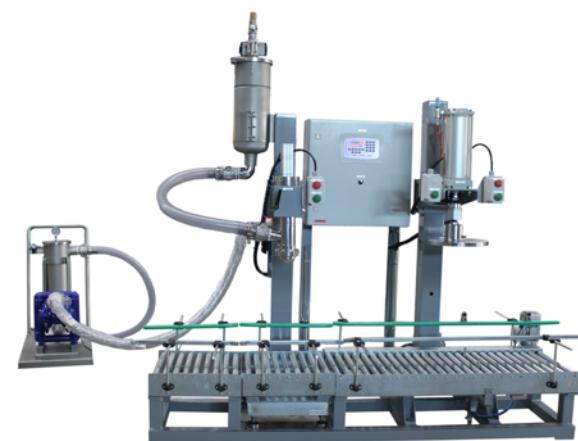
A control panel is available for handling the equipment, with touchscreen for synchronizing the operation of the dosing head with the scale and the closing station.



Pail lid crimping device and metal disc for pressure closure

ROLLER CONVEYOR

In order to optimize the operation of the packaging machine, additional roller conveyors (gravitational or motorized) can be supplied at the infeed and outfeed of the weigher, acting as pallet accumulators before and after the filling cycle. Under these conditions, the installation can achieve higher throughput.



PEN-30/COMBI gravimetric packaging machine fed by DEPA pump