

# FILLING MACHINES



AS FOR YOUR PRODUCTS,  
YOU WILL HAVE MANY IDEAS AND  
REQUIREMENTS

**HOW TO BE MORE HYGIENIC/  
EXTEND SHELF LIFE?**

**HOW TO PRESERVE FLAVOR  
AND TEXTURE?**

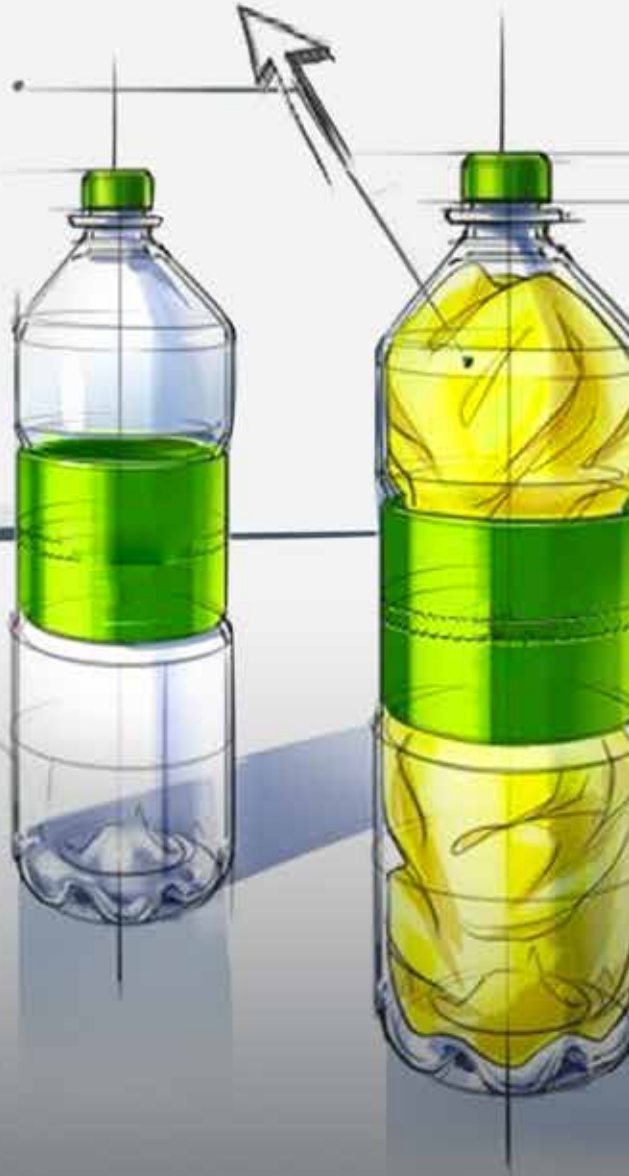
**HOW TO ATTRACT CUSTOMER  
WITH INNOVATIVE PACKAGING?**



expertise

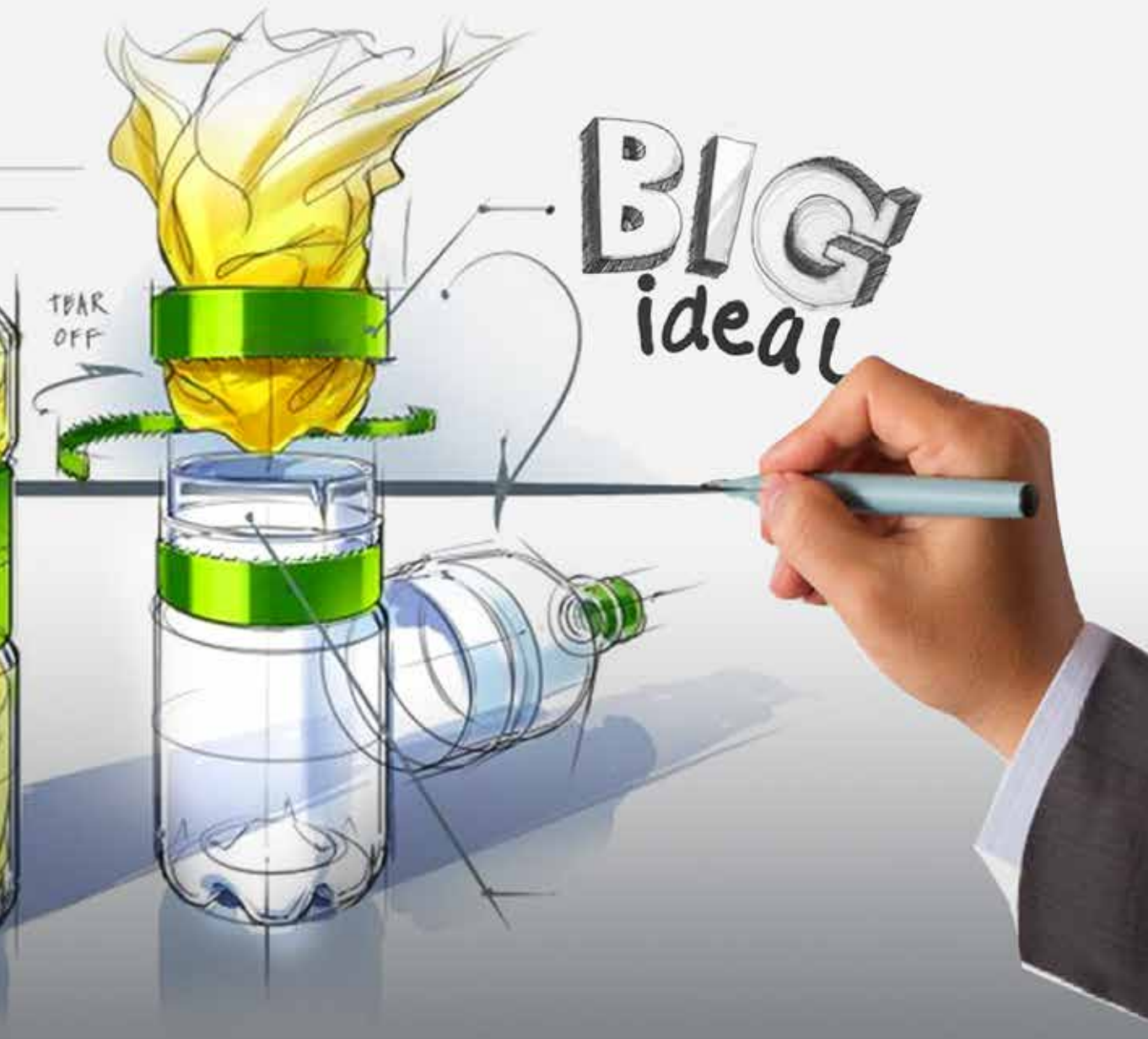


stability



FROM THESE IDEAS AND REQUIREMENTS, WE BUILD A MACHINE THAT MEETS YOUR STANDARDS.

THE COMBINATION OF VARIOUS PRODUCTS AND PACKAGING FORMATS DEMANDS MULTIPLE REQUIREMENTS FOR FILLING MACHINE. FOR DIFFERENT FILLING PROCESS, DIFFERENT FILLING METHODS AND DIFFERENT HYGIENE STANDARDS, TECH-LONG PROVIDES SOLUTIONS TO MEET VARIOUS REQUIREMENTS.

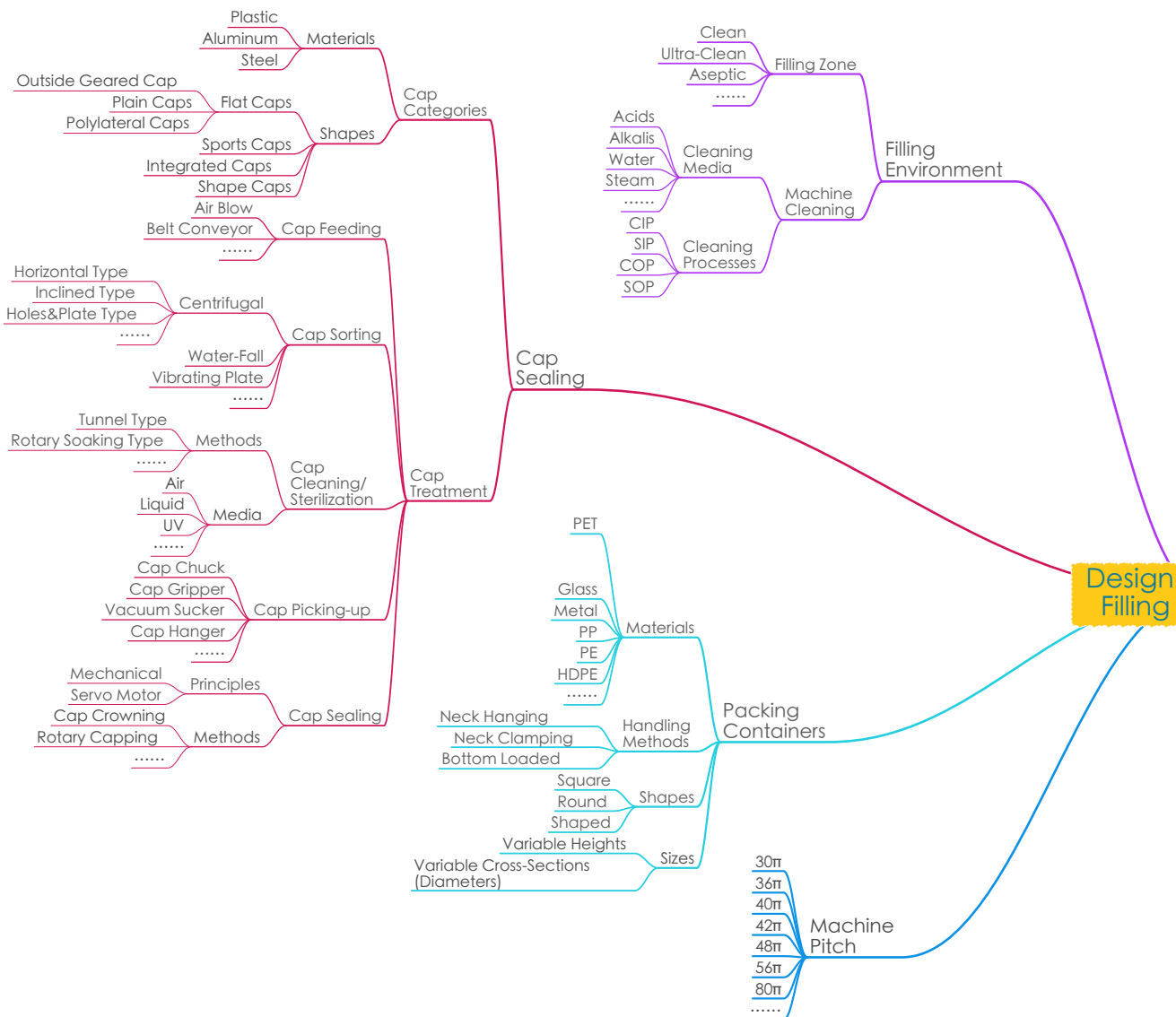


# VARIETY CONTRIBUTES OUR EXPERTISE

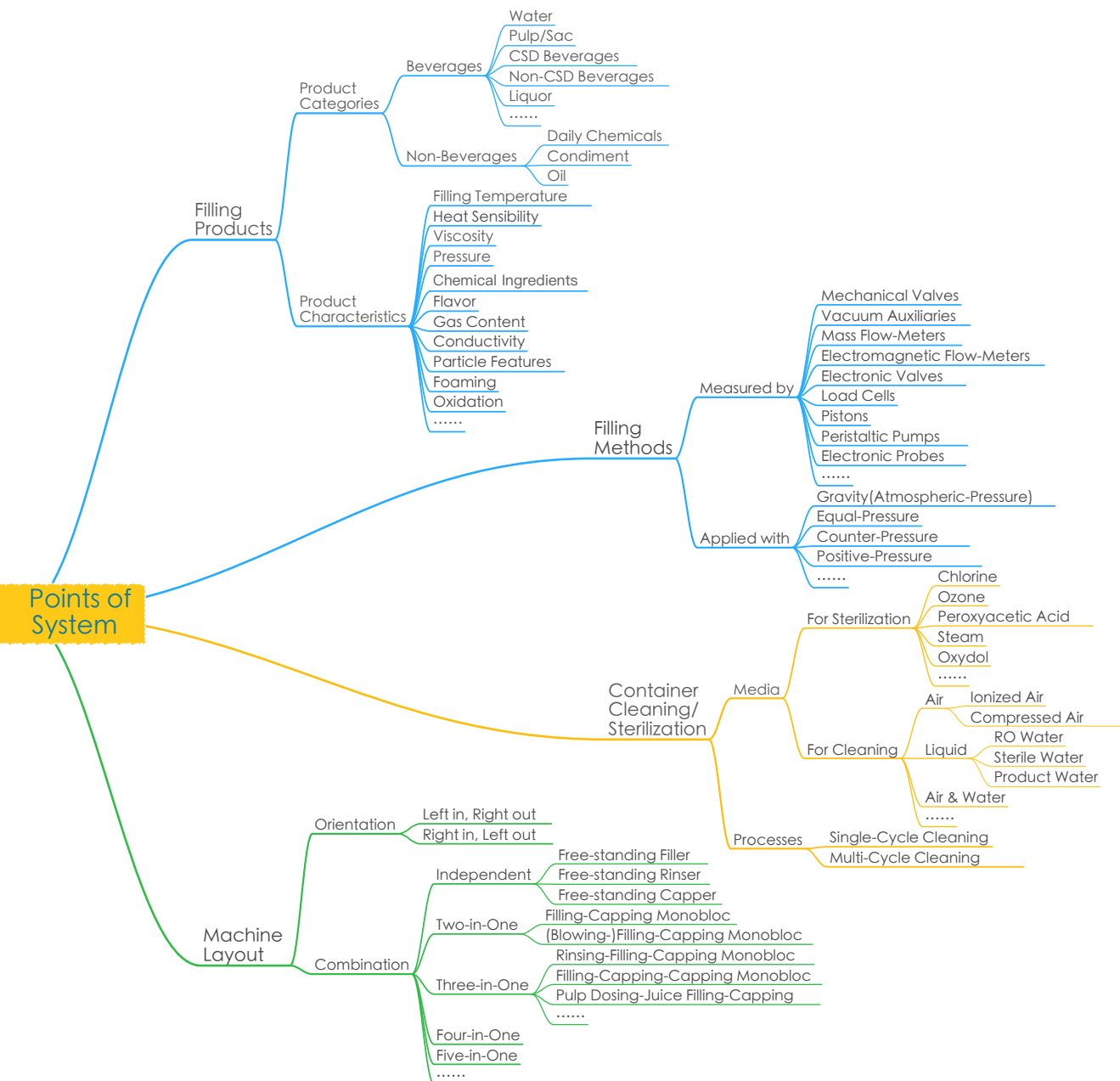
FILLING MACHINE IS AN EQUIPMENT THAT FILLS LIQUID INTO CLEAN CONTAINERS UNDER CLEAN CONDITIONS AND SEALS THE CONTAINERS WITH CAPS.

**WE ARE THE EXPERTS FOR COMPLEX PRODUCTS.**

**FOR ALL YOUR PRODUCTS AND PROCESSES, WE HAVE SOLUTIONS.**



- AN IN-DEPTH STUDY FOR EACH PRODUCT
- PROFESSIONAL TECHNICAL TEAM
- EXPERIENCE IN A WIDE RANGE OF PRODUCTS, COUPLED WITH EXPERTISE IN DIFFERENT TECHNOLOGIES
- EXPERTISE IN INTEGRATING DIFFERENT TECHNOLOGIES





## INTRODUCTION OF TECH-LONG FILLING MACHINES

02-05

## APPLICATION OF FILLING MACHINES

08-09

## FILLING MACHINES SERIES

10-29

### ■ WATER & BEVERAGE FILLING

#### • Water

10-11

#### • Carbonated Soft Drink

12-13

#### • Hot-Filling

14-15



## ■ ASEPTIC FILLING & ULTRA HYGIENIC FILLING

- |                                  |       |
|----------------------------------|-------|
| • Ultra Hygienic-Ambient Filling | 16-17 |
| • Ultra Hygienic-Warm Filling    | 18-19 |
| • Aseptic Filling                | 20-21 |

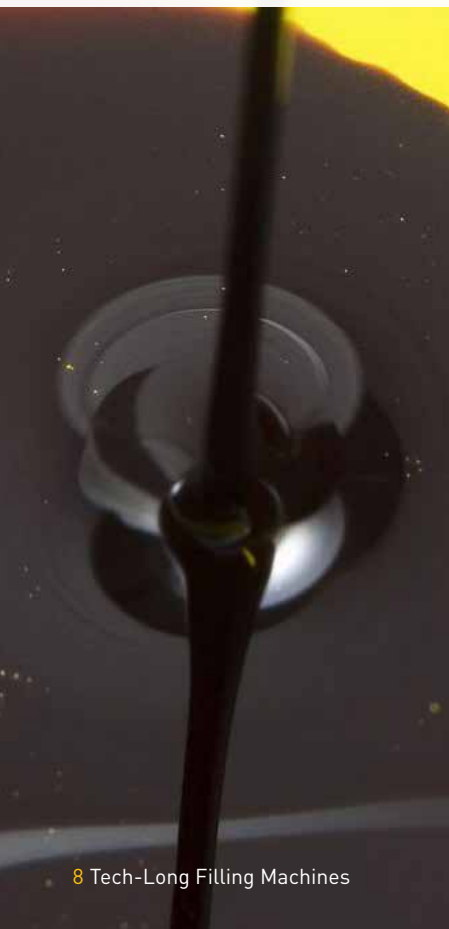
## ■ NON-BEVERAGE FILLING

- |   |       |
|---|-------|
| • Salad dress/Marinade/Seasoning                        | 22-23 |
| • Household Chemicals/Health and Personal Care Products | 24-25 |
| • Edible Oil  | 26-27 |



## APPLICATION RANGE

water, carbonated soft drink, hot fill, warm fill, aseptic, salad dressing/marinade, HPC, edible oil etc.





# THERE ARE MANY CHOICES, BUT THERE IS ALWAYS ONE OPTIMAL SOLUTION FOR YOU!

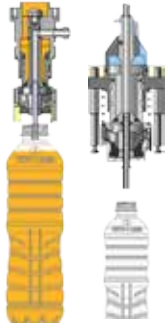

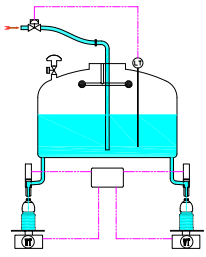
IN ORDER TO PROVIDE YOU WITH THE BEST SOLUTION,  
TECH-LONG CONTINUES TO DEVELOP NEW FILLING TECHNOLOGIES.

	Beverage Filling			Aseptic or Ultra Hygienic Filling			Non-Beverage Filling		
	Water	CSD	Hot filling	Ambient Filling	Warm Filling	Aseptic Filling	Condiment	Cosmetics	Edible Oil
Product	spring water, purified water, other drinking water .....	CSD, soda water, sparkling water, flavored water .....	juice, tea, liquid food, diary, energy drink, milk tea, coffee .....	water, flavored water, juice, beverage with juice, carbonated juice .....	juice, tea, liquid food, diary, energy drink .....	fresh juice, carbonated drinks, juice, tea, liquid food, flavor water, diary beverage, energy drink, milk tea, coffee .....	soy sauce, cooking wine, vinegar, syrup, .....	Shampoo, hair conditioner, laundry detergent, softener sanitizer, Detergent, body wash, mouth wash .....	edible oil, industry oil .....
Filling Method	mechanical valve filling, flow meter filling, electronic valve filling, gravimetric filling .....	mechanical valve filling, flow meter filling, electronic valve filling .....	mechanical valve filling, flow meter filling, electronic valve filling, gravimetric filling .....	mechanical valve filling, flow meter filling, gravimetric filling .....	mechanical valve filling, flow meter filling, gravimetric filling .....	flow meter filling, gravimetric filling .....	mechanical valve filling, flow meter filling, gravimetric filling .....	mechanical valve filling, flow meter filling, gravimetric filling .....	flow meter filling, gravimetric filling .....

## Water Filling

Water is not water. It is a multifaceted product: natural spring water, purified water, carbonated water, flavored water.... What process can be used to prevent bromate formation? How to deploy mechanical filling valves to keep water crystal clear and contaminant free? How to achieve the maximum benefit with speed, accuracy and light weight bottles? Tech-Long, the expert in liquid product filling, will always provide you with the best solution for your products.



Filling Method	Mechanical Valve Filling	Flow Meter Filling	Weigh Filling
			
Applicable Bottle Type	PET	PET	PET
Technical Features	<ul style="list-style-type: none"> <li>▪ Different length of vent tubes to control fill level</li> <li>▪ Sanitary design</li> <li>▪ Filling with reflux or filling without reflux</li> <li>▪ Light weight bottle handling</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Non-contact filling, more hygienic</li> <li>▪ Automatic CIP with dummy bottles</li> <li>▪ Optimal flow path in filling valves to ensure the complete CIP</li> <li>▪ Flow meter selection based on water conductivity</li> <li>▪ Faster filling speed</li> <li>▪ More adaptable for light weight bottle</li> <li>▪ Fast recipe change</li> <li>▪ Easy maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Online weighing instrument to control the accuracy of filling level</li> <li>▪ Non-contact filling design, safe and hygienic</li> <li>▪ Optimized liquid piping design</li> <li>▪ Fast filling speed</li> <li>▪ Pre-reserved different filling recipe, easy to change</li> </ul>
How to Choose?	<ul style="list-style-type: none"> <li>▪ Low capex and low operating cost</li> </ul>	<ul style="list-style-type: none"> <li>▪ More hygienic filling</li> <li>▪ Accurate filling</li> <li>▪ Automatic CIP dummy bottles</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weight as the measuring standard</li> <li>▪ Higher requirements for filling accuracy</li> <li>▪ Different size of bottle in one machine</li> <li>▪ More hygienic requirement</li> <li>▪ Large size container filling</li> </ul>
Capacity	80,000 bottles per hour	100,000 bottles per hour	15,000 bottles per hour

## Carbonated Filling



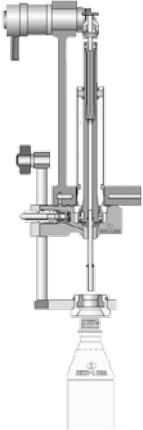
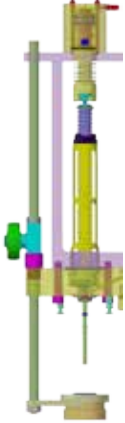
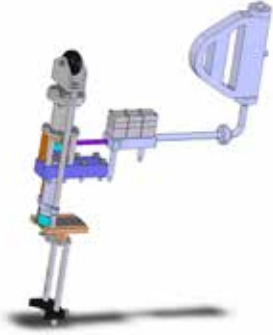
Cola, Sprite, Soda, sparkling water, cocktail, flavored water.....the variety of carbonated beverage is ever changing. New trend, new products and new packaging are emerging continuously.

For carbonated filling machines, how to rise up the filling temperature to reduce energy consumption? How to reduce foaming? How to keep accurate filling?

How to avoid the residuals in the neck? How to preserve the  $\text{CO}_2$ ... it is not an easy task to handle all these challenges. However, no matter what products, Tech-Long will achieve your target with the best technology.

Meanwhile, Tech-Long filling machine can realize multiple functions in one equipment. One machine can do water, carbonated drinks and hot filling products!



Filling Method	Mechanical Valve Filling	Electronic Valve Filling	Flow Meter Filling
			
<b>Applicable Bottle Type</b>	PET	PET	PET
<b>Technical Features</b>	<ul style="list-style-type: none"> <li>▪ Cam controlled filling valve opening and closing</li> <li>▪ Different length of vent tubes to control fill level</li> <li>▪ Two air exhaust</li> </ul>	<ul style="list-style-type: none"> <li>▪ Cylinder controlled filling valve opening and closing. more reliable</li> <li>▪ Filling valve open and close time and angle are adjustable</li> <li>▪ Air vent tube rising position and time are adjustable</li> <li>▪ Accurate fill level</li> <li>▪ Less foaming</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Faster filling speed</li> <li>▪ Less foaming</li> <li>▪ Automatic CIP dummy bottle</li> <li>▪ Best CIP result</li> <li>▪ Multiple filling function available</li> <li>▪ Higher filling temperature</li> <li>▪ Fast recipe change</li> </ul>
<b>How to Choose?</b>	<ul style="list-style-type: none"> <li>▪ Low capex and low operating cost</li> </ul>	<ul style="list-style-type: none"> <li>▪ More reliable than mechanical valves</li> <li>▪ Lower capex than flow meter fillers</li> </ul>	<ul style="list-style-type: none"> <li>▪ Higher filling temperature</li> <li>▪ Best CIP result</li> <li>▪ Water, carbonated, and hot filling products together</li> </ul>
<b>Capacity</b>	42,000 bottles per hour	42,000 bottles per hour	50,000 bottles per hour

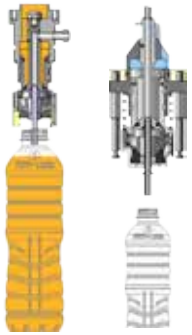

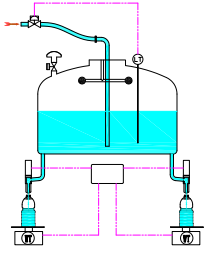
## Hot Filling



Juice, tea, milk based product, liquid food, energy drinks, milk tea, coffee and so on are all hot filling products. The product variety is ever increasing with flavors and textures preferred by customers.

The variation of beverages has extremely high requirements for the production equipment. How to preserve the original flavor? How to treat the beverage with pulp and sacks? How to achieve the hygiene requirement, filling accuracy, temperature etc? With the support of safety design to control microorganism and flexible filling technology, Tech-Long filling machines will provide different solutions for different products. Every one of your products will have its optimal solution.



Filling Method	Mechanical Valve Filling	Flow Meter Filling	Weigh Filling
			
Applicable Bottle Type	PET	PET	PET
Technical Features	<ul style="list-style-type: none"> <li>▪ Different length of vent tubes to control fill level</li> <li>▪ Hygienic design</li> <li>▪ Filling with reflux or without reflux</li> <li>▪ To guarantee the fill level with vacuum device</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Non-contact filling</li> <li>▪ Automatic CIP dummy bottle</li> <li>▪ Optimal flow path in filling valves to ensure the complete CIP</li> <li>▪ Adaptable to light weight bottle</li> <li>▪ Fast recipe change</li> <li>▪ Easy maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Online weighing instrument to control the accuracy of filling level</li> <li>▪ Non-contact filling design, safe and hygienic</li> <li>▪ Optimized liquid piping design</li> <li>▪ Fast filling speed</li> <li>▪ Pre-reserved different filling recipe, easy to change</li> </ul>
How to Choose?	<ul style="list-style-type: none"> <li>▪ Low capex and low operating cost</li> </ul>	<ul style="list-style-type: none"> <li>▪ More hygienic filling</li> <li>▪ Accurate filling</li> <li>▪ Automatic CIP dummy bottle</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weight as the measuring standard</li> <li>▪ Higher requirements for filling accuracy</li> <li>▪ Different size of bottle in one machine</li> <li>▪ More hygienic requirement</li> <li>▪ Large size container filling</li> </ul>
Capacity	60,000 bottles per hour	60,000 bottles per hour	24,000 bottles per hour

## Ultra Hygienic Filling-Ambient Filling





Flavored water, which is made by mixing still water and juice in a certain proportion, not only keeps the flavor of fruit, but also has less calories than 100% juice, thus favored by customers. In the meanwhile, water producer keeps launching new products, soda water, Pocari Sweat, Lingyangjiao Water and so on are springing in the market.

Tech-Long applies Ultra Hygienic filling technology to realize the filling of these products. Ultra Hygienic filling applies the key technology of aseptic filling, which uses rigorous sterilization process and fills the product in 100 grade environment. This is to prevent the product contamination during filling. Ambient filling will reduce the heating time for products, which guarantees the nutrition and flavor of products.

Ambient filling breaks the limitations of hot fill bottle design. It allows a variety of bottle shapes, reduces bottle weight and cost.





Filling Method	Mechanical Valve Filling	Flow Meter Filling
		
<b>Applicable Bottle Type</b>	PET	PET
<b>Technical Features</b>	<ul style="list-style-type: none"> <li>▪ Different length of air vent tubes to control fill level</li> <li>▪ Hygienic design</li> <li>▪ Filling without reflux, automatic CIP available</li> <li>▪ Low capex</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Non-contact filling, more hygienic</li> <li>▪ Automatic or manual CIP dummy bottle</li> <li>▪ Optimal flow path in filling valves to ensure the complete CIP</li> <li>▪ Fast recipe change</li> </ul>
<b>How to Choose</b>	<ul style="list-style-type: none"> <li>▪ Fruit juice and vegetable juice without pulps</li> <li>▪ Low capex and operating cost</li> <li>▪ Fill level as a measuring standard</li> <li>▪ Products with short shelf life or with few food grade additives</li> </ul>	<ul style="list-style-type: none"> <li>▪ More hygiene requirements</li> <li>▪ Volumetric filling</li> <li>▪ Automatic CIP cups</li> <li>▪ Filling volume as a measuring standard</li> <li>▪ Various bottle changeovers</li> <li>▪ Products without any food additives</li> </ul>
<b>Capacity</b>	36,000 bottles per hour	36,000 bottles per hour

## Ultra Hygienic Filling-Warm Filling

When you are looking for a filling system—It is applicable for high acid beverage & heat sensitive beverage. It can fill the products in Grade 100 environment. It has the option of mechanical valve filling or flow meter filling. It has high filling speed and less residual. Tech-Long warm filling technology is definitely your best choice.





Ultra Hygienic warm filling is the combination of aseptic filling technology and hot filling technology. It applies the sterilization process of aseptic filling and has the features of reflux in hot filling technology.

### Main features:

1. reduce the filling temperature, reduce energy consumption;
2. reduce the cost of packaging material;
3. preserve the flavor and texture;
4. prevent bottle expansion during hot filling;



Filling Method	Mechanical Valve Filling	Flow Meter Filling
		
<b>Applicable Bottle Type</b>	PET	PET
<b>Technical Features</b>	<ul style="list-style-type: none"> <li>▪ Different length of air vent tubes to control fill level</li> <li>▪ Hygienic design</li> <li>▪ Filling without reflux, automatic CIP available</li> <li>▪ Low capex</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Non-contact filling, more hygienic</li> <li>▪ Automatic or manual CIP dummy bottle</li> <li>▪ Optimal flow path in filling valves to ensure the utterly CIP</li> <li>▪ Fast recipe change</li> </ul>
<b>How to Choose?</b>	<ul style="list-style-type: none"> <li>▪ Fruit juice and vegetable juice without pulps</li> <li>▪ Low capex and operating cost</li> <li>▪ Fill level as a measuring standard</li> <li>▪ Products with short shelf life or with few food grade additives</li> </ul>	<ul style="list-style-type: none"> <li>▪ More hygiene requirements</li> <li>▪ Volumetric filling</li> <li>▪ Automatic CIP cups</li> <li>▪ Filling volume as a measuring standard</li> <li>▪ Various bottle changeovers</li> <li>▪ Products without any food additives</li> </ul>
<b>Capacity</b>	36,000 bottles per hour	36,000 bottles per hour

# Aseptic Filling

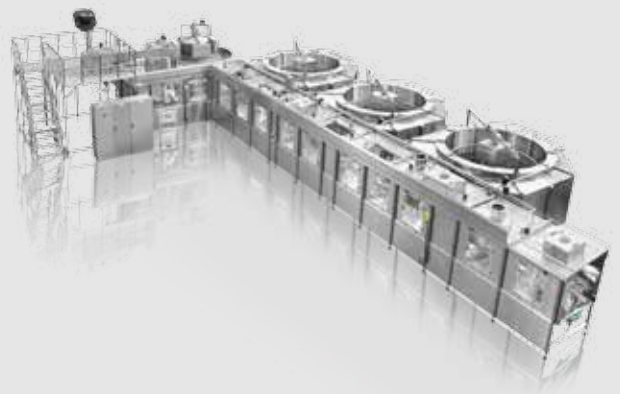
Aseptic filling is to fill an aseptic product into an aseptic container under an aseptic environment. The end product has a long lifetime in ambient temperature.

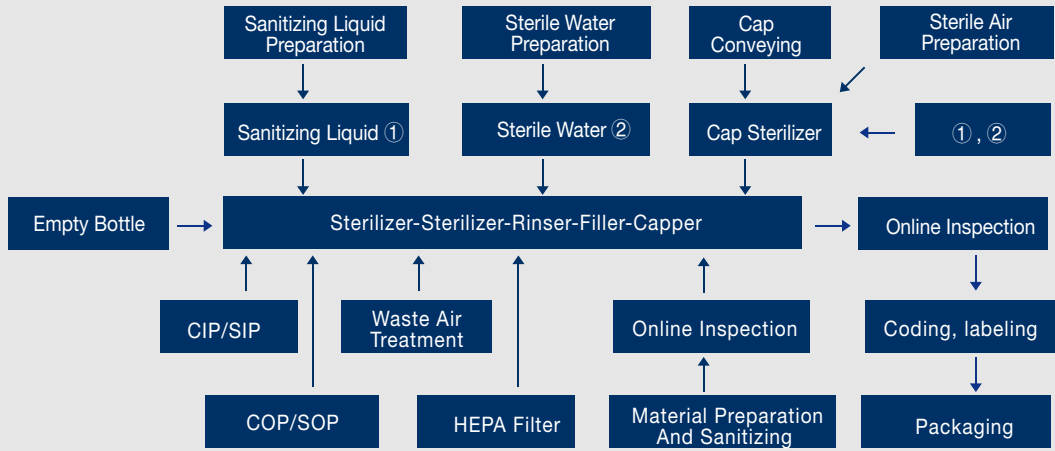
Aseptic filling process integrated aseptic isolation technology and microorganism control technology. It has its unique advantages and features:

1. Wide application range, which can be used to fill all type of liquid beverage, such as juice, tea, energy drinks, protein based beverage, milk based beverage.
2. Filling in ambient temperature results in reduced product heat contact time, reduced lost in vitamins and increased preservation in nutrition and flavor.

3. Packaging cost is less than hot filling products, more price advantage in the market.

4. Various packaging container design available.





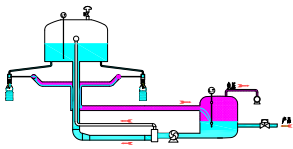
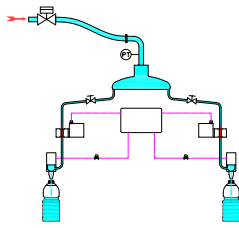
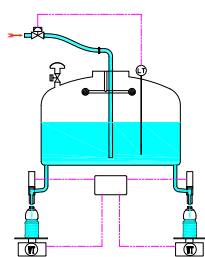
## Condiment Filling



Condiments can be categorized as liquid condiment and sauce condiment, the common products are soy sauce, cooking wine, vinegar, sugar syrup...

Due to high salt content in the products, there is a requirement for corrosion resistance. The key for filling is to control product foaming, and dripping.

Tech-Long condiment filling machines will meet all the above requirements. All the choice for you not only consider the hygiene of filling products, but also the reliability of equipment.

Filling Method	Mechanical Valve Filling	Flow Meter Filling	Weigh Filling
			
<b>Applicable Bottle Type</b>	PET/Glass/HDPE/PE/Aluminum Bottle	PET/Glass/HDPE/PE/Aluminum Bottle	PET/Glass/HDPE/PE/Aluminum Bottle
<b>Technical Features</b>	<ul style="list-style-type: none"> <li>▪ Different length of air vent tubes to control fill level</li> <li>▪ Hygienic design</li> <li>▪ Filling with reflux or filling without reflux</li> <li>▪ To guarantee the fill level with vacuuming device</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Maintenance free flow meters</li> <li>▪ Automatic CIP dummy bottle</li> <li>▪ Optimal flow path in filling valves to ensure the complete CIP</li> <li>▪ Selection of flow meters based on the product conductivity</li> <li>▪ Faster filling speed</li> <li>▪ Fast recipe change</li> <li>▪ Easy maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weighing instrument to control filling accuracy, free of filling volume limits</li> <li>▪ Reliable, easy maintenance, regularly adjust for platform</li> <li>▪ Fast recipe change</li> <li>▪ Positive pressure or gravity filling</li> <li>▪ Automatic or manual CIP dummy bottle</li> </ul>
<b>How to choose</b>	<ul style="list-style-type: none"> <li>▪ Fluid features of products</li> <li>▪ Low capex and low operating cost</li> <li>▪ Large container size and filling level as its measuring standard</li> </ul>	<ul style="list-style-type: none"> <li>▪ Volume as a measuring standard</li> <li>▪ Extremely high requirement for filling accuracy</li> <li>▪ Different bottle sizes in one machine</li> <li>▪ More rigorous hygienic requirements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weight as a measuring standard</li> <li>▪ Extremely high requirement for filling accuracy</li> <li>▪ Different bottle sizes in one machine</li> <li>▪ More rigorous hygienic requirements</li> <li>▪ large size containers filling</li> </ul>
<b>Capacity</b>	36,000 bottles per hour	36,000 bottles per hour	36,000 bottles per hour

## Household Chemicals and Personal Care Product Filling



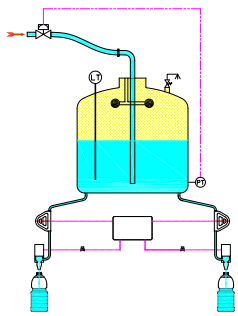
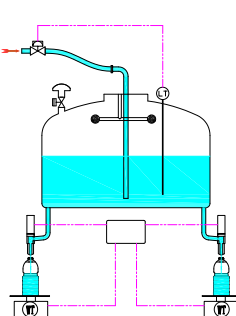
HPC products, such as laundry detergent, dish washing detergent, shampoo, thimerosal, hair conditioner, fabric softener, mouthwash, have irregular shapes in container and cap. Their packaging container keeps changing. During filing, foaming, stringing, dripping etc. are all the difficult points. The filling accuracy and hygienic requirements are also rigorous. Capacity requirement is also becoming a new tendency for filling equipment.

All these factors launched a challenge for filling technology.

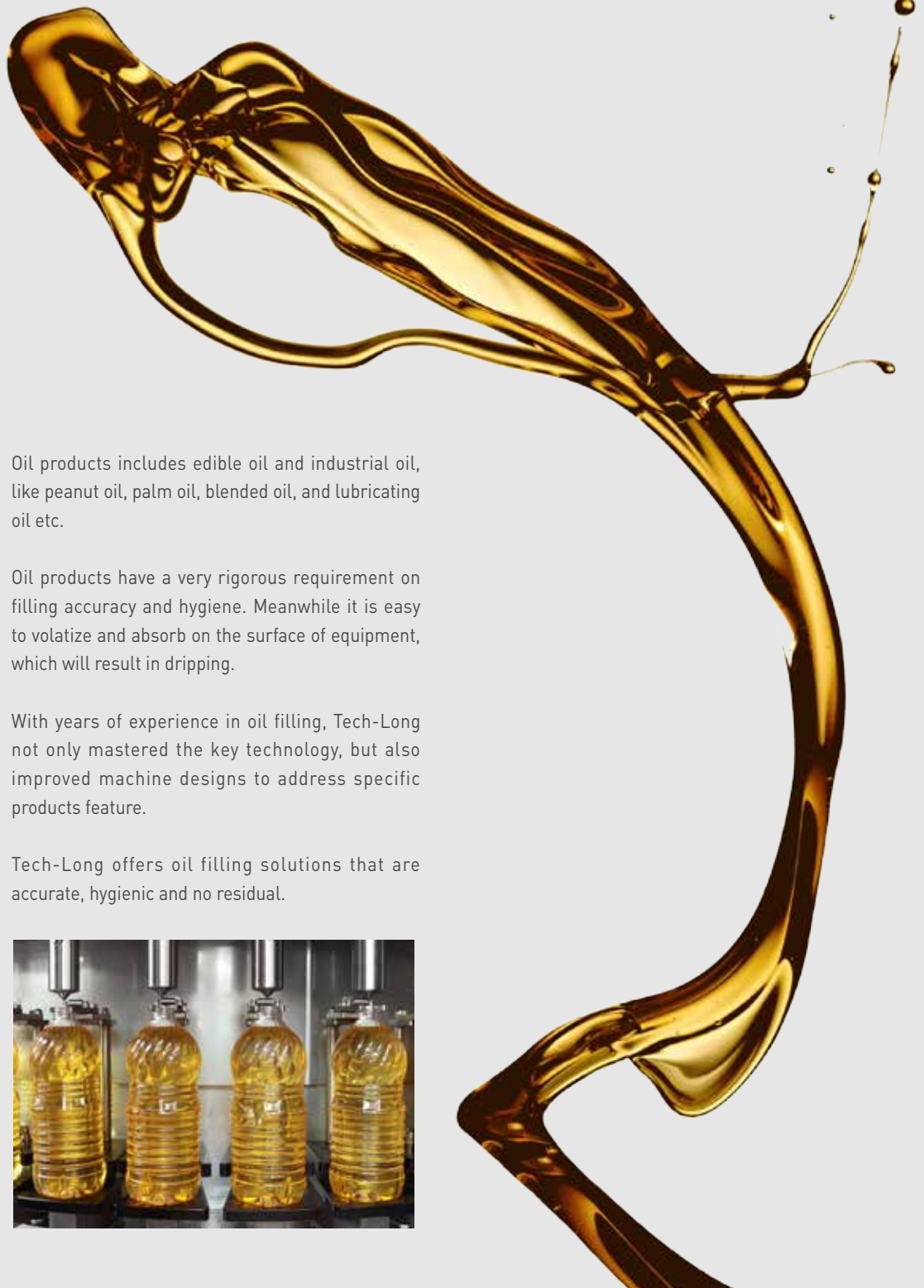
Tech-Long HPC filling machines fully consider all the key points. With our core technology and rich experience, we will provide you with a filling solution for your requirement. It will simplify your operations.





Filling Method	Flow Meter Filling	Weigh Filling
		
<b>Applicable Bottle Type</b>	PET/Glass/HDPE/PE Bottle	PET/Glass/HDPE/PE Bottle
<b>Technical Features</b>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Maintenance free flow meters</li> <li>▪ Automatic CIP dummy bottle</li> <li>▪ Optimal flow path in filling valves to ensure the complete CIP</li> <li>▪ Selection of flow meters based on product conductivity</li> <li>▪ Faster filling speed</li> <li>▪ Fast recipe change</li> <li>▪ Easy maintenance</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weighing instrument to control filling accuracy, free of filling volume limits</li> <li>▪ Reliable, easy maintenance, regularly adjust for platform</li> <li>▪ Fast recipe change</li> <li>▪ Positive pressure or gravity filling</li> <li>▪ Automatic or manual CIP dummy bottle</li> </ul>
<b>How to choose</b>	<ul style="list-style-type: none"> <li>▪ Volume as the measuring standard</li> <li>▪ Filling products are even</li> <li>▪ Frequent bottle change</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weight as the measuring standard</li> <li>▪ Filling products are even or not even</li> <li>▪ Large container size</li> </ul>
<b>Capacity</b>	36,000 bottles per hour	36,000 bottles per hour

## Oil Filling



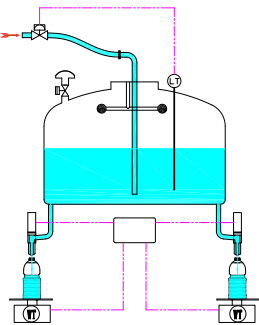
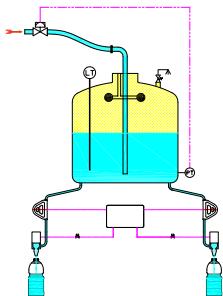
Oil products includes edible oil and industrial oil, like peanut oil, palm oil, blended oil, and lubricating oil etc.

Oil products have a very rigorous requirement on filling accuracy and hygiene. Meanwhile it is easy to volatilize and absorb on the surface of equipment, which will result in dripping.

With years of experience in oil filling, Tech-Long not only mastered the key technology, but also improved machine designs to address specific products feature.

Tech-Long offers oil filling solutions that are accurate, hygienic and no residual.



Filling Method	Weigh Filling	Mass Flow Meter Filling
		
<b>Applicable Bottle Type</b>	PET/Glass/HDPE/PE Bottle/Can	PET/Glass/HDPE Bottle
<b>Technical Features</b>	<ul style="list-style-type: none"> <li>▪ Weighing instrument to control filling accuracy, free of filling volume limits;</li> <li>▪ Suck back function on filling valve to avoid dripping</li> <li>▪ Fast recipe change</li> <li>▪ Positive pressure or gravity filling</li> <li>▪ Automatic or manual CIP dummy bottle</li> </ul>	<ul style="list-style-type: none"> <li>▪ Accurate fill level control</li> <li>▪ Maintenance free flow meters</li> <li>▪ Automatic CIP dummy bottle</li> <li>▪ Optimal flow path in filling valves to ensure the complete CIP</li> <li>▪ Faster filling speed</li> <li>▪ Fast recipe change</li> <li>▪ Easy maintenance</li> </ul>
<b>How to Choose?</b>	<ul style="list-style-type: none"> <li>▪ Large container size</li> </ul>	<ul style="list-style-type: none"> <li>▪ To do different bottle size in one machine (small size container)</li> <li>▪ High efficiency requirement</li> </ul>
<b>Capacity</b>	36,000 bottles per hour	36,000 bottles per hour

# The Development of Fillers Keep moving and innovating



- First blower-filer-capper monobloc in China (at speed of up to 33,000 BPH)



- 20,000 BPH water filling rinser-filler-capper monobloc



- 30,000 BPH hot filling machine
- 24,000 BPH carbonated rinser-filler-capper monobloc



- First 5-gallon water filling machine developed in China
- 15,000 BPH water filling machine and hot filling machine for small PET bottles



- 24,000 BPH hot filling rinser-filler-capper monobloc



- 28,000 BPH carbonated filling machines for PET bottles



- 40,000 BPH beer filling machine

Beverage

Non-Beverage

1999

2001

2002

2003

2004

2006

2008

2009



- First high-viscosity high speed volumetric filling machine in China

- Volumetric soy sauce filling machine for large containers
- 36,000 BPH mechanical valve filling machine with vacuum for soy sauces
- Successfully launched gravimetric filling machine for edible oil





- First blower-filler-capper monobloc for lightweight PET bottles



- World-class ultra-hygeinic volumetric filling machine with peristaltic pumps



- 36,000 BPH high-speed hot filling rinser-filler-capper monobloc
- First carbonated filling machine containing solid fibres
- 24,000 BPH hot filling rinser-doser-filler-capper for juice with pulp
- First carbonated blower-filler-capper monobloc in China



- 40,000 BPH ultra-hygeinic volumetric water filling machine
- 30,000 BPH blower-volumetric filler-capper for hot filling
- First rinser-filler-capper for cold filling products



- 36,000 BPH aseptic filling machine passed certification once only
- First high-speed blower-filler-capper monobloc in China at speed of up to 68,000 BPH
- First volumetric filling machine for lightweight aluminum bottles in China



- First water/carbonated/hot multi-functional volumetric filling machine in China



- First probe-type filling machine for juice with pulp
- Electronically-controlled carbonated filling machine
- 36,000 BPH ultra-hygeinic warm filling machine



- Ultra-hygeinic ambient filling machine passed certification once only
- 54,000 BPH high-speed blower-mechanical valve filler-capper for lightweight bottles

- Launched the first blower-filler-capper monobloc with speed up to 72,000 BPH for ultra-lightweight PET bottles
- Rotary gravimetric bulk water filling machine

2010

2011

2012

2013

2014

2015

2016



- New generation high-speed daily volumetric filling machine



- High-speed volumetric filling machine for soy sauce (rinser-filler-capper-capper-crowner-crowner)



- First volumetric filling machine with mass flowmeter control for edible oil



- Gravimetric filling machine for soy sauce with load cells
- High-performance servo-capping machine



- Volumetric filling machine with exterior filling level inspection
- First high-speed blower-volumetric filler-capper for edible oils with mass flowmeters
- New generation of high-performance edible oil gravimetric filling machine (at high-speed, high-precision, high-level-of-hygiene, and energy-saving)



- World-leading mechanical valve filling machine with vacuum for edible vinegar
- World-leading shaped cap processing device

- First positive pressure filling machine with mechanical valves for particle sources
- More hygienic and accurate edible oil gravimetric filling machine



# Our broad experience in the industry makes us the best partner to design or optimize your PET turnkey solution.

**YOUR ENTERPRISE IS UNBEATABLE, WHILE OUR STRENGTH IS OBVIOUS. AS THE LEADING COMPANY IN THE INDUSTRY, TECH-LONG OWNS ABUNDANT CONFIDENCE AND STRENGTH TO CUSTOMIZE TURNKEY SOLUTION FOR YOU.**

## **LONG-TESTED TURNKEY SOLUTION**

Tech-Long's high speed liquid packaging production line, including water treatment, beverage pre-processing, blower-filler-capper monobloc, injection moulding, blow molding, filling, conveying, labelling, packaging and so on. Over the years, hundreds of water lines have been successfully applied, and the rate of the complete line's production efficiency is higher than 85%, while the rate of the finished products is higher than 99.5%.

Based on the advantage of the liquid product packaging system, Tech-Long knows every technology of packaging system very well. And based on what mentioned above, Tech-Long developed automatic application turkey solution which constructed mainly by free technology. As the new industrial revolution's coming, Tech-Long will change its production mode and build automatic system to offer your turnkey solution in the best way, in order to offer you the turnkey solution in the best way that facing to the future.

## **CONTINUOUS INNOVATION ABILITY**

Listening to the clients' needs and focusing on the trend of the market, Tech-Long has always believed in the power of the products' innovation. And we will never give up innovation.

Tech-Long owns the only national qualified enterprise technological center in the industry, the combination of national and local

engineering research center, as well as over 340 professional technological and developing staffs. The rich technological developing techniques and superior professional talents are the source of continuous innovation. Until now, Tech-Long has already achieved over 370 technological patents and developed 3 to 5 new products per year.

## **AFTER-SALES SERVICE SYSTEM & SERVICE HOTLINE**

Tech-Long will be by your side since you purchase Tech-Long's products. In a word, what you buy is not only the products, but also Tech-Long's service.

Tech-Long has the standard machines and local service as well as more than 30 million spare parts. No matter where and when, Tech-Long will provide you with the quick and accurate service immediately according to your specified needs, so that you can experience convenient, professional and rapid after-sales service.

Hotline: **+86 20 62956800**

## **TECH-LONG TRAINING CENTER**

Tech-Long training center can provide you with the theoretical knowledge and practical training, so that your technological staffs' operation and machine's management ability can be all-sided improved from technology, production and maintenance. What's more, your machine's management cost can also be lowered down.





## TECH-LONG PACKAGING MACHINERY CO., LTD.

---

### HEADQUARTERS & MANUFACTURING BASE - GUANGZHOU

No. 23 Yunpu 1 Road, Luogang District, Guangzhou, 510530, China

Tel: (0086 20) 62956800

Fax: (0086 20) 82266913

E-mail: market@tech-long.com

## OVERSEA SUBSIDIARY COMPANY

---

### TECHLONG INC.

3400 Rivergreen Ct., Suite # 400 Duluth, GA 30096 U.S.A.

Tel: +1 770-623-2688

Fax: +1 770-623-3299

### TECH-LONG PACKAGING MACHINERY PLC

Bole kfil Ketema, kebele 03/05 House

No.2392 A.A at the back of millennium Hall, Addis Abab, Ethiopia

Tel: +251-912677005 +86-13760764591

## REGIONAL OFFICE

---

### SURE TECHNOLOGIES FZC (MIDDLE EAST)

P.O.Box 33827, Dubai-U.A.E.

Tel: + 9714 2869111

Fax: + 9714 2869222

### TECH-LONG JAPAN CO.,LTD.

05, Daishuu Bidg, Ueno 1-15-10, Taito-ku, Tokyo 110-0005 Japan

Tel: +03-5817-4058

Fax: +03-5817-4059

### TECH-LONG SURE INDIA CO.,LTD

8, Tirupati Udyog, I.B. Patel Road, Goregaon(E), Mumbai- 400 063

Tel: +91 22 26854930

Fax: +91 22 26864932

### PT SMARTPACK MACHINERY INDONESIA (INDONESIA)

Jl. Kedoya Agave Raya Blok I No.37 Jakarta Barat 11520

Tel: +62-21-5801543

Fax: +62-21-5804743

### TECH-LONG CEYLON COMPANY

135/1, Suvisuddarama Road, Colombo 6, Sri Lanka.

Tel: +9411 2367394

Fax: +9411 2367393

For more detailed information on Tech-Long products, please visit our website at: [www.tech-long.com](http://www.tech-long.com)

Stock Code **002209**

©2016 All rights reserved. Reproduction in whole or in part is forbidden without the express permission of the publisher.

Tech-Long keeps working on further development of our products. Thus, for the latest information, please contact our sales representatives. Although information in this brochure has been updated many times for accuracy, we recommend it is used for reference purpose only. Please take the practical machines, nameplate, and operation specification as standard.