



ROTARY PISTON FILLING MACHINE - PF - R

The machine is suitable for glass/tinplate/plastic container volumetric filling with pasty-like products, more or less dense, containing also ingredients in small pieces (tomato sauce, sauces, gravy, pesto, mousse, pâtés, creams, honey, compote, jams, smoothies/fruit nectars, etc.).



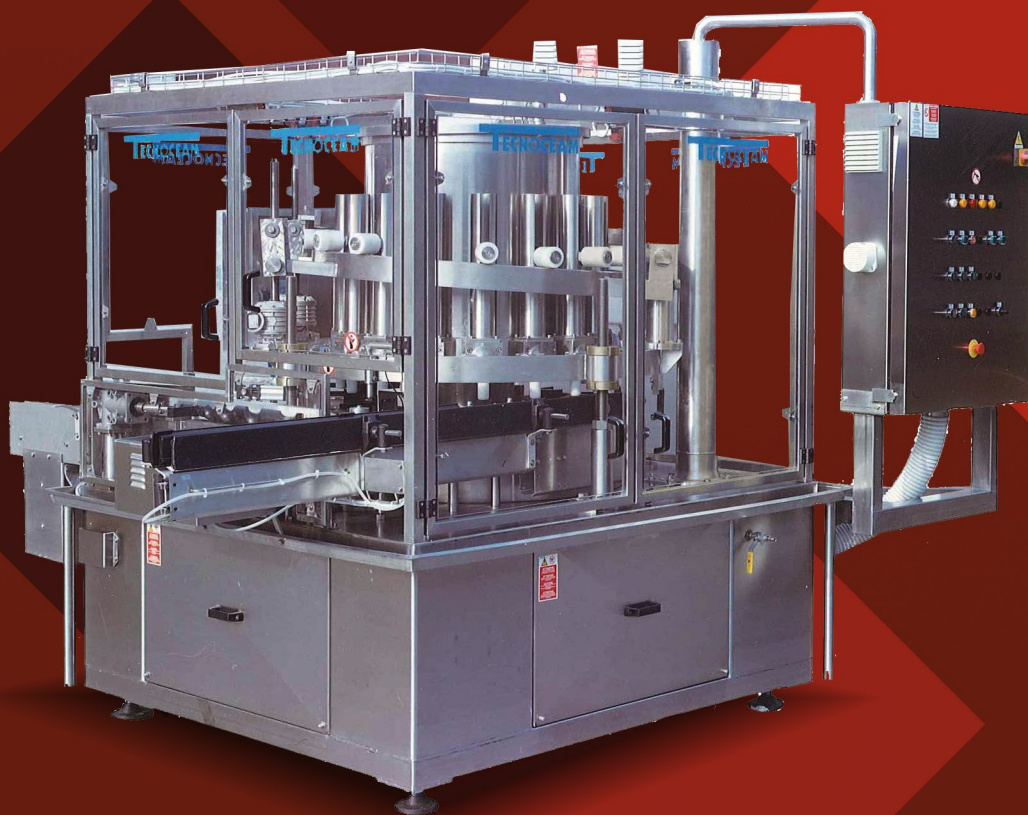
TECHNICAL SPECIFICATIONS

Pistons number: from 4 to 16

Approximate production range:
(variable according to filling piston number, product type, container volume and process settings)

2,400 – 9,600 containers/hr 300 ml

Filling volume: up to 700 ml



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MANUFACTURING CHARACTERISTICS:

The machine, completely made of stainless steel, consists of the following essential parts:



- A robust frame to support all machine components equipped with height-adjustable feet;
- Container feeding and extraction conveyor;
- Variable pitch polyzene auger for container synchronisation with infeed star wheel;
- Container infeed star wheel;
- "No can no fill" double device;
- Container centering system to properly place them in correspondence with filling pistons; this can have two alternative configurations:
 - With a specially provided housing star wheel (in this case the filling is performed from above with filling valves placed on the container mouth);
 - With a series of plates – in the same number of the filling pistons – equipped with mobile supports installed on a rotary base body. Mobile supports, controlled by a specially provided lower cam, act as container lifters and make the piston valves enter inside them in order to perform the product filling from the bottom (system suitable to prevent air bubbles from forming and splashes);
- Upper cam for cylinder filling control through product suction from the tank;
- Filling carousel with a variable piston number consisting of filling valves installed on pneumatic cylinders;
- Mirror polished product tank internally, with openable lid and manual exhaust valve equipped with control level sensor;
- Container outfeed star wheel;
- Control panel with PLC included;
- Safety devices in compliance with the EU regulations. AISI 304 stainless steel frame with polycarbonate panels and safety devices for an automatic machine stop in case of door opening;

The transmission of different movements is obtained by means of electric motors and pneumatic system.

NOTE: all machine components meant to be into contact with foodstuff are manufactured in AISI 316 stainless steel and other proper materials in compliance with current EU regulations on this subject.

OPERATING PRINCIPLE:

Containers, fed by the conveyor, are picked from the variable pitch auger, which aligns them and inserts them paced into the infeed star wheel.

Once the empty containers are properly placed, by the central star wheel or by the mobile plates, in correspondence with underlaying filling pistons rotating in the carousel, the cylinder filling takes place through product suction - from the corresponding tank and it is controlled by a specially provided cam. At this point, containers receive the product from the valves linked with cylinders.

Once the filling phase is finished, containers are finally picked up from the outfeed star wheel and led again onto the conveyor to be conveyed to the next machine in the line.

ADVANTAGES:

- Extreme versatility (the machine can be used for a particularly wide range of products and containers);
- High precision and product caring filling thanks to volumetric dosing measurement;
- Manufacturing configuration adapting to filling product specifics and to the required output per hour;
- Possibility to vary from the electric panel, the entire process machine speed;
- Format change operations are very easy and quick: synchronising auger and star wheel unit replacement, manual height adjustment of the filling head according to the height of the container to be filled, filling volume adjustment - from the electric panel - according to the format of the container to be treated, with working machine too;
- Easy access to inner components for cleaning and maintenance;




OPTIONAL available upon request:

Stirrer to be installed inside product tank to keep it homogeneous, container format change equipment (auger, star wheels).

RELATED MACHINES:

Pulping machine,
Grinding machine,
Concentration plant,
Pasteuriser-Cooling
machine.





NOTE: machine images appearing in the
present folder are indicative only and could
differ from the last model in production.

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