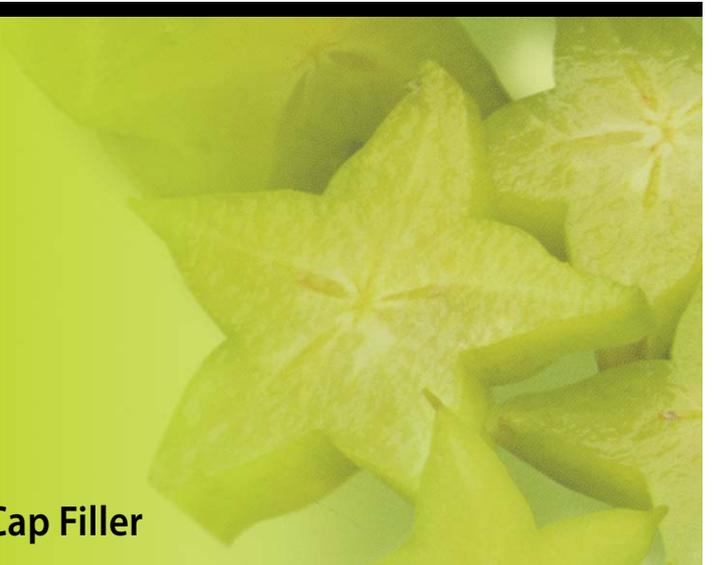


# Hygiene Rotary Cup Filler

AFRC Series – Servo Driven CNC Rotary Cap Filler





## Hygiene Rotary Cup Filler – The Principle Function:

The highly flexible Hygiene Rotary Filling and Sealing Machine, from the series GFR, is solidly built and easy to operate. This Series is designed for a very high hygienic standard and provides sensitive filled and sealed products with a long shelf-life.

The GFR series is available with an output speed of between 1000 and 6000 containers per hour, depending upon the product, volume, cup size, cup shape, and the head space inside the filled container.

The stations are designed with high flexibility and all functions are fully servo driven, pneumatic driven, frequency-controlled motor driven, and controlled from the control panel.

### Hygienic Design of Machine Frame

- > Heavy duty machine doors (hardened glass)
- > Machine floor with large draining bevel
- > All table joints are welded
- > Easy-to-clean machine environment
- > Machine maintenance is fast and easy

### The filler is designed to fill following products:

- |              |               |                             |
|--------------|---------------|-----------------------------|
| > Juices     | > Ketchup     | > Tahina                    |
| > Milk       | > Honey       | > Salad dressing            |
| > Yogurt     | > Jam         | > And many similar products |
| > Ice cream  | > Soft cheese | > Personal care             |
| > Mayonnaise | > Hummus      |                             |





## Filling Machine Features:

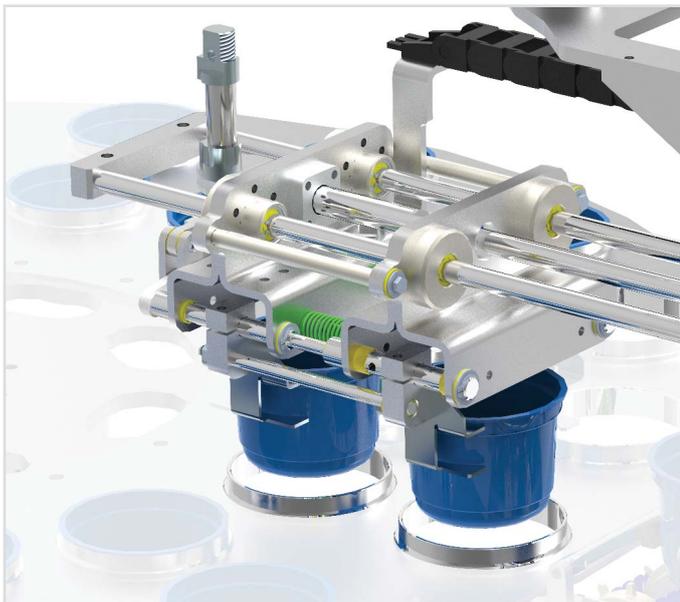
### High Hygienic Machine Frame



The High Hygienic Machine Frame is one of the most important parts of the filler. The tabletop of the machine table is beveled to prevent standing wash water. Wash water must be drained quickly and completely to prevent microorganisms from growing. These microorganisms could contaminate products and shorten their shelf life. Therefore, our machine tables are fully welded to prevent the penetration of cleaning water into the machine base (machine foot).

The door covers are made from tempered glass adhered into stainless steel frames. These glass door covers can never receive an electrostatic charge, unlike polycarbonate doors. A polycarbonate door with an electrostatic charge will draw in unsterile dirt when open. When the door closes, the dirt falls from the door contaminating the filling area.

### Prefilled Cup Entering Robot



The AFRC Series can be equipped with an Prefilled Cup Entering Robot that takes the prefilled cups from a conveyor into the machine rotary table.

The robot unit can handle different cup sizes by a quick and easy exchange of the gripper arms.

## Cup entry station

The Cup Entry Station is easily and quickly adaptable for different cup sizes.

A "Cup Serialisation Process" can be integrated into the cup entry station. This sterilisation process will sterilise the cups before entering the machine rotary table.



## Dosing Unit

The high hygiene servo driven dosing unit is designed to fill highly sensitive and viscous products.

The unit is fully controllable from the filling machine controller.

The dosing unit can be equipped with a pressure tank up to 2 bar.

Cleaning of the dosing unit can be made fully automatic.

There is also a possibility to get the dosing unit as an internal dosing unit.

The dosing unit is available with up to 8 dosing pistons.

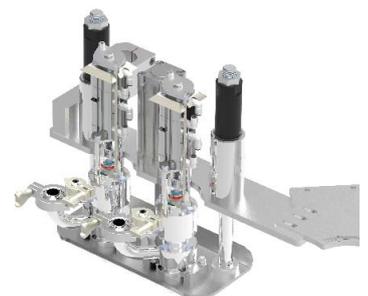
The dosing unit is available with different measuring principles; volume measuring piston, magnetic flow meter, or mass flow meter.



## Filling Unit

The high clean filling nozzles are designed for highly sensitive and highly hygienic products.

The filling nozzles are equipped with the "Seal Back Space Cleaning System". This system can also be pressurised during the filling process for keeping the nozzle's shaft sterile by opening and closing the nozzle. The filling nozzles can be cleaned without dismantling, from a CIP Station / Unit or any other CIP Supply Unit.



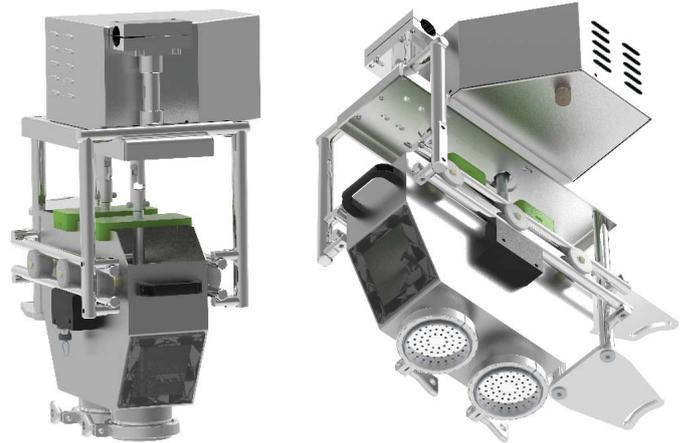
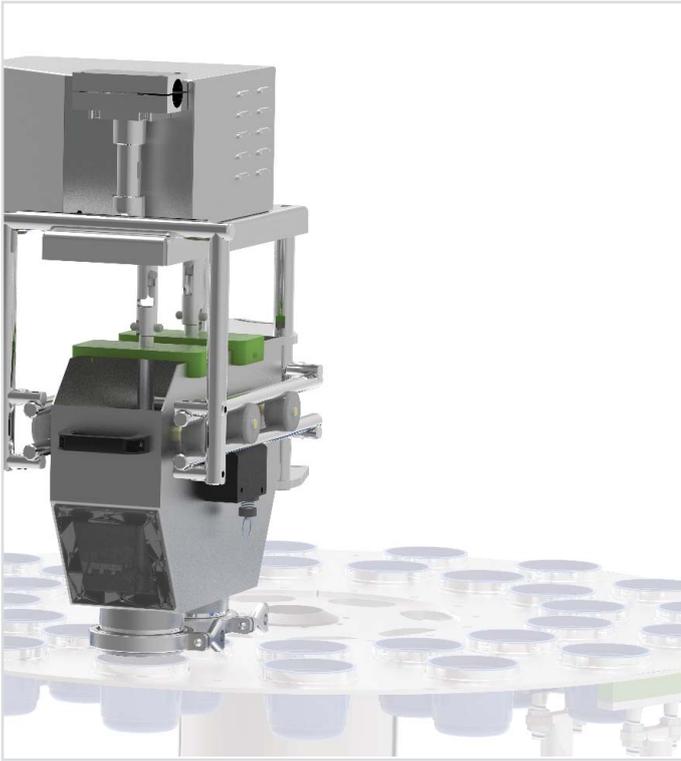
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## Spice Dispersing Unit

The Spice Dispersing Unit can put dry spices on top of the filled products. By changing the bottom plates the design of the spices on the product can be changed.

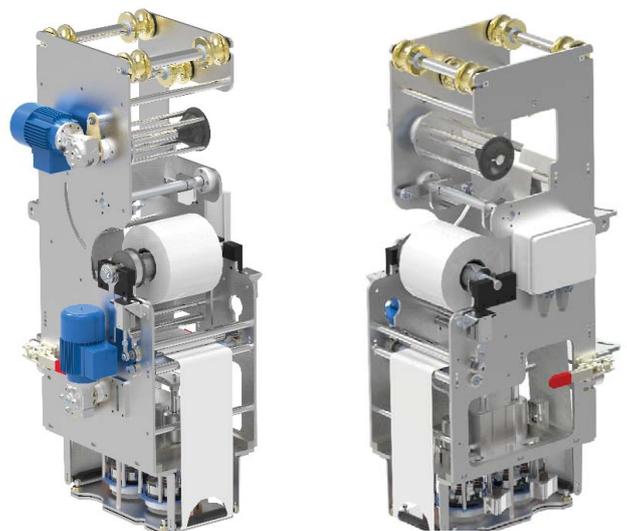
The spice funnel can be easily removed for cleaning and emptying after production.



## Cup Sealing Unit

The Cup Sealing Unit seals the cups with foil. The complete unit is quickly removed for cleaning, maintaining, and changing of the welding units to another diameter.

The setup and change can be made without tools, quickly and safely.



### Cup Lid Adding Unit

The Cup Lid Adding Station is easily and quickly adaptable for different cup lid sizes.



### Discharge Station of closed cups

The station lifts the cups out of the cup cells and pushes the cups on to the exit conveyor belt.



### Clean Air Unit

Retaining clean air in the filling area is very important for products with no preservatives.

The filter housing is built from stainless steel to protect the filter from coming in contact with wash water. Wash water damages the filters and allows mold or other microorganisms to grow, contaminating the filling area and products.



solidly built &  
easy to operate



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## Beth-El Machinery Product Lines Include

### The AFRB and AFRC series High Clean Rotary Filler and Capper

These machines are designed for an extremely high hygienic standard, are able to provide products with a long shelf-life, and have an output speed, depending upon the product, between 1,000 to 12,000 containers per hour.

A servo driven CNC filling machine, is designed so that all functions are fully servo or pneumatic driven, operable from the controller panel, and have an output speed of up to 6,000 containers per hour.

### The High Clean Continuous Bottle Cleaner

From the AWC series, these machines have a highly flexible set-up and orientation which can accommodate containers with a variety of sizes and shapes, and incorporate a range of capabilities with an output speed of up to 15,000 containers per hour.

### The AFR series High Clean Filling

These machines are designed for an extremely high hygienic standard and are able to provide products with a long shelf-life.

The output speed of the inline filling lines are capable of up to 3,600 containers per hour.

## Custom Processing Line Engineering and Manufacturing

Beth-El Machinery produces turnkey projects in the engineering and manufacturing of custom processing lines, pasteurisation, deaeration, product recovery systems, and homogenisation systems.

Applications include fermentation, carbonation, control systems, and batch and continuous mixing and blending systems for various fields in the food, chemical, and pharmaceutical industries.

Beth-El Machinery's process units, systems, solutions, and complete processing plants are a direct result of engineering expertise within core disciplines. Our goal is to apply these varied technologies in the most efficient and reliable ways to produce the highest quality process systems and plants available. Beth-El Machinery designs and manufactures the systems that, in turn, do the work for you.



### Core Expertise:

Liquid processing

Mass & heat transfer

Controls & automation

Packaging Machines

Sterilisation Units

Ozone Water Units

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