



### Unscrambler UNB

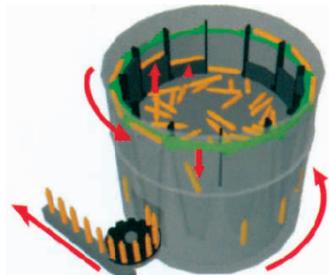
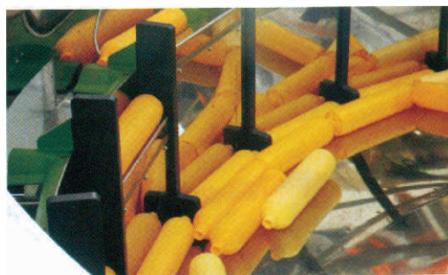
The design of UNB is adopted with rotary type, selecting pieces and descending chutes, which being auxiliary with air pressure ensures the empty bottles moves continuously on the filling line.

Capacity Bottle Height	60 - 70 mm	80 - 90 mm	100 - 110 mm
TF-UNB-1500	320 BPM	250 BPM	180 BPM
TF-UNB-2000	450 BPM	350 BPM	280 BPM
TF-UNB-2500	560 BPM	450 BPM	350 BPM



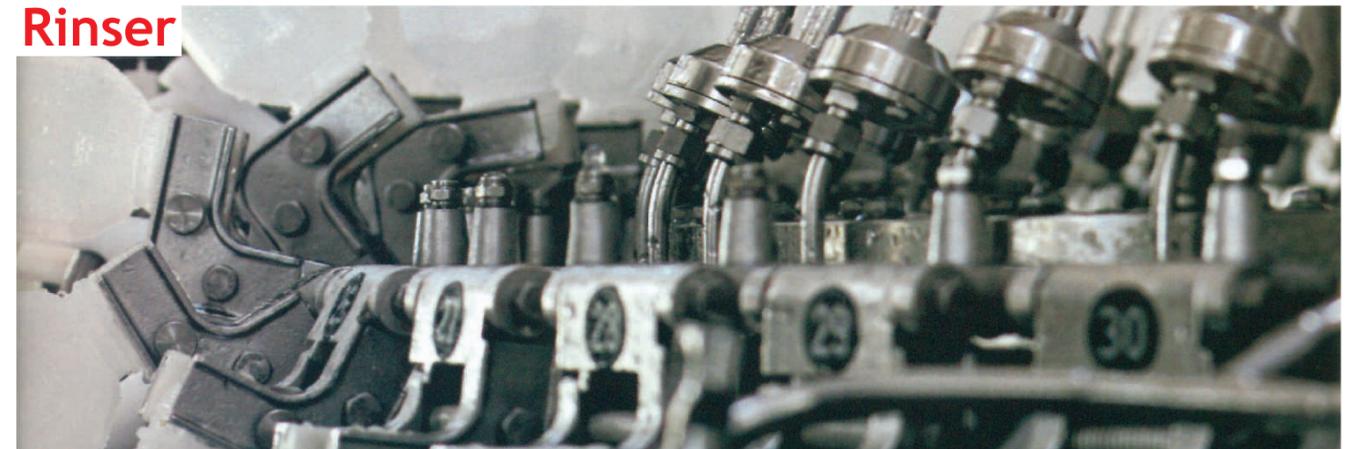
### Unscrambler UND

The feature of UND design is to increase the speed by double-unscramble mechanism. Empty plastic bottle a more stable for unscrambling there fore enables easy selections of pieces & descending chutes.



Capacity Bottle Height	120 - 140 mm	160-180 mm	200-220 mm	240-260 mm	280-300 mm	320-340 mm
TF-UND-2000	300 BPM	270 BPM	230 BPM	180 BPM	150 BPM	120 BPM
TF-UND-2500	420 BPM	330 BPM	270 BPM	240 BPM	210 BPM	170 BPM
TF-UND-3000	600 BPM	450 BPM	4200 BPM	360 BPM	270 BPM	230 BPM

### Rinser



The machine is suitable for washing glass bottles and plastic bottles.

Equipped with parts made of special material, the water injection devices to use either cool cleaning water or hot cleaning water.

The circulation system in the machine for washing is recyclable.

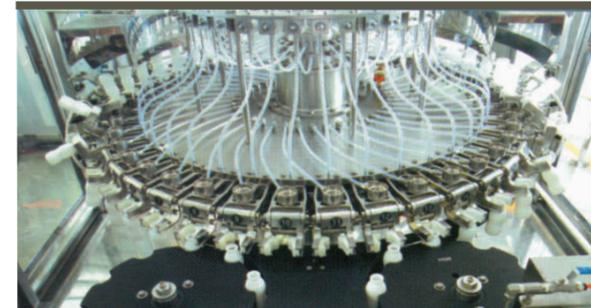
The injection valves are controlled by photo sensor which ensures it will not inject water out in case of absence empty bottles.

The circulation system and injection valves ensure optimum usage of water.

Applicable with any kinds of cleaning water or aseptic air, the injection tubes installed with the rotary joints are designed to handle one-phase or multi-phase washing, which is subject to the requirements of customers.

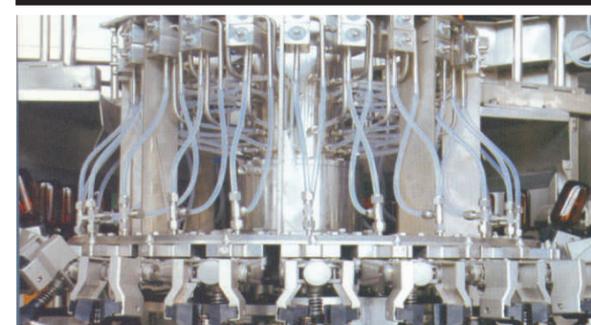
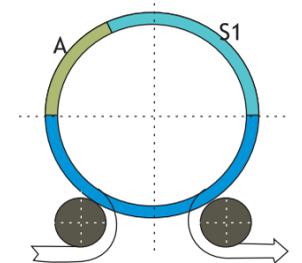
The timing of the injection valves can be adjusted easily.

Moreover, the control of the injection valves allows the injection nozzles to handle automatic CIP (clean in place) movements before production.



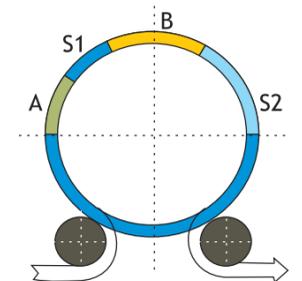
#### TF - R - 1 S ONE-STAGE RINSING

- Ⓐ 1 ST RINSING
- Ⓢ1 1ST DRIPPING



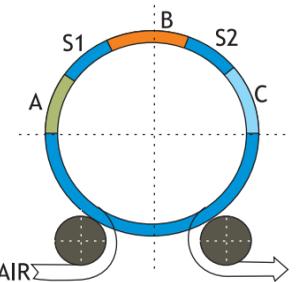
#### TF - R - 2 S

- Ⓐ 1 ST RINSING
- Ⓢ1 1ST DRIPPING
- Ⓑ 2 ND RINSING
- Ⓢ2 2 ND DRIPPING



#### TF - R - 3 S THREE-STAGE RINSING

- Ⓐ 1 ST RINSING
- Ⓢ1 1ST DRIPPING
- Ⓑ 2 ND RINSING
- Ⓢ2 2 ND DRIPPING
- Ⓒ BLOWING WITH ASEPTIC AIR



## Convection Filling Type



MONOBLOCK TYPE RINSER / FILLER / CAPPER CAPACITY - 38000 BPH (For 600 ML MINERAL WATER)



The filler adopts the convection filling type. This filling principle can prevent product from pollution and increases the filling speed.

The filler is suitable for tea drink, non-granule juice, mineral water, etc.

As filling, the product flowing back system can ensure the constant filling temperature.

The product liquid will re-flow to the recycle tank firstly, via the sanitary pump motion, through the pasteurizing equipment to pasteurize, and then back to the filling bowl. It is not suitable for the temperature sensitive products.

## Ghee Filling

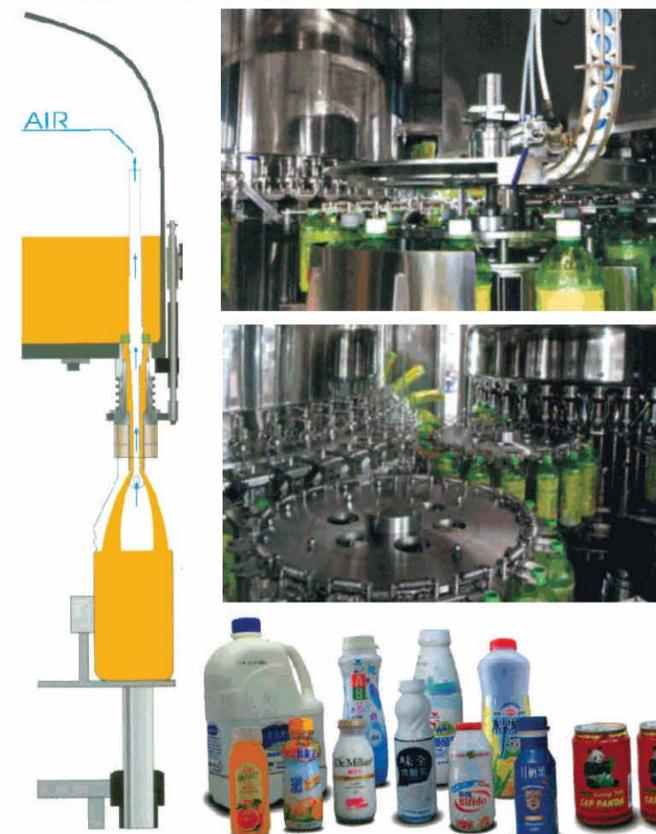


The filler adopts the convection filling type and is applicable for big mouth container.

It can balance filling line speed, will not delay filling time when the container is big volume, but it is not suitable for temperature sensitive product. There are safety doors in the surrounding to isolate dust and external object.

The machine is able to equip with HEPA filter to condition the air reaching a standard in filling room.

## Convection Filling Type



### RINSING

The design of gripping head which has no spring is to reduce the dirt accumulation and is easy to maintain.

### FILLING

Flexible diaphragms equipped in the filling pipe is a patent design, when the filling pipes stretch and retract, it ensures the sealed effect, so that filling procedure can insulate external pollution and control large flow in order and avoid bottle shape changes due to pressure.

### AUTO. CIP MECHANISM (cleaning in place)

When equipments will do CIP cleaning, firstly lift up the filling bowl, then squish the groove. After all preparations are finished, the equipments can execute CIP (cleaning in place) and COP (cleaning out of place). Filling valves are not required to be removed to during the cleaning process.

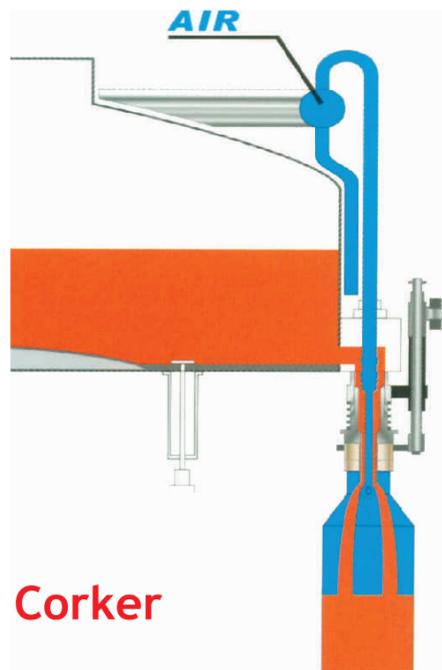
The filler adopts gravity filling type and is suitable for filling fresh mil, drinking yogurt, fresh juice (content with fiber) and temperature sensitivity products.

The designs of this filler have two models : General Model and Auto. CIP Model. There is a safety cover surrounding the machine to isolate dust and external object. The filler can equip with HEPA on the machine top to be more suitable for fresh cool storage products.

## Vapor-Liquid Separation For Gravity Filling



As filling, the liquid flows into the bottle by filling valve, and the air inside the bottle discharge out by exhaust pipe, without flowing into filling tank.

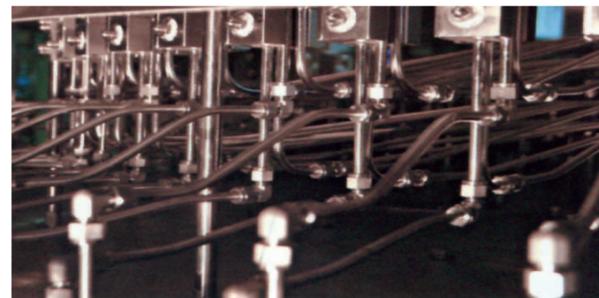


### Corker

The Machine consists of cork sorter, cork compressing & inserting mechanism.

Before inserting cork, machine will drain out air from bottle inside to make negative pressure.

The filler is suitable for filling glass bottle beverage and can be coordinated with a capping machine.



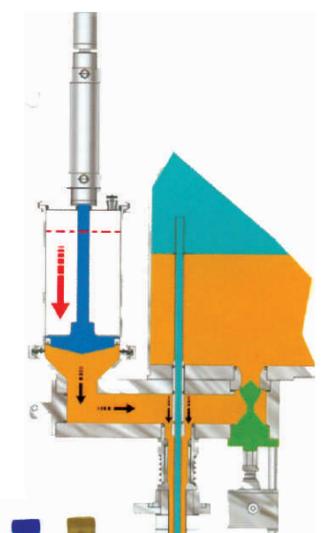
## High Vacuum Filling



The filler is suitable for filling glass bottle beverage and can be co-ordinated with a capping machine.

Besides all the features of the standard filler, the machine adopts the high vacuum filling type that is suitable for sauces with a higher viscosity, such as soya sauces paste, tomato ketchup, chilli sauce, etc.

## Piston Type Level Height Control Filling

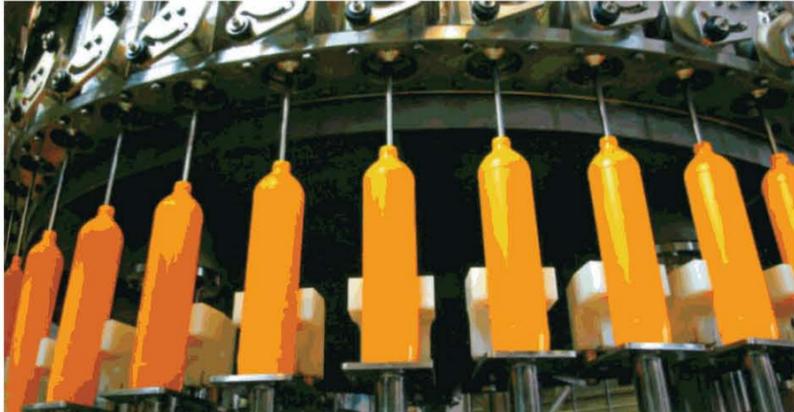


The Machine is the Piston & Level positioning filling type and suitable for filling liquid which is high and low viscosity contents with granule such as yogurt, sauce, etc.

The filler adopts the independent material feeding system and material output control, no bottle no filling. The machine can automatically CIP cleaning. The filler can equip with HEPA on the machine. top.

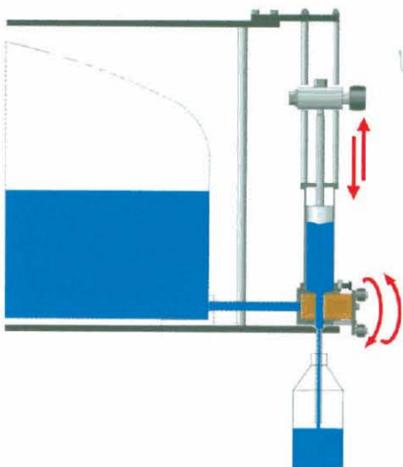


# Piston Type Volumetric Filling

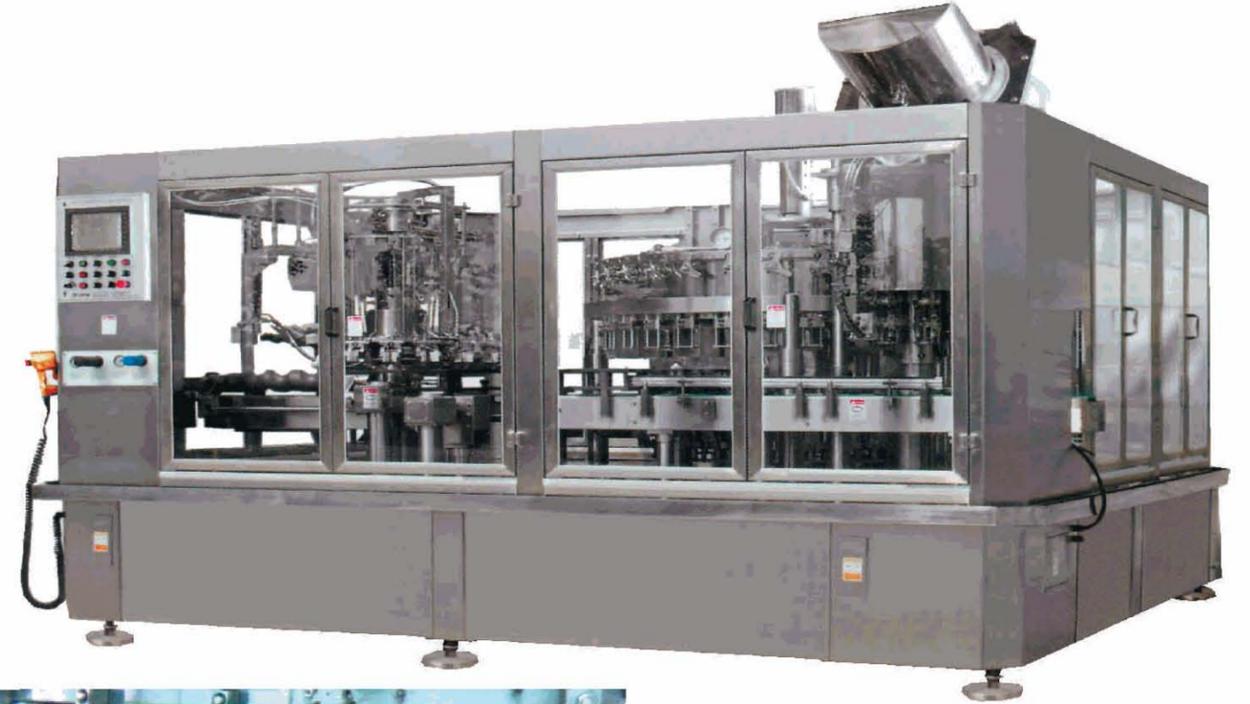


This filling system is designed for high viscosity with foam-forming product.

The filler adopts non-touch filling type. As the filler pumping in and squeezing out the filling liquid (i.e. Product), the filler will adjust the distance between filler & liquid level in order to minimize the filler impact force inside the bottle.

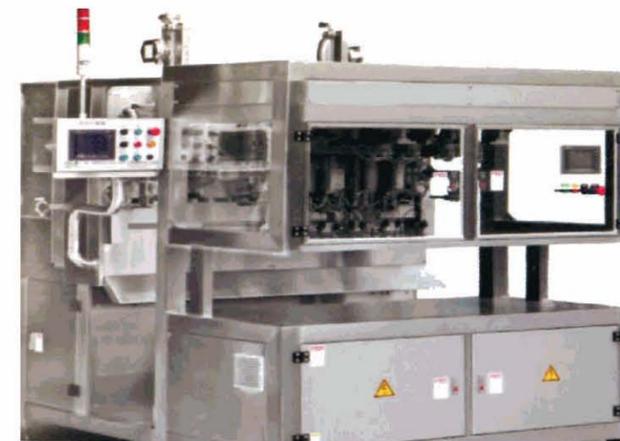


# Carbonated Soft Drink Filling



This filler machine can fill bot i.e. bottle or can, the bottle can be glass or plastic, and the suitable beverage is Soda Water, Champagne, Beer, Carbonated Soft Drink and all kinds of carbonated beverage.

## FILLING EQUIPMENT FOR BAGS WITH AUTOMATIC PLUG INSERTION



## FILLING AND PACKING EQUIPMENT FOR INJECTION



## Capper



The machine is equipped with starwheels to pick up plastic caps. The starwheels are used for bottles and plastic caps and operate synchronously so that the plastic caps can be precisely aligned with and screwed on the bottle mouths in the high-speed production.

The screwing heads of the machine are equipped with regulators having permanent magnetic floating torsion instead of the machine with stable torsion, by which the mechanical structure of the machine will be reduced wear & tear, and allow plastic caps to be screwed on the bottle with high precision. The machine is provided with bottle presence sensors having the function of not releasing plastic caps when bottles are not located in their positions.



### Automatic Capper For Tamper Evident Caps



Capacity : 160 BPM  
 Material : SS 41 steel is embraced by SS 304 stainless steel on the surface of machine.  
 Operating instruction : Caps go through sorter, enter track and are delivered to the rotating gear tank then tamper evident caps are securely placed on the cans.  
 Suitable : bottles and cans  
 Products : Oil, Milk Powder, etc.  
 Feature : Machine adopts rotary type and continuous movement. The photo sensor can sense whether the cap is present on the bottle or not.  
 Touch screen panel can adjust speed, bottle height etc. Suitable for all kinds of bottles shapes, sizes and heights.  
 Safety door is located around the machine.



## Auto. Packer



The packer is an excellent system for packaging glass bottles and plastic bottle to be packed into a case / carton. It combines functions of Bottles In-feed, Accumulating bottles, Automatic arrangement bottles in matrix, Bottles gripping and Case packing and synchronizing the case conveyor to pick & place the bottles into the cases / cartons.

The movement of the head support beam is achieved with two cam lever assemblies positioned on either side of the structure by means of the circular movement of gripping bottles and putting bottles, and then return to the original position of the gripping system.

The driving system moved by pneumatic cylinder. The motor-reducer is counter-balanced by a pressure-balancing device.



ITEM	A	B	C	D	E	F
TF-UND-2000	5000	1870	2540	400	950	950
TF-UND-2500	5500	1870	2540	400	950	950
TF-UND-3000	6000	1870	2540	400	950	950

G	H	I	J	CAPACITY	TOTAL POWER	COMPRESSED AIR
1470	545	450	1200	7 case/min	6 1/4 HP	2501/min
1870	545	450	1200	14 case/min	6 1/4 HP	3501/min
2455	545	450	1200	21 case/min	8 1/4 HP	5001/min