

WHY CHOOSE TECH-LONG?



The rapid development of PET bottled water

Higher and higher requirements for energy conservation and discharge reduction

Huge pressure of market competition; high demand of cost control

The gradual popularization of the concept of sustainable development and "green" factory

- ▶ High efficiency; high yield; low energy consumption
- ▶ The production efficiency of Tech-Long's whole line is not less than 85%, while yield rate of finished products is not less than 99.5%, thus ensuring the maximum of income.
- ▶ At present, Tech-Long is one of the few company with the R & D capacity of injection molding, bottle blowing and filling in the world.
- ▶ The ability to design preforms and bottle shapes
- ▶ Tech-Long has the most leading R & D design platform and laboratory equipment in the industry at present
- ▶ Its flexible and open modes of cooperation offer the most optimized options to customers



TECH-LONG

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For more detailed information on Tech-Long products, please visit our website at: www.tech-long.com

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.

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ULTRA HYGIENIC BLOW-FILL-CAP(BFC)



BLOWING-FILLING-CAPPING COMBI-BLOCK

Cost

High efficiency of the whole line
Low investment in equipment
Low investment in the plant
Low operation cost

Reliability

Easy manipulation
Less maintenance
Hygienic, safe and reliable
Improved mechanical safety



Correlation data

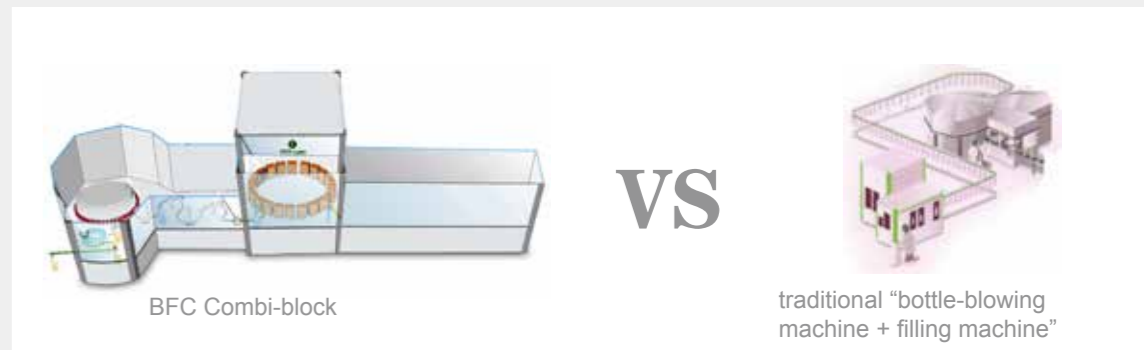
Enhancing the overall efficiency by 5% (The efficiency of the BFC Combi-block now reaches 98%)

Reducing the investment in equipment by 10-20% (it is unnecessary to equip air conveyor and bottle rinser)

Reducing the investment in plant by 65% (The coverage area of the equipment is reduced greatly)

Reducing the energy consumption by 15-20% (fewer operators; lower start-up wastage; no energy consumption for air conveyor or bottle-jamming waste)

Reducing the amount of pure-water used by about 35% (it is unnecessary to wash bottles with water)



Note: The above-mentioned data are the contrast between BFC Combi-block and the traditional "bottle blowing machine + filling machine"
Calculation conditions: 500-ml bottled water line; 30000 BPH; varying with different products.

TECHNICAL PARAMETERS



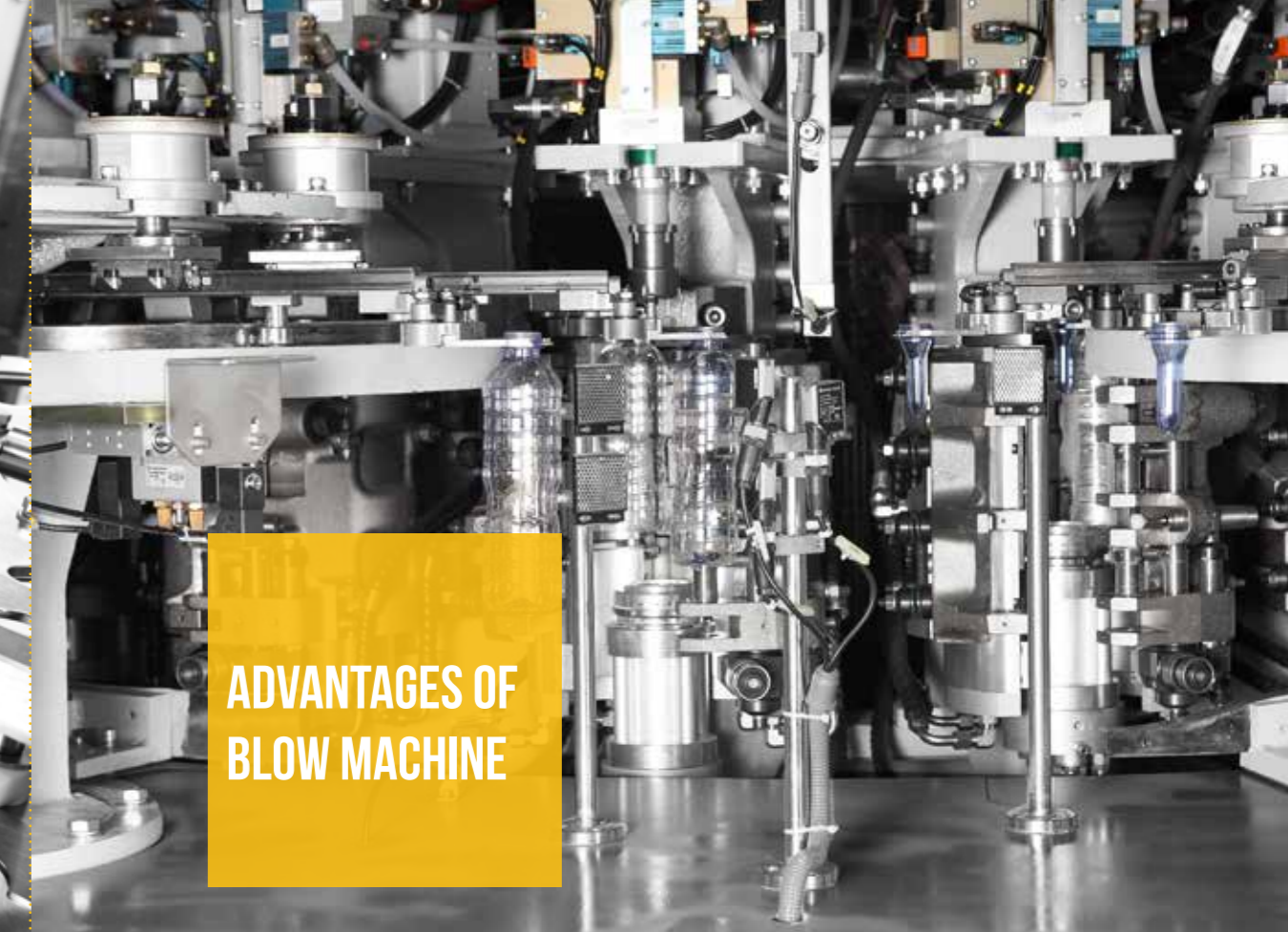
TECHNICAL GUARANTEE



ADVANTAGES OF FILLING MACHINE



ADVANTAGES OF BLOW MACHINE



Filling products:	fruit juice, tea drinks, drinking water, etc
Electrical conductivity of products:	5 mu S/cm or more, water (20 mu S/cm or higher)
Applicable bottle type:	PET bottle or round bottles
Applicable cover type:	thread the plastic cover
Rated output:	40000 BPH (500 ml)
Cavity number:	20
Filling Numbers:	72
Screw LIDS:	18
Heating chain pitch:	38.1 mm
Light box number:	18 group
Heating tubes, total power of	369 kw
Biggest diameter bottle blowing bottles:	Φ 120 mm or less
Maximum filling bottle diameter bottle (or diagonal) :	Φ 108 mm or less
Biggest bottle high:	350 mm or less
Filling temperature:	95 ℃ or less
Filling accuracy:	0.3%



Tech-Long is one of the few suppliers in the world that have mastered such two key technologies of PET bottle-blowing and filling. Based on its substantial whole-line project experience, integration of “bottle-blowing technology” and “filling technology” is the fundamental guarantee for the equipment technology of BFC Combi-block. Through innovation of the online molding, bottle-blowing technology, filling and filling equipment, it can reduce the energy consumption of complete machines by over 25%, fill a vacancy in the industry in China and reach the international advanced level.

Safe Healthy Environment

- ▶ Adopts quantitative filling flow meter method, filling process intelligent control;
- ▶ Use cologne (KROHNE) electromagnetic flowmeter, quantitative precision;
- ▶ Adopts cover pneumatic double diaphragm valve control filling speed, realize how irrigation, make filling more stable, less bubble;
- ▶ Using non-contact filling, filling process and health;
- ▶ Product use clean seal design flow inside filling machine;
- ▶ Patented technology of ceramic type filling machine center divider;
- ▶ Contact with the fluid part of the material 316 l;
- ▶ Configure automatic cup;
- ▶ Tilting chassis automatic ability;
- ▶ Ultra clean seal round box, ensure the machine inside filling environment;
- ▶ Bottle shape a quick change;
- ▶ The lid automatically weed out;
- ▶ Screw cover machine can apply to a variety of cover type, need to change electric parameter Settings;
- ▶ Every lower part of the star wheel equipped with precision torque limiter, which ensure the security of personnel and equipment;
- ▶ Conform to European safety standards (CE certificate).

High Speed and Low Energy Consumption

- ▶ The single mode output - 2000 BPH
- ▶ The high pressure gas recovery system - reduce consumption of compressed air
- ▶ The optimal light box - reducing energy consumption and temperature control system
- ▶ The bottle preform electrostatic dust removal - improve the bottle preform cleanliness
- ▶ Modular design - improve the versatility and standardization
- ▶ Optimize the operation interface - control is simple and intuitive