TECH-LONG

RUNS FOR YOU!

达 意 隆

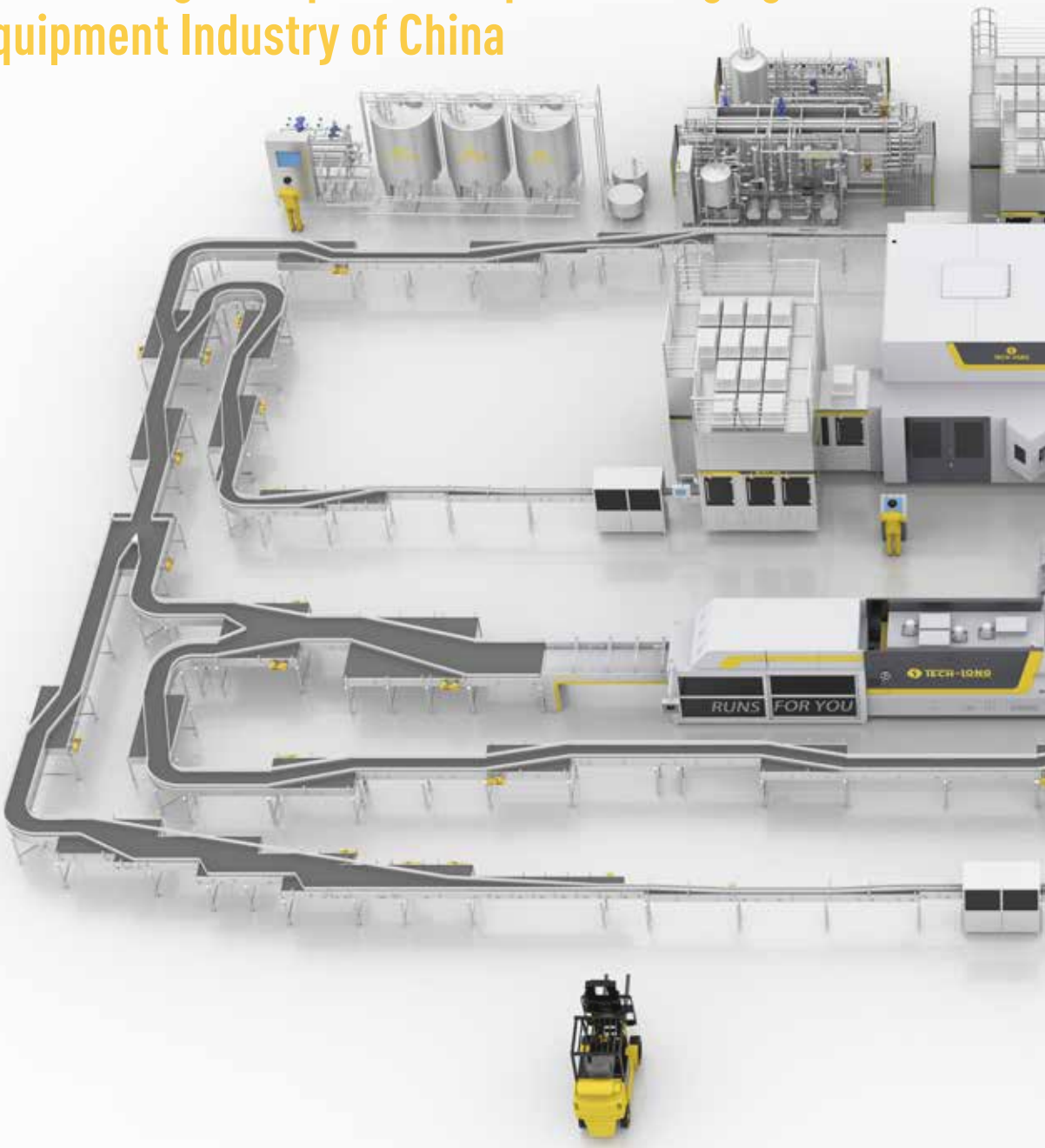
TECH-LONG



English Version

Tech-Long

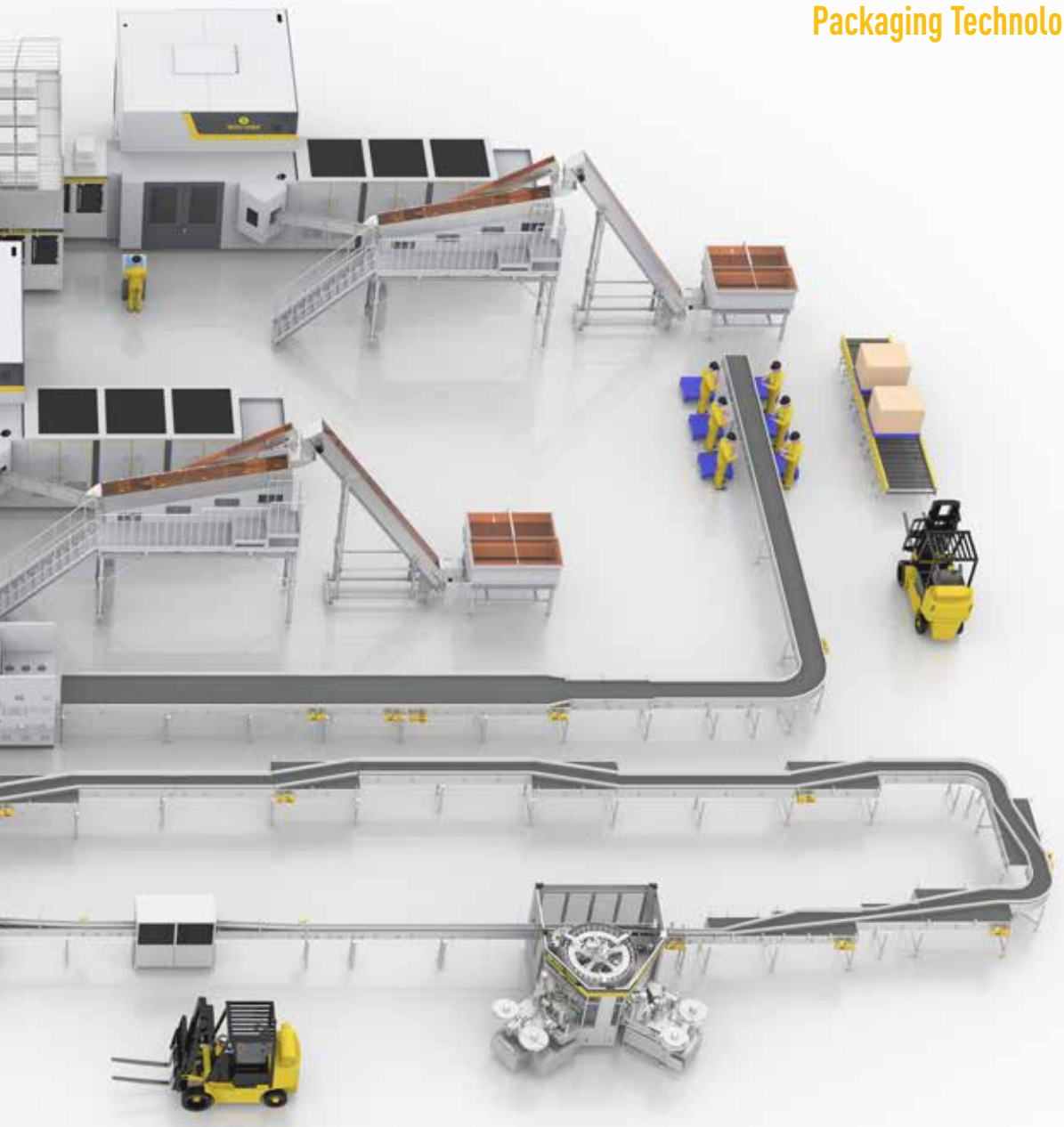
The Leading Enterprise in Liquid Packaging Equipment Industry of China





- ★ Initiator and drafter of national and industry standards
- ★ A model company in national intellectual property rights, a provincial backbone of strategic emerging industries, a provincial backbone of robots

Turnkey Solution for liquid package
Remote Control & Maintenance Service
Packaging Technologies



- ★ Global strategic partner of Coca Cola, Pepsi and P&G
- ★ The first national enterprise technology center in the industry, national & local joint engineering center, and postdoctoral scientific research workstation
- ★ Founded in 1998 as one of the few providers of complete line solution in the world
- ★ Listed on Shenzhen Stock Exchange in 2008 (Stock Code: 002209)



Content

01

Company Introduction 07
Brief Introduction of Manufacturing & Technologies 08
Advantages 10
Honors 12
Customers 14

02

Water Treatment System 16
Beverage Treatment System 18
Blow Molding Machine 20
Filling Machine 24
Large Container Filling Machine 28
Blower-Filler-Capper Monobloc 30
Blower-Labeler-Filler-Capper Monobloc Series 32
Labeling Machine 34
Conveying System 38
Packaging Machine 40

03

Spare Parts 44
MES System 46







Guangzhou Tech-Long Packaging Machinery Co., Ltd. (hereinafter referred to as "Tech-Long") established in the most economically vibrant Guangzhou Economic and Technological Development Zone in south China in 1998, is the largest manufacturer of beverage packing machines in Asia. On 30th January 2008, A-shares of Tech-Long (Code: 002209) were formally listed on Shenzhen Stock Exchange, and Tech-Long thereby became the first listed company in the industry of beverage packing machinery in China.

As a leading equipment manufacturer of the liquid packaging industry, Tech-Long provides global customers with complete lines and packing technologies of liquid products (including water treatment system, beverage treatment system, pet blow molding series, filling series, large container filling series, blower-filler-capper monobloc, blower-labeler-filler-capper monobloc,labeling series, conveying series and secondary packaging machine), smart workshops, top-level designs of smart factories, software and hardware. It also improves product processes and offers turnkey solutions to customers. It satisfies customer needs for all parts of the whole value chain, including product research and development, procurement, manufacturing, packing, warehousing, logistics, distribution and consumption.

Nowadays, Tech-Long has nine first tier wholly-owned subsidiaries subsidiaries, including Xinjiang Baolong Packaging Technology Development Co.,Ltd,Zhuhai Baolong Bottle Preform Co.,Ltd., Dongguan Baolong Packaging Technology Development Co.,Ltd.,Dongguan Tech-Long Water Treatment Technology Co.,Ltd., Tianjin Baolong Packaging Technology Development Co.,Ltd., Guangzhou Tech-Long Packaging Machinery Industrial Co.,Ltd.,TECHLONG INC.,Changji Baolong Packaging Technology Development Co., Ltd.,Guangzhou Kecheng Information Technology Co., Ltd.;Tech-Long has three second tier wholly-owned subsidiaries: Tsong Household Products(Guangzhou)Co.,Ltd., Tech-Long Europe GmbH,Guangzhou Kecheng Software Technology Development Co., Ltd.;Tech-Long has one joint stock subsidiary:Tech-Long Packaging Machinery India Private Limited.







Brief Introduction of Manufacturing and Technologies

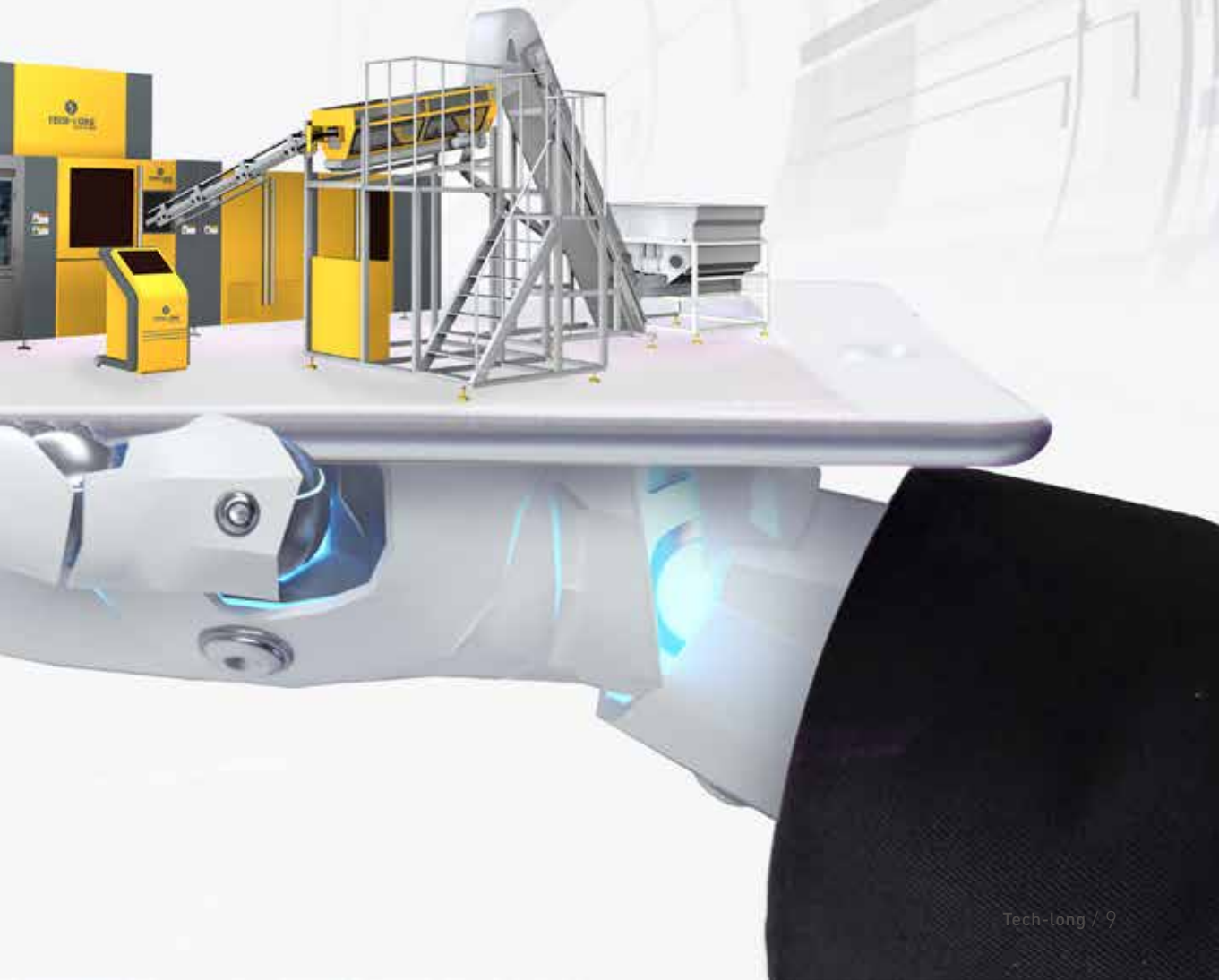




Each enterprise is the collection of activities which performs in product designing, producing, marketing, delivering, and supporting its product or service and delivering value to customers—these activities can be grouped into enterprise value chain.

In the value chain of manufacturing, Tech-Long understands every process of packaging system. With the advantages in packaging industry, Tech-Long is devoted to extending its supply scope to warehousing, logistics, and manufacturing and assembling to provide one stop service for its customers.

- **Over 340 engineers**
- **2,000m^2 National R&D center**
- Annually develops **3 to 5** new products
- As of the end of December 2023, Tech-Long has applied for a total of **1409** patents, registered **51** software copyrights, and has **724** valid authorized patents, including **262** valid authorized invention patents, **433** utility model patents, and **29** design patents; Registered **404** copyrights and owned **132** registered trademarks. Received **10** China Patent Excellence Awards and **1** Guangdong Patent Gold Award.
- In 2008, it had the sole laboratory of PET products in the industry and was the initiator and drafting unit of multiple national standards. It led and participated in the development of **1** international standard, **22** national standards, and **20** industry standards.
- Creatively developed four new key types of national grade products:
  RJM series automatic blow molding machines, CPXX series automatic high-speed PET blow molding machines, integrated automatic lightweight blowing-filling-capping monobloc and integrated complete sets of equipment for low-viscosity liquids
- Creatively developed five types of national high-tech products:
  Automatic high-speed soy sauce filling machines, hot filling lines for fruit and vegetable juice, high-speed hot filling lines for PET bottles, high-speed blow molding machines for PET bottles and CSD filling machines





Manufacturing and Processing

To effectively enhance its production and manufacturing capacity, Tech-Long has been increasing its investments in digitalization and automation of machining equipment. Since 2005, it has annually purchased ten sets of advanced machining equipment. Till now, it has more than 260 sets of machining equipment and over 70 high-precisionCNC machine tools. It has more than 120 professional operators and 20 top process technicians.



Quality Control and Detection Systems

Tech-Long attaches great importance to equipment and food safety. It set up maching department in 2006 and quality detection center in 2008. Every year, Tech-long invest a lot on R&D, machining and detection equipment. Till now Tech-Long has certified by CE, UL, ISO9001.

Advantages

Overview of Machining Equipment

- **Vertical lathe series** (5M, 3.5M, 2.5M and 1.6M vertical lathes)
- **Large-scale CNC boring & milling equipment** (MITSUBISHI gantry-type five face machining centers, Qier CNC floor-type boring and milling machines, KIA CNC horizontal boring and milling centers, gantry machining centers)
- **Vertical and horizontal machining centers**(Mazak gantry machining centers, KIA horizontal boring and milling centers, Mazak horizontal machining centers, Mori Seikiki machining centers, Yongjin vertical machining centers, HURC vertical machining centers, and Neway CNC machining centers)
- **CNC turning centers** (Mazak turning centers, Jianrong horizontal CNC lathes, KIA CNC lathes)
- **Other CNC precision equipment** (Mazak laser cutters, MITSUBISHI 2D laser cutters, Flow waterjet cutters, etc)



Value Plus Services

We are committed to quality, services and innovations. While seeking perfection in technologies, we also make every effort to provide high-quality services.

Dependent upon years of project experience and dedication to certain markets, Tech-Long understands challenges induced by liquid manufacturing and can jointly overcome difficulties together with you. Tech-Long can assure you of creating exceptional value for you through a range of new measures regardless of your production equipment, products or profitability.



Cooperation with International Well-known Suppliers

Maintain long-term cooperation with international well-known brands of components such as Siemens,SEW,ABB, KUKA, KSS, SMC and AirTAC.



Sophisticated Engineering Experiences

With rich experiences in general contracting and management of domestic and international projects, Tech-Long is one of very few suppliers of complete packaging lines from PET resin to finished products in the world. Based on its strengths in packaging projects accumulated over years, it owns abundant practical experiences in customers and integrators of service terminals. It helps customers realize efficient and flexible industrial production through its powerful service system.



Honors

In China, there are less than 1,100 national research and development centers, including Tech-Long which is the first listed company that established a national research and development center in the industry of packing machinery. As national high-tech enterprise, Chinese packaging leader and national pilot enterprise in intellectual property rights, Tech-Long is an equipment manufacturer which conforms to standards for military industries and shipbuilding.

Tech-Long achieves fruitful outcomes in research, development and innovation.

- Tech-Long has a national enterprise technology center
- In 2012, Tech-Long set up national/local joint engineering research centers for complete sets of beverage packing equipment and post-doctoral scientific research workstations
- Blow molding machines are parts of the national key torch program
- Filling machines are parts of the national key torch program



Drafter of National Standards

High-tech Enterprise

National Role Model in Intellectual Property Rights

National Enterprise Technology Center

National Engineering Research Center

Chinese Excellence Award for Patents

Guangdong Provincial Patent Medal

Progress Award for P&G Equipment Suppliers

Coca Cola's Award for the Most Significant Technology Progress

Postdoctoral Scientific Research Workstation



Customers

Global Brands

Beverage Brands

Coca Cola, Pepsi, Nestlé, Danone, Big Cola, SAB MILLER, etc

Non-beverage Brands

P&G, Unilever, HSBC, Yihai Kerry, Heinz, Inbev, Carlsberg, Heineken, etc

International Regional Brands

Beverage Brands

Tania, Dala, Hilwa, Fayha and Oasis (Saudi Arabia); pran (Bengali); origin and Yes (Ethiopia); RAMY (Algérie); SOSRO, Aqua, Tamobel and Indofood Asahi (Indonesia); Bisleri (India); THP (Vietnam); Oasia (Oman); мерkурнй (Russia), etc.

Non-beverage Brands

SAB Miller (UK), Adani Wilmar (India), Best Group (Indonesia), etc.

Domestic Famous Brands

Beverage Brands

C'estbon, Wahaha, Nongfu Spring, Robust, Blue Pine, Ganten, Runtian, Laothan, Yili, Anhui Yeling, Huangshan Wujixue, Zhejiang Happywood, GTS, China Mineral Water, LITED, Emeishan Xinfa, Sichuan Ama'ning, BlueSword, Yunnan Tianwaitian, Maixiangyuan, Bama Spring, Xinjiang Xuebaizhen, Pulisi, Watson, HeySong, Uni-President, Dali, Yinlu, Coconut Palm, Ten Wow, Zijiang, EASTROC, SPICE GIRL, Jiulongzhai, Beiqi (Shenzhen Baisheng), Dongyitang, Leyuan, VV, Ruinian Intrenational, Chongqing Qishuang, HT Lemon, Daqing Yueran, JinMaiLang, Mingren Food, XPH, etc.

Non-beverage Brands

Lonkey, BlueMoon, Longliqi, Hawley & Hazel Chemical, ECOLAB, Luhua, Haitian, Shinho, Meiweixian, Donggu, Jiajia, Laocaichen, Fortune Food, Tianjin Limin, Yanjing Beer, Zhujiang Beer, Qingdao Beer, Gree, etc

Water Treatment System





The technologies applied in water treatment system depends on the raw water quality and product water standards. According to the process difference, water treatment system can be divided into pretreatment system, fine treatment system and product use treatment system.

Pretreatment system includes multi-media filter, carbon filter, softener, iron and manganese filter, defluorination filter, ultrafilter and micron filter;
Fine treatment system includes RO system and ion exchange system;
Product use treatment includes: ozone, UV, polishing mixed beds, EDI or CDI treatment, etc.



Applications

- Water for food and beverage industries, purified drinking water, mineral water, sprint water, mineralized water, beverage, beer, liquor, and water for dietary supplements
- Desalination of brackish water and seawater
- Water for the electronics industry, and water for flushing electronic components (integrated circuits, silicon wafers, silicon wafers and display tubes
- Water supplied to boilers in power/chemical industries, and desalination of water supplied to corporate high-pressure boilers such as thermal power boilers and dynamical systems of low-pressure boilers for factories and mines
- Water for daily chemicals, extensive transfusion of the pharmaceuticals industry, injection, pills, biochemical products, other sterile water
- Waste water/reclaimed water-concentration and recycling of useful substances in water solutions
- Centralized treatment and supply of direct drinking water from pipes and drinking water
- Other unmentioned pure water equipment and ultra-pure water equipment

Beverage Treatment System



Beverage Treatment Hot Water System	Provide hot water for sugar dissolving, extraction, restoration of juice, milk and supplementary materials etc.
Sugar Dissolving System	Dissolve the granulated sugar in certain amount of hot water to make estimated brix syrup. Then, store the syrup for further use after thermal insulation/sterilization (optional), filtration and cooling.
Supplementary Material System	Provide supplementary materials necessary for fruit juice restoration and stabilizer.
Batching System	According to the process requirements, pumping syrup, other main and supplementary materials, fruit juice and RO water to the preparation tanks in order. Stir and uniformly mix them inside the preparation tank, and then perform sampling test. Keep the liquid still and prepare to deliver the liquid to the next process.
CIP System	CIP refers to the use of a mix of chemicals, heat and water to clean machinery, vessels or pipe work without dismantling them. It is an integral part of food and beverage production. It runs the water with chemical with certain pressure to clean the valves, PHE, pipe, and tanks, with several steps to provide a hygienic environment for food and beverage products.
Extraction System	Put plants such as tea and Chinese herbs in basket-type, bottom slag-discharging or reverse extraction tanks to which some water has been added in advance; extract by jacket heating, and then deliver the extraction to the preparation tank after filtration and cooling.
Various storage tanks, valves and pipe fittings	



Hot and ambient filling beverage treatment key equipment - sterilizer

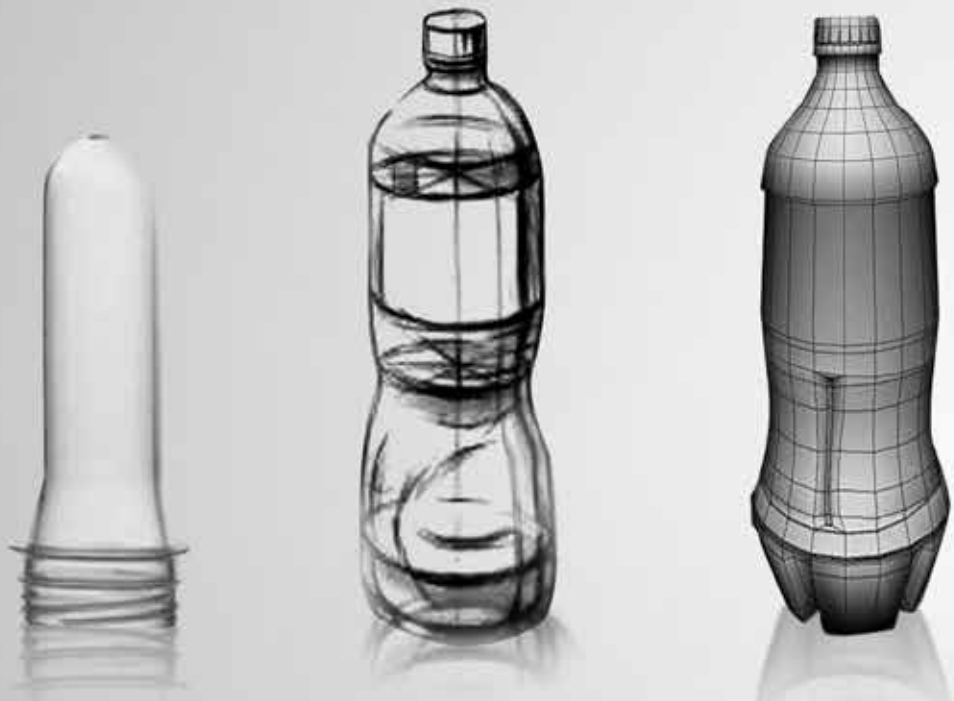
The sterilizer is used to kill microorganisms which may cause material spoilage and deterioration however, at the same time it preserves the original flavor and nutrient of products. The stringent process and prices treatment effectively prevent the secondary contamination of product and greatly extend the shelf life of the products. Tech-Long sterilizer applies corrugated tube with highly efficient heat exchange for product contacting part. Proper process and precise machine process save lots of cost.



Cold filling beverage treatment key equipment - mixer

Mixers are classified into mechanical and econometric mixers. They can fully mix final prepared syrup with deoxygenated water at the required ratio. After cooling, add carbon dioxide to the mixture to prepare uniform and stable carbonated beverage

Blow Molding Machine







Speed per cavity per hour

- **Water bottles:** up to 2750BPH (≤0.6L)
- **Hot filling bottles:** up to 2250BPH (≤0.5L)
- **CSD bottles:** up to 2700BPH (≤0.6L)



Tech-Long PET automatic rotary blow molding machine is the first high-speed blow molding machine developed in China since 2001.Through 20 years of development , the pinnacle of our engineering, the brand new G6 blow molding machine with higher speed and lower power consumption is one of the leading products on the market.Tech-long has become a world class supplier of blow molding machine.



Specification & Speed of Blow Molding Machines

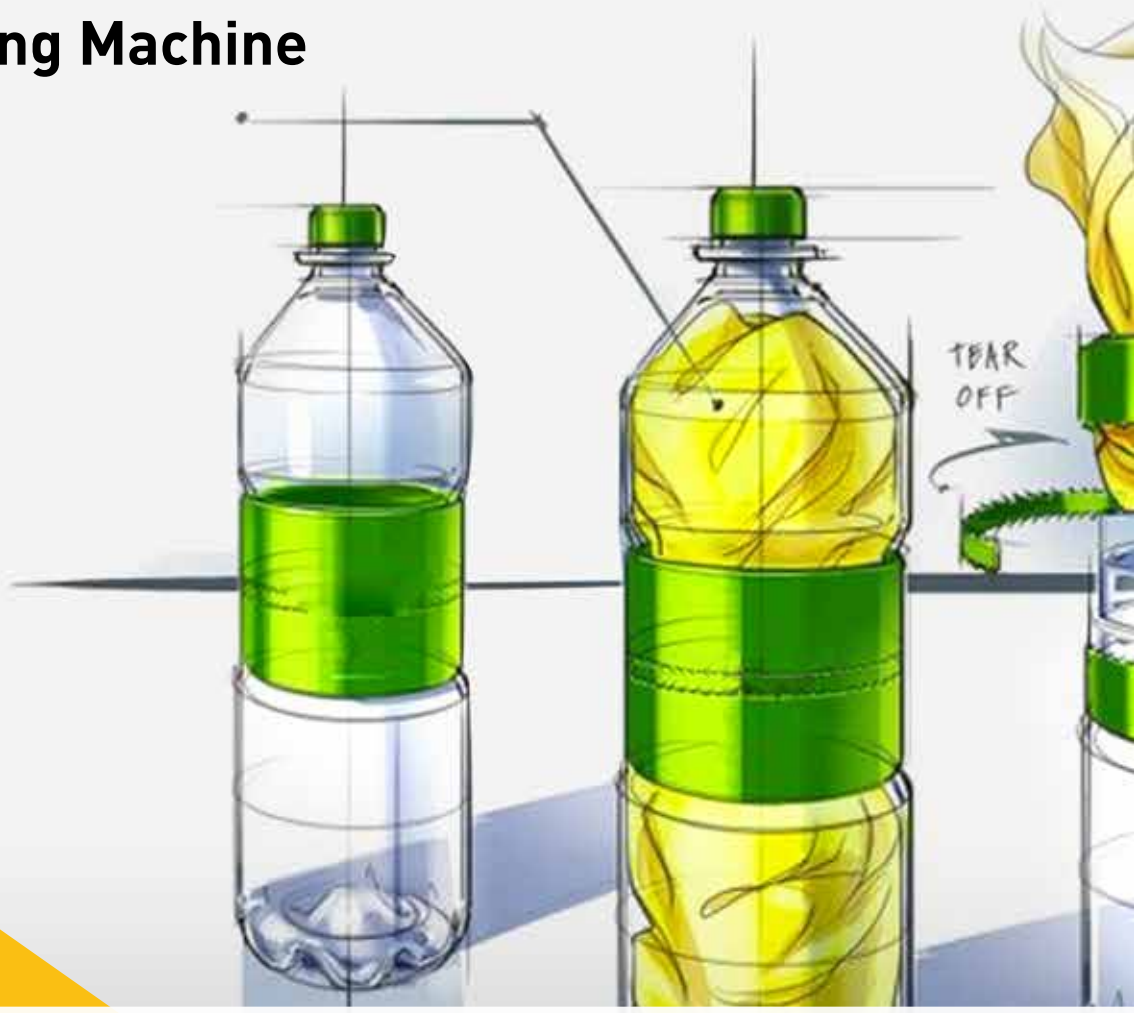
Series	Model	Cavities	Capacity			Bottle Volume	Application Scope
			Water Bottles	CSD Bottles	Hot Filling Bottles		
Standard cavities	CPX3	3	8250	8100	N/A	0.25-2.5L	Water Beverage Milk products Edible oil Food Medicine Cosmetics Detergent bottles, etc
	CPX4	4	11000	10800	4800-9000		
	CPX6	6	16500	16200	7200-13500		
	CPX8	8	22000	21600	9600-18000		
	CPX10	10	27500	27000	12000-22500		
	CPX12	12	33000	32400	14400-27000		
	CPX14	14	38500	37800	16800-31500		
	CPX16	16	43200	43200	19200-36000		
	CPX18	18	49500	49500	21600-40500		
	CPX20	20	55000	55000	24000-45000		
	CPX22	22	60500	60500	26400-49500		
	CPX24	24	64800	64800	28800-54000		
	CPX26	26	70200	70200	31200-58500		
3L cavities	CPXM06A	6	9600	9600	6000-9000	0.25 - 3.3L	Water bottles and CSD bottles with a volume below 3.3L
	CPXM08A	8	12800	12800	8000-12000		
	CPXM10A	10	16000	16000	10000-15000		
	CPXM12A	12	19200	19200	12000-18000		
	CPXM14A	14	22400	22400	14000-21000		
	CPXM16A	16	25600	25600	16000-24000		
	CPXM18A	18	28800	28800	18000-27000		
	CPXM20A	20	32000	32000	20000-30000		
	CPXM22A	22	35200	35200	22000-33000		
	CPXM24A	24	38400	38400	24000-36000		
Square cavities	CPXF6A	6	9600	9600	6000-9000	0.25 - 3L	Big-diameter water and juice bottles with a volume of about 2.5-3L Bottles with a volume of about 2L and hind handles
	CPXF8A	8	12800	12800	8000-12000		
	CPXF10A	10	16000	16000	10000-15000		
	CPXF12A	12	19200	19200	12000-18000		
	CPXF14A	14	22400	22400	14000-21000		
	CPXF16A	16	25600	25800	16000-24000		
	CPXF18A	18	28800	28800	18000-27000		
	CPXF20A	20	32000	32000	20000-30000		
	CPXF22A	22	35200	35200	22000-33000		
	CPXF24A	24	38400	38400	24000-36000		



Series	Model	Cavities	Capacity		Bottle Volume	Application Scope
			Water Bottles	CSD Bottles		
Small cavities	CPXX16A	16	38400	32000	≤0.77L	Water Beverage Milk products Edible oil Food Medicine Cosmetics Detergent bottles, etc
	CPXX18A	18	43200	36000		
	CPXX20A	20	48000	40000		
	CPXX22A	22	49500	44000		
	CPXX24A	24	54000	48000		
	CPXX26A	26	58500	52000		
	CPXX28A	28	63000	56000		
	CPXX30A	30	67500	60000		
	CPXX32A	32	72000	64000		
			Water Bottles (4-6L)	Edible Oil Bottles (10L)		
Big cavities	CPXD02	2	2000	1200	Φ200x410 4-20L	Water Beverage Edible oil bottles, etc
	CPXD04	4	4000	3000		
	CPXD06	6	6000	4500		
			12L	20L	Φ280x500 12-20L	
	CPXG04	4	3000	2000		
	CPXG06	6	4500	3000		

Series	Model	Cavities	Bottle Volume (≤600ml)	Max Bottle Size	Application Scope
			Yield		
Preferential heating bottles	CPX04T	4	8000	2L	Beverage Milk and milk products Edible oil Food Medicine Cosmetics Detergent bottles, etc
	CPX06T	6	12000		
	CPX08T	8	16000		
	CPX10T	10	20000		
	CPX12T	12	24000		
	CPX14T	14	28000		
	CPX16T	16	32000		
	CPX18T	18	36000		
	CPX20T	20	40000		
	CPX22T	22	44000		
	CPX24T	24	48000		
	CPX26T	26	52000		

Filling Machine



Filling machine is a machine to fill various liquid into hygienic containers and seal them with caps under clean environment.

How to make more hygienic products? How to get products taste better? What packages shall be used to better attract consumers? Ultimately, these thoughts are the standards for selecting proper filling solution.

The combination of products varieties and package pattern difference brings multiple requirements for filling solution. Tech-Long filling machine can fit to infinite products, it can provide multiple filling process, several filling technologies and different hygienic requirements

Applicable Containers

- **Bottle material:** PET, glass, metal, PP, PE, HDPE
- **Bottle transfer:** neck loading, bottom loading
- **Bottle shape:** square, round, eclipse
- **Bottle size:** different heights and sections



Applicable Products

- **Beverage**: water, CSD drinks, non-CSD drinks...
- **Non-beverage:** daily chemicals, condiments, edible oil products

Filling Methods

- **Volumetric filling:** mechanical valve, vacuum assisted, mass flowmeter, electromagnetic flowmeter, electronic valve, weighing...
- **Pressure filling:** gravitation, constant pressure, negative pressure, positive pressure...



Multiple choices:
There is always one best solution for you

Product Series / Filling Method		Beverage Filling			
		Small-bottle Water	Large-bottle Water	Carbonated products	Hot filling products
Level	Mechanical	√	√	√	√
	Electronic	√		√	√
	Probe				√
	Level detection		√		
Weight/ mass	Weighing		√		√
	Mass flowmeter	√		√	
Volume/ capacity	Electromagnetic flowmeter	√		√	√
	Peristaltic pump				√
	Plunger				√
Applicable products		Mineral water Purified water Other drinking water		Cola Sprite Soda Salt soda sparkling mixed beverage Flavored water ...	Fruit juice Tea Liquid food Mixed milk products Energy drinks Milky tea Coffee ...

To provide you with better services, Tech-Long has been sticking to innovations and has creatively developed several filling technologies.

Apply to different products and meet various technological requirements.

Aseptic and Ultra-hygienic Beverage Filling				Non-beverage Filling		
Ultra-hygienic-Cold Chain	Ultra-hygienic-Ambient	Ultra-hygienic-Warm	Aseptic	Condiments	Daily Chemicals	Oil Products
√	√	√		√	√	
				√		
√	√	√		√	√	√
						√
√	√	√	√	√	√	
√						
√						
Fresh milk Fresh fruit juice Vegetable juice Yogurt	Water Flavored water Fruit juice Juice-containing beverage sparkling mixed beverage ...	Fruit juice Tea drinks Liquid food Mixed milky drinks Energy drinks ...	Fresh fruit juice sparkling mixed beverage Liquid food Flavored water Mixed milky drinks Energy drinks Milky tea Coffee ...	Soy sauce Cooking wine Vinegar Sugar water ...	Shampoo Hair conditioner Laundry detergent Hair portion Disinfectant Detergent Shower gel Mouthwash...	Edible oil Industrial oil ...

Large Container Filling Machine

In 1991, China's first barreled water emerged in Zhuhai. Through decades of development, large volume liquid packages have become diverse. Meanwhile, a great variety of products such as 5-gallon PET barrels, 5L and 12L flexible barrels have been launched in markets in succession to meet different markets and consumers. Filling machines have been developing with package type. To meet different packing requirements, Tech-Long has developed more and more large volume filling series.



Three/ Five Gallon Equipment



Tech-Long 3/5 gallon fully automatic filling machine has the features of outstanding design, simple operation, reliable performance, proper process, and food grade hygienic conditions. It is composed of empty bottle conveyors, pre-rinsier, decapper, external washer, rinser, filler, capper, visual lamp, shrink tunnel bagging machine, products conveyors, and palletiser. It can realize fully automatic production. The whole process is strictly complied with national hygienic standards and regulations and there is no secondary contamination during the filling process. It is the most reliable,accepted machine for water and beverage companies. 3/5 gallon bottle purified water, spring water etc.

Product Series	Equipment
3 and 5-gallon Filling Machine	Decapper
	Rotary External Washer
	Visual Lamp
	Shrink Tunnel
	Cap Elevator
	Cap Rinser
	Bagging Machine
	External Washer-Rinser-Filler-Capper Monobloc
	Rinser
	Filler
One-gallon Filling Machine	Rinser-Filler-Capper Monobloc
	Blower-Filler-Capper Monobloc

Fl Series One Gallon Blower-Filler-Capper Monobloc

This equipment combines blower, filler ,capper in one block. It has small footprints, low energy consumption. This equipment complete the whole process from preform to product and has the features of high efficiency, energy saving and hygiene.

Equipment productivity: 2000BPH-6000BPH



F Series Rinser-Filler-Capper Monobloc

F series rinser-filler-capper is the latest developed product for one gallon filling technology. This equipment combines rinser, filler ,capper in one block, which keeps the high efficiency and reliable performance. This machine fills one gallon products in hygienic room to complete from empty bottle to products, which ensures the product safety and hygiene.

Equipment productivity: 2000BPH-6000BPH



Blower-Filler-Capper Monobloc





Innovative technology to use single machine to complete the process from preform to bottled liquid product

Blower-filler-capper monobloc is a powerful combination. It combines blower, filler ,capper in one block. It is the best choice compared with traditional production line. It is competitive and can improve the whole value of packaging production line.

efficient, environmental, hygienic, economic, flexible ... It has the features whatever you want.

In product application, it can be used to produce all PET containers in the market and also complete the filling for different liquid products. Meanwhile. It removes the conveying system, empty bottle storage space and loading procedures, improves package conditions, reduces contamination, increases the machine efficiency, saves energy and saves cost.

As the rarer suppliers who has the key technology of PET blower and filler, Tech-Long is the pioneer of monobloc machine. Since 2009, Tech-Long developed the first blower-filler-capper monobloc, we keep improving and enlarging our products range. In 2013, Tech-Long launched ultra hygienic volumetric blower-filler-capper monobloc, which is the leading position in the world.

What bottle we can blow ?

Round PET bottles
Square PET bottles
Shape PET bottles
Lightweight PET bottles

What's the bottle size?

200 ml
—
10 L

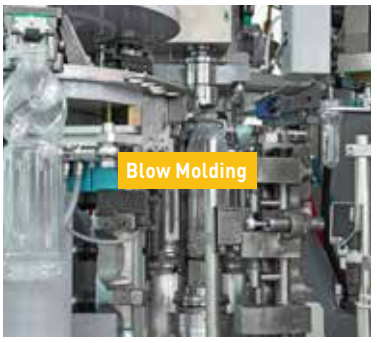
What kinds of product we can fill?

Water
Fruit juice
Tea drinks
Carbonated drinks
Edible oil
Daily chemicals

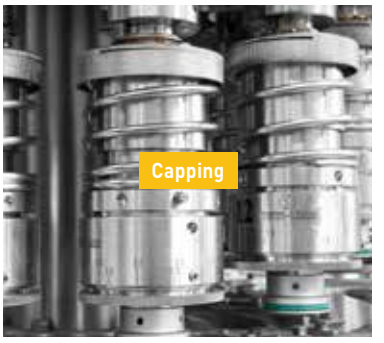
Capping

Plastic flat caps
Plastic sports caps

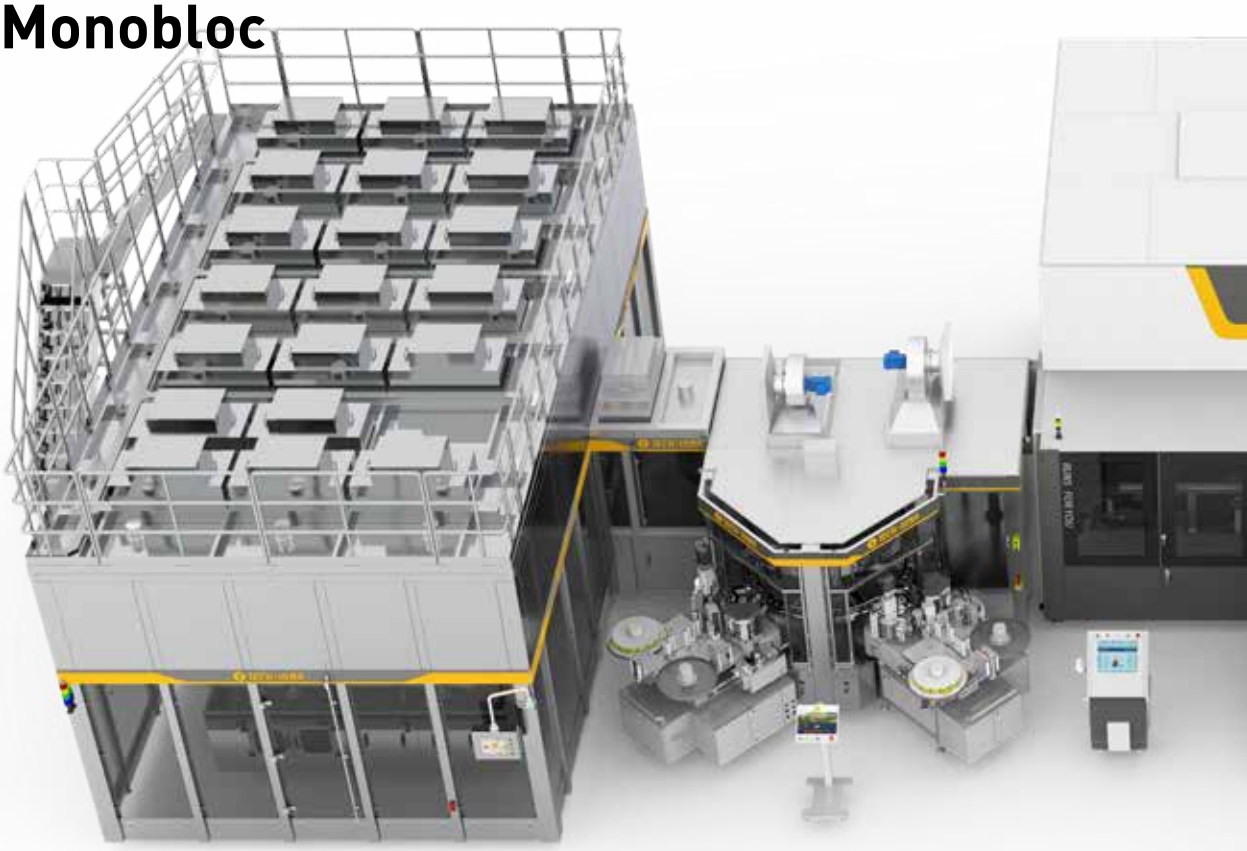








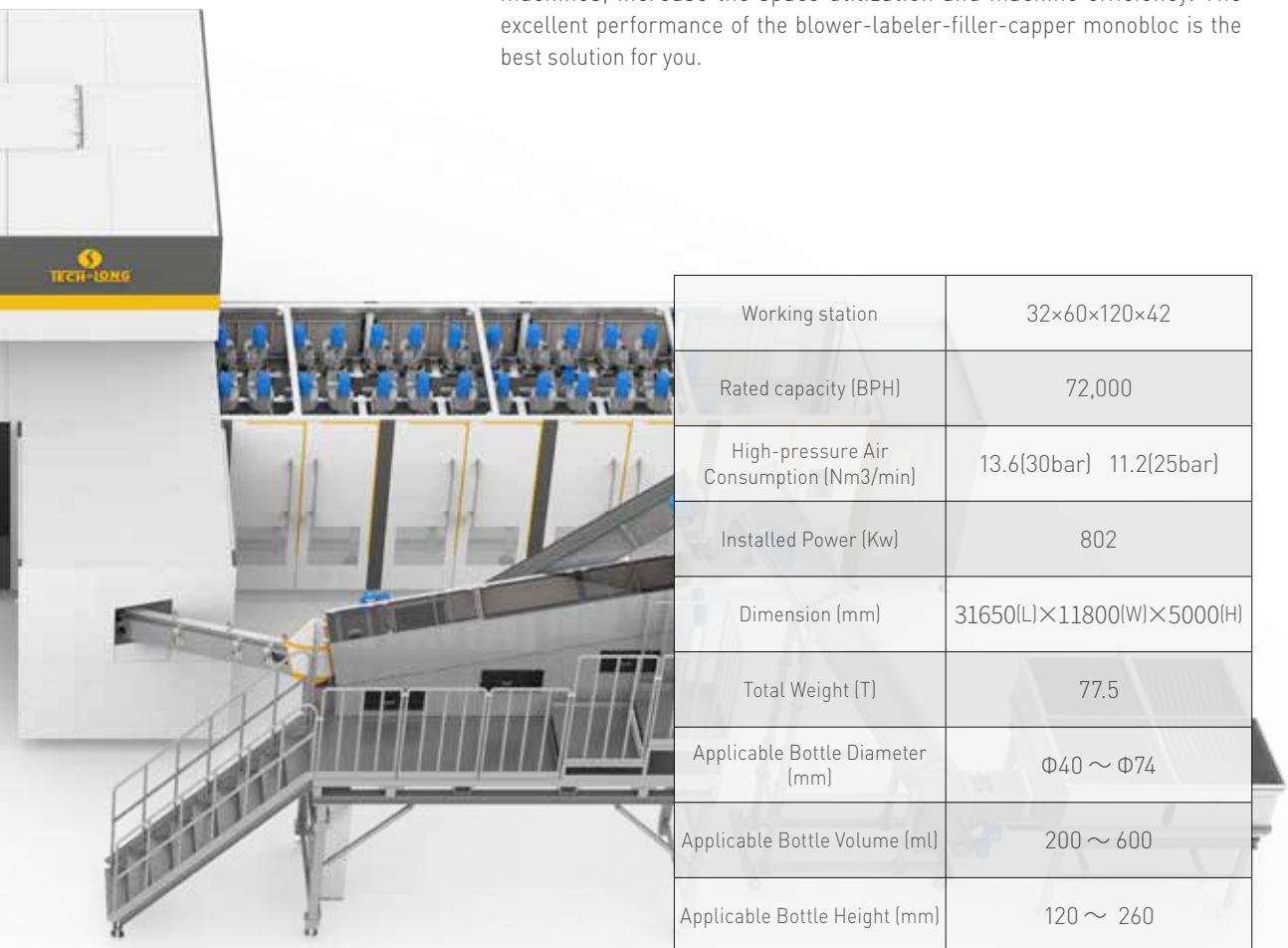
Blower-Labeler-Filler-Capper Monobloc



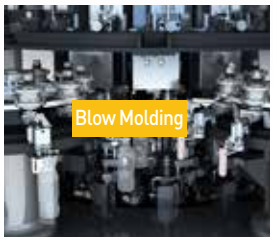
Our strengths

- Highly integrated function parts remove the conveyors, accumulation table and air blower before the labeler, which saves over 30% production space.
- Only one person to operate four equipment.
- More hygienic due to less intermediate transfer and less cross contamination;
- Gripper transferring for all function parts to reduce bottle scratch during the transmission
- Automatic reject empty bottles and missing label bottles enables machine running at stable speed;
- Bottle types are easy to shift in production lines, and intelligent equipment management systems are supplied. Automatic data acquisition, monitoring of production lines and remote assistance guarantee high-performance equipment operations.
- Overall equipment efficiency is up to 95%.

Blower-Labeler-Filler-Capper Monobloc efficiently integrates blow molding, labeling, filling and capping machines in one block. It is the most advanced technology in Asia. It enabled the blowing, labeling, filling and capping working in the same block, which reduces the conveyors in between these machines, increase the space utilization and machine efficiency. The excellent performance of the blower-labeler-filler-capper monobloc is the best solution for you.



Working station	32×60×120×42
Rated capacity (BPH)	72,000
High-pressure Air Consumption (Nm3/min)	13.6(30bar) 11.2(25bar)
Installed Power (Kw)	802
Dimension (mm)	31650(L)×11800(W)×5000(H)
Total Weight (T)	77.5
Applicable Bottle Diameter (mm)	Φ40 ～ Φ74
Applicable Bottle Volume (ml)	200 ～ 600
Applicable Bottle Height (mm)	120 ～ 260
Label Width (mm)	30 ～170
Label Length (mm)	138 ～ 250
Label Height (mm)	35 ～115









Labeling Machine

Hot Melt Glue Labeling Machine



Tech-Long Hot Melt Glue Labeling Machine is a machine applied new research result. It has the feature of proper design, reliable performance, low running cost, high competitiveness etc. It can meet the round bottle, square bottle, eclipse bottle in different production line. It can also be used to label before filling or after filling.

Design feature

- Simple, easy operation;
- Optimized design, less consumable parts;
- 10 Minutes to do different bottle change over
- Mobile and fixed cutter adjustment simple, long time cutter
- Optimized label feeding and control to meet different label application
- Optimized glue system to meet different glue application



SN	Type	Non-fixed position Label	SN	Fixed position Label	Fixed position Label
1	1-PHR6A	4000BPH (large bottles)	10	1-PHR6E	4000BPH (large bottles)
2	1-PHR9X	3000BPH (large bottles)	11	1-PHR9F	7000BPH (large bottles)
3	1-PHR12A-9	4000BPH (large bottles)	12	1-PHR9FD	9000BPH (large bottles)
4	1-PHR12A	8000BPH (large bottles)	13	1-PHR12E	8000BPH (large bottles)
5	2-PHR12A	18000BPH	14	1-PHR12F	14000BPH (large bottles)
6	2-PHR18A	28000BPH	15	2-PHR16E	18000BPH
7	3-PHR24A	36000BPH	16	3-PHR20E	24000BPH
8	4-PHR24A	43200BPH	17	4-PHR25E	36000BPH
9	4-PHR30A	48000BPH	18	4-PHR32E	36000BPH

Bottle Parameters		Label Parameters	
Bottle Height	150mm-375mm	Label Height	30mm-175mm
Bottle Diameter	55mm-160mm	Label Length	185mm-360mm
Customized machine is available			

Labeling Machine



Rotary Self-adhesive Labeling Machine

Rotary self-adhesive labeling machine is independently developed by Tech-Long to meet customers' growing needs for simple, safe and efficient labeling machines. It is suitable for switching between full and empty bottle labeling. Both container rotation and label conveyance are controlled by servo motor. This machine is highly reliable with high positioning precision, higher adaptability and flexibility.

This machine is suitable for various common amorphous containers in different shapes (round, square, oval) and made of different materials (plastic, glass, metal). This series has several layouts for feeding and discharging bottles to increase customers' utilization of venues.



Design Features

- Label can be applied to any position of bottle due to servo control bottle rotary. The position accuracy is high and the reaction is fast.
- Labeling station is rapidly regulated in multiple directions to label on different irregular surfaces such as cylindrical and tapered surfaces;
- Servo-based labeling station minimize prevision of label delivery and reduce system vibration and noise;
- Modular layout of multiple labeling stations makes it possible to increase or decrease labeling stations as per customer requirements and stick several labels on each product;
- Modular labeling stations are suitable for different types of labeling such as labeling with hot melt and self adhesives;
- Antistatic systems of labeling stations increase precision of label delivery and labeling. They ensure cleanliness of bottles and labels;
- Label coding (spray coding) and inspection satisfies customers' diverse needs.

SN	Machine Model	Max Number of Labeling Stations	Output	Output per Labeling Station	Output of Multiple Labeling Stations
1	TRM-576-12-E	2	18000BPH	100m/min	90m/min
2	TRM-720-18-E	2	24000BPH	100m/min	90m/min
3	TRM-960-24-E	3	36000BPH	100m/min	90m/min
4	TRM-1200-30-E	4	48000BPH	100m/min	90m/min
5	TRM-1800-30-E	6	65000BPH	100m/min	90m/min

Bottle Parameters		Label Parameters			
Bottle Height	150mm-375mm	Label Height	30mm-230mm	Labeling Height	15mm
Bottle Diameter	50mm-110mm	Label Length	30-200mm	Labeling Precision	±0.05mm
Customized machine is available					

Conveying System

In water, beverage, diary, edible oil, cosmetics production lines, conveying system plays an important role. How to connect the independent equipment into a proper complete line and reach to best efficiency,has a great relationship with conveying system design.



Cooling Tunnel

Output **6000-72000**BPH

PET bottles, glass bottles, Al bottles .Used to cool filled PET and glass bottles in hot filling line



Air Conveying System for empty bottles

Max conveying speed **95**m/min

Empty PET bottles
Used to convey empty PET bottles with different shape and size



Carton Conveying System

Max conveying speed **80**bags/min

Cartons, plastic cartons, wrapped case , Used to convey cartons, plastic cartons and wrapped case for beverage production lines



Bottle Conveying System

Output: **6000-72000**BPH

PET bottles, glass bottles, Al bottles , Customize conveying methods as per bottle types, Inverters control conveying speed

Common conveying

Bottle conveying system

Case conveying system

Cap conveying system

Air conveying system for empty bottles

(Including sterile air conveying)

Functional conveying

Cooling tunnel

Bottle warmer

Ring unscrambling and pressing system

Tilting conveying system

Cap sterilizing system

Auxiliary functional products

Handle application system

Cap blower

Air dryer

Visual lamp

Cap/bottle elevator



Bottle Warmer

Output: **6000-72000**BPH

PET bottles, glass bottles, Al bottles , Used to warm filled PET and glass bottles in low-temperature filling lines



Tilting Conveyor

Output: **6000-48000**BPH

PET bottles, glass bottles, Al bottles , Used in production lines of hot filled beverage in PET and glass bottles



Accumulation Table

Output: **6000-72000**BPH

Customize buffer methods as per bottle shape; buffer and relieve pressure of products by controlling conveying methods



Handle Application System

Output: **800-6000**BPH

PET and glass bottles
Add lifting rings to bottles in production lines of big barrels of water, wine, grain, oil and daily chemicals, etc

Packaging Machine



Tech-Long's Packaging Machines can be categorized as **Shrink Wapper and Wrap Around Packer, Palletizer and Depalletizer, Case Packer and Case Unpacker** as well as **Integrated Automation System**.

Each machine involves multiple types of products, widely used in several industries of industrial manufacturing. Various bottled, canned and barreled products can be secondarily packaged. Each series can be also used in combination with the production lines for automatic filling. Easy to adjust, operate and repair, they are highly automatic and exercise reliable control.



Shrink Wrapper & Wrap Around Packer

Widely used for industrial packing of glass bottles, PET bottles and cans of beverage, beer, food and medicine, etc.
Production type: PET、PP、HDPE、Glass bottle、Aluminum bottle...
Diameter Range: 50mm-160mm

Series	Modes	Model	Description	Packs/min	Production Size(mm)	Machine L×W×H(mm)
Wrapper Packer	Single lane	MB30	Cylinder divider	28	L=150-450 W=100-300 H=100-330	11190×1570×2470
		MB35	Single servo divider	35	L=150-450 W=100-300 H=100-330	11190×1570×2470
		MB40/45	Double servo divider	40	L=150-450 W=100-300 H=100-330	11190×1570×2470
		MBC40	Double servo divider+Next By	40	L=150-450 W=100-300 H=100-330	12370×1570×2470
		MBS50	Down filmfeed	45	L=150-450 W=100-300 H=100-330	13840×1570×2470
		MBC50	50 Packs+Next By	50	L=150-450 W=100-300 H=100-330	14150×1870×2300
		MB50	50 Packs	50	L=150-450 W=120-300 H=100-330	13650×1870×2300
		MB60	60 Packs	60	L=150-450 W=120-300 H=100-330	15100×1870×2300
		MBC60	60 Packs+Next By	60	L=150-450 W=120-300 H=100-330	19387×1870×2300
		MB70	70 Packs	70	L=150-525 W=120-300 H=100-330	16500×1628×2505
	Double lane	MBX90	Single 45 Double 90	90	L=120-450 W=120-300 H=100-330	14150×1870×2500
		MBX100	Single 50 Double 100	100	L=120-450 W=120-300 H=100-330	14150×1870×2500
		MBS120 (Multipack)	Single 60 Double 120	120	L=120-450 W=120-300 H=100-330	13650×1870×2500
		MBX120	Single 60 Double 120	120	L=120-450 W=120-300 H=100-330	17500×1870×2500
		MBX140	Single 70 Double 140	140	L=120-525 W=120-300 H=100-330	17185×1870×2500

Series	Modes	Model	Description	Packs/min	Production Size(mm)	Machine L×W×H(mm)
Shrinking Wrapper Packer	Carboard	MB30D	Carboard	28	L=150-450 W=120-300 H=100-330	11190×1570×2470
		MB45D	Carboard	40	L=150-450 W=120-300 H=100-330	11190×1570×2470
		MB50D	Carboard	50	L=150-450 W=120-300 H=100-330	13605×1870×2500
		MBX90D	Carboard film Only	90	L=120-450 W=120-300 H=100-330	13605×1870×2500
	Tray	MBT35	Tray+Film Only	30	L=150-450 W=120-300 H=100-330	12690×1870×2470
	Pack film	MBX40	Servo divider	40	W=150-450 L=120-300 H=100-330	12000×1870×2500
Wrap Around Packer	Carboard	ZB30	Cylinder divider	28	W=150-450 L=165-300 H=100-330	10615X2000X2400
		ZB35	Single servo divider	35	W=150-450 L=165-300 H=100-330	10615X2000X2400 10995X2000X2400
		ZB35K	Single servo divider (Bigger size)	35	W=150-450 L=165-300 H=100-330	10915X2100X2590
		ZB45	Double servo divider	40	W=150-450 L=165-300 H=100-330	10615X2000X2400 10995X2000X2400
		ZB45K	Double servo divider (Bigger size)	40	W=150-450 L=165-300 H=100-330	10915X2100X2590
		ZB60	Servo Infeed Carboard	50	W=150-450 L=165-300 H=100-330	15535X4200X2400
		ZBX60	Whole Servo	60	W=150-450 L=165-300 H=100-330	15535X4200X2400
		ZB70	Whole Servo	70	W=120-450 L=120-300 H=100-330	14830X4000X2400
		ZB80	Whole Servo	80	W=120-450 L=120-300 H=100-330	14830X4000X2400

Case Packer and Case Unpacker

Widely used for industrial packing of beverage, beer, food, non-food glass, plastic bottles/cans and medicine, etc.

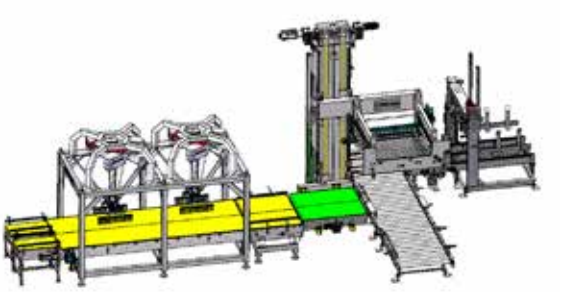
Bottle type: Φ55-100, 330ml-1.5L, H=230-330



Series	Machine Type	Model	L*W*H (mm)	Total Installed Power	Speed
Case Packer	Straight Bottle Robot Case Packer	JRZX180A	9600×3280×2600	30KW	36000~48000BPH
	Side Bottle Robot Case Packer	JRZX180B	4600×2820×2600	20KW	24000~36000BPH
	Horizontal Case Packer	PZX48	2600×2100×2700	4KW	8-12 cartons/min
	Horizontal Case Packer	PZX58	3400×2200×2700	6KW	15-20 cartons/min
	Horizontal Case Packer	PZX68	3800×2200×2700	7KW	25-30 cartons/min
Case Former	Tape-type Case Former	CXJ40A	3877×1480×2145	2KW	35-40 cartons/min
	Tape-type Case Former	KX35	5200×1700×2250	1.1KW	25-35 cartons/min
	Tape-type Case Former	KX20	2500×1560×2250	0.75KW	15-20 cartons/min
	Tape-type Case Former	KX12	2000×1900×1450	0.75KW	8-15 cartons/min
	Hot Melt Case Former	CXJ40B	3877×1480×2145	8KW	25-30 cartons/min
	Hot Melt Case Former	KX35B	5200×1700×2250	7KW	20-25 cartons/min
Case Sealer	Tape-type Case Sealer	FX40A	1650×760×1450	0.8KW	35-40 cartons/min
	Hot Melt Case Sealer	FX40B	1750×730×1620	5KW	25-30 cartons/min

Palletizer and Depalletizer

For over 20 years, Tech-Long has been committed to designing and developing innovative palletizer technologies suitable for various products. Tech-Long palletizers are widely used in industries such as beverages, food, chemicals, pharmaceuticals, detergents, and glass, all of which have first-class palletizer quality and high reliability.



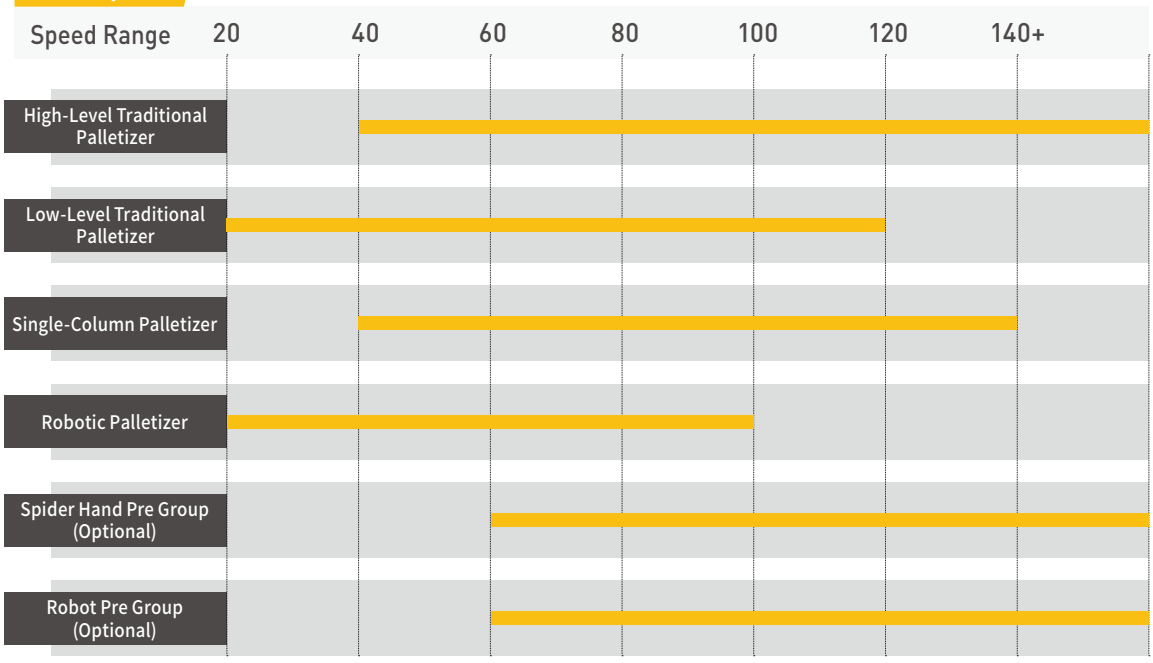








Packs/min



Bare Bottle Palletizer	2000-6000BPH
Low-Level Depalletizer	10000-24000BPH
High-level Depalletizer	20000-40000BPH

*The speed range is determined by the actual layout and palletizing format.

Spare Parts

The main businesses are complete after-sales services for beverage packing equipment and other products. They cover sales of general and special spare parts; repair, overhaul and upgrade of the whole production line and equipment; plant or equipment relocation, etc. In addition, Tech-Long undertakes businesses about new water treatment system, beverage treatment system and 5-gallon full line system and so on. It offers overall technical solutions to new and old customers home and abroad, to guarantee normal equipment production and operation for customers from different parts of the world all day long with direct, fast and efficient professional forces and service networks.



Spare Parts of Water Treatment & Pretreatment System



Spare Parts of Blow Molding Machines



Spare Parts of Filling Machines



Spare Parts of Packaging & Conveying Machines



Spare Parts of Labeling Machines

MES System

MES(Manufacturing Execution System) is information-based software deeply integrating factory production lines' equipment and control systems.

The system can do real-time monitoring for production line, to accurately analyze OEE and KPI of the production line, and standardize production management process.

Provide information-base support, and reasonably manage the personnel, equipment, materials,quality and energy consumption during the production and manufacturing process.

We are committed to intelligent manufacturing

Focusing on the integration technology of information and industrialization in the FMCG industry

Transparent

Production of production lines is made transparent by combining information systems with production automation. Enterprise managers can understand real situation of production through the systems.
Performances are transparent and management is improved.

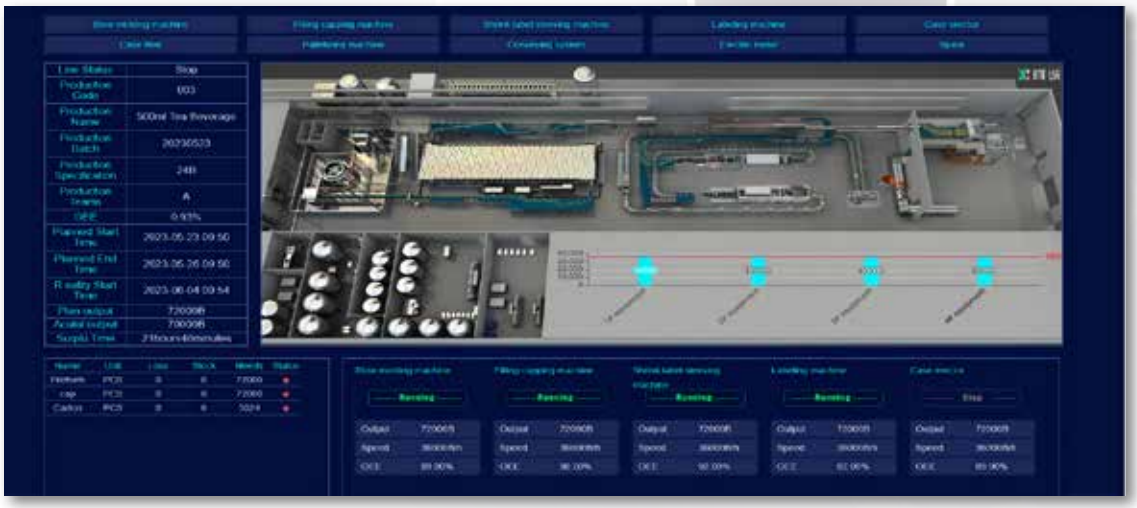
Value

Efficient

Unified monitoring of factories, production lines, production and operation conditions, collaborative planning, production, quality, and data, and improve collaboration capabilities.
Reduce invalid time and improve collaboration capability.

Real-time

The system acquires data of equipment and control systems on a real-time basis, measures operation state of OEE and equipment, and offers real-time feedback.
Shortens failure duration and increase utilization of production lines.



MES could provide real-time information and data for field individual equipment (e.g. blow molding machines, filling machines, capping machines, labeling machines), including their KPI (key performance indicators), OEE (overall equipment effectiveness), energy consumption index, shutdown and failure analysis, spare part consumption. It offers support necessary for improving operational efficiency and performance of equipment.





Collection, Diagnosis, Maintenance

Data acquisition of production line control systems

Integration of control systems

Diagnosis of equipment failures

Equipment operation and maintenance

Presentation, Monitoring, Prewarning

Equipment OEE

Dashboard of Equipment State

Network State

Prewarning

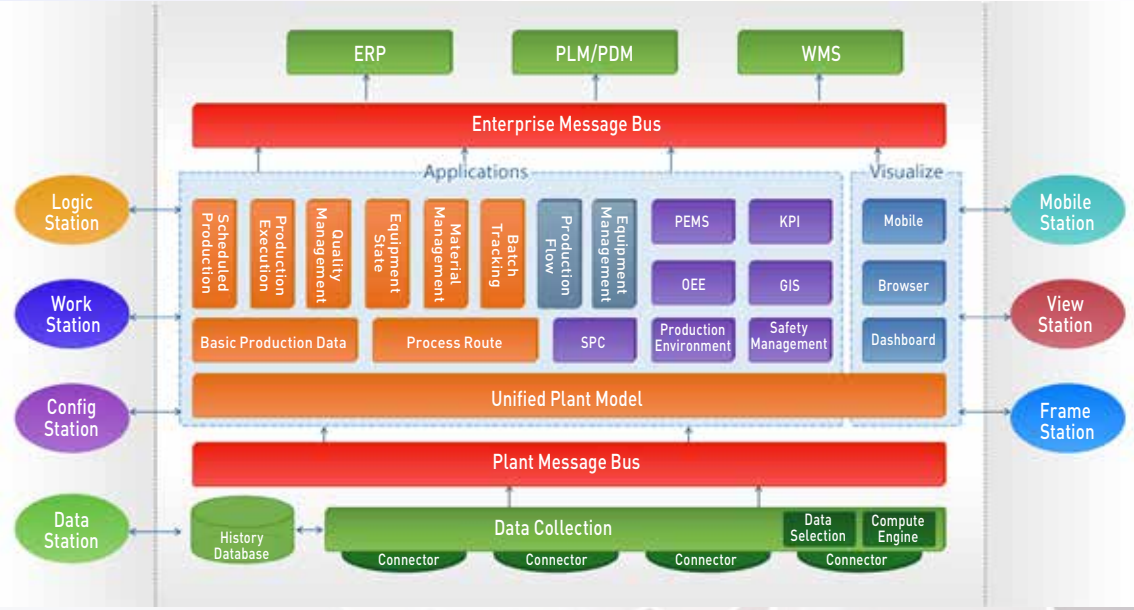
Analysis, Improvement

Output Statement

Analytical Statement on Equipment Performances

Analysis on Filling Performances

MES System



Extended Functions of Factory-level MES

- Production modeling and basic data management
- Production planning and management
- Management of work orders
- Integrated interfaces and data collection
- Production monitoring
- Error proofing for material dispensing and material tracing
- Mobility smart terminal
- Quality management and quality tracing
- Equipment maintenance and management
- Analysis of equipment effectiveness and shutdown
- Material delivery and warehouse management
- Batch tracing
- Reporting system
- Energy management

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 turnkey solution which constructed mainly by own 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.



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

TECH-LONG PACKAGING MACHINERY CO., LTD.

HEADQUARTERS & MANUFACTURING BASE - GUANGZHOU

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

Tel: +86-136 2222 0030 (Same No. for Wechat)

E-mail: market@tech-long.com

TECH-LONG PACKAGING MACHINERY INDIA PRIVATE LIMITED.

710, Shivalik Satyamev, Bopal Ambli Junction , S.P Ring Road, South Bopal, Bopal, Ahmedabad , Gujarat- 380058

TECH-LONG PACKAGING MACHINERY PLC

Bole kfil Ketema,kebele 03/05 House No. 2392 A.A at the back of Millennium Hall, Addis Ababa, Ethiopia

SURE TECHNOLOGIES FZC (MIDDLE EAST)

P.O. Box 9192, Block M2-17 SAIF Zone Sharjah, Freezone Sharjah UAE

PT. MANDIRI STARPLAST

Taman Tekno X BSD Blok B No. 23

Tangerang Selatan, Indonesia 15310

BEIJING OFFICE

10-2-301, Longhu Shidai Tianjie East Area, Biological Medicine Base, Daxing District, Beijing, China

CHENGDU OFFICE

Beihuguojicheng Phase III, No. 8 Huxiu 2nd Road, Chenghua District, Chengdu City

These materials are from the Marketing Department of Tech-Long. Their content will change with product updates. For details, please don't hesitate to contact our salesmen. Although these materials have been calibrated repeatedly for accuracy, they are for reference only. The physical products, name plates and manuals shall prevail.

For more information about Tech-Long's products, welcome to visit our website:

www. tech-long.com

Stock Code **002209**

WeChat Official Account | Douyin Short Video | Weishi Short Video | Facebook | YouTube | Twitter