

Leshan 乐善®

Athlon Series

ATHLON SERIES HIGH SPEED EXTRUSION BLOW MOLDING MACHINE

LESHAN CHANGE THE BLOWING ROUTINE

Leshan Plastic Blowing Machine

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Leshan Plastic Extrusion Blow Molding Machine
**Professional Provision Of Athlon Series
 Bottle Blowing Technology**
 Overall System Solution



Company profile

Guangdong Leshan Intelligent Equipment Co., LTD. (HEREINAFTER referred to as Leshan Intelligent) is a listed company on neeq. Founded in August 1995, Leshan Intelligent is located in Daliang Wusha Industrial Zone, Shunde District, Foshan city, covering an area of about 37570 square meters, with more than 380 employees. At present, the company has developed into an intelligent mechanical equipment company focusing on the field of "plastic hollow molding" and integrating mechanical design, research and development, production, sales and service. The main products include: blow molding machine series, precision mold, motor series, auxiliary machinery series, key engineering design and construction, etc., among which the manufacture of extrusion blow molding machine is adopting international standard production and qualify with CE qualification, which is the mandatory certification from the European Union.

LESHAN Intelligent is one of the blow molding machine industry standard drafting unit and national high-tech enterprise in China. It was awarded as THE FAMOUS TRADEMARKS OF GUANGDONG PROVINCE, THE FAMOUS BRAND PRODUCT, NURTRUING ENTERPRISES FOR STRATEGIC EMERGING INDUSTRIES FOR GUANGDONG PROVINCE, THE QUALITY MANUFACTURER IN GUANGDONG PROVINCE and so on. Over the years, the company has undertaken and completed 4 national projects, 12 provincial projects, and more than 10 regional projects. It has obtained 3 scientific and technological achievements, formulated 3 enterprise standards, and has 70 state-authorized utility model patents, 7 design patents, 7 invention patents, and 26 in-process patents, among which 6 are utility model patents and 20 invention patents. It has 18 registered trademarks in China, and has applied for 7 trademarks in transit. There are 7 international registered trademarks, namely, the Philippines, Malaysia, Indonesia, Russia, Egypt, Australia and Vietnam, and 3 pending trademark applications. LESHAN Intelligent has won the third prize of Science and technology progress of Guangdong Province, the second prize of Science and technology Progress of Foshan City, the first prize of Science and technology Step of Shunde District and many other honors. Leshan Intelligence is a provincial-level enterprise technology center in Guangdong Province, a REGISTERED supplier of the United Nations, and a Chinese quality manufacturer certified by TUV. The company's product development, design and manufacturing process is completed by computer. Leshan Intelligence invests 5% of the total sales in technology research and development every year, and maintains close academic exchanges and cooperative relations with Wuhan University of Technology, Xi'an Jiaotong University, South China University of Technology, Guangdong Automation Engineering Society and Guangdong Mechanical Engineering Society. At present, Leshan Intelligence and Foshan Institute of Science and Technology have signed a strategic cooperation agreement.

Leshan Intelligent has equipment remote after-sales service system, global after-sales technical support and personnel training, liquidity spare parts warehouse. Leshan is a manufacturer in China that provides free technical training for the full range of blow molding machines, and is also a supplier of comprehensive planning of blow molding production line (key project). At present, the company has set up a wechat newspaper installation system, which is convenient for customers to report for repair at any time.

After more than 20 years of development, Leshan intelligence has grown into one of the enterprises with strong R&D strength, strong technical innovation ability and large capacity scale in the blow molding machine equipment industry, and the annual production scale of the whole blow molding machine reaches more than 500 sets. The company has also established good cooperative relations with many world-renowned enterprises and Top 500 Enterprises in China, such as Unilever, P&G, Walch, Mobil, Danone, Bp, Uni-President, Shell, Petrochina, Wahaha, Libai, Mengniu, Yili, Nais, Mobil Oil, Haocaitou, Jun Yao Group and so on.

In the future, LESHAN intelligent will start the strategic of worldwide footprint. It will make use of highly automated production and network to realize diversified association and diversification of product business in the field of packaging machinery, and make use of the Internet of Things, mobile Internet, big data, cloud computing and other emerging technological means to achieve diversification, intelligence and industry 4.0. At the same time, the business to the global development, become a certain visibility of the global intelligent machinery manufacturing brand. LESHAN Intelligent believes that, with the development, the spirit of struggle, innovation, forge ahead, adhere to the "Create high and new technology to help users develop" of the enterprise mission, with the dream of clinging to the brand construction, rely on the innovative and pragmatic, do not forget to "let leshan intelligent is appreciated all over the world" vision, Leshan will become a global leader of intelligent equipment, golden harvest hope win-win

Athlon Series Bottle Blowing Machine

Leshan Intelligence, which is recognized by the market with its blow molding machine, has a deep understanding of the importance of the market for the overall solution of blow molding technology. In order to meet the requirements of different customers, the company is equipped with a professional technical research and development team and advanced blow molding processing equipment. What's more, we gain strong alliance with German technical experts to provide overall solutions for bottle blowing technology and create the best Leshan Athlon series ever. Fully absorbing market opinions, we are pretty confident with the new Athlon blow molding machine. The design of the Athlon machine has been in advance in the modern machine design. And the machine runs more stably with 20% output increase.



Application Field

Leshan Athlon series blow molding machine adopts excellent processing technology to ensure the systemization of equipment. With efficient production capacity, complete quality control, and perfect after-sales service system, we provide our customers with efficient and high-quality production experience. And the machine can be applied in wide range of industries such as food, daily chemical washing, chemical barrels, etc.





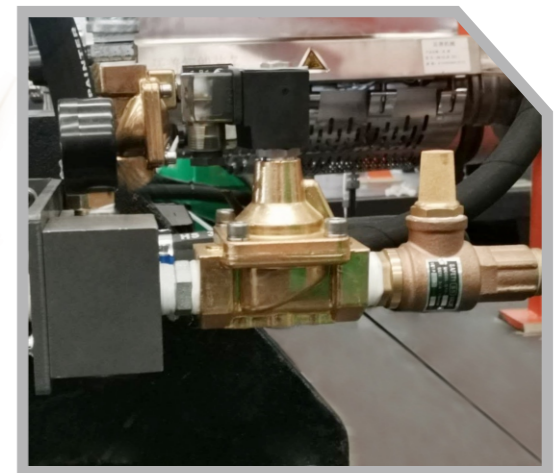
Athlon Series-Features

point 1: Rapid Cooling Installation(RCI)



Before optimization (regular machine)

VS



After optimization (Athlon Machine)

- New structure air circulation function.
- Good cooling effect

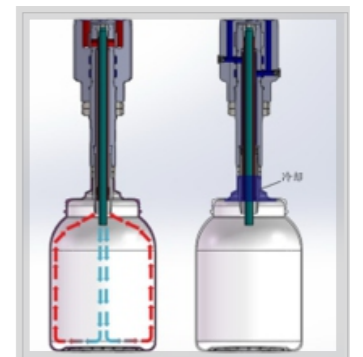
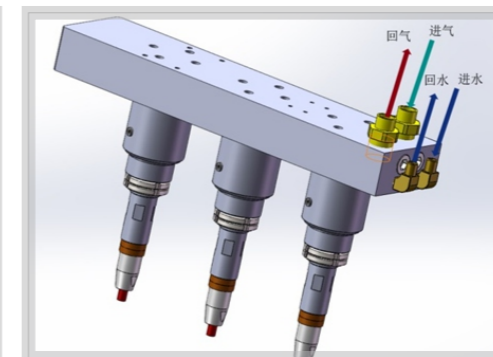
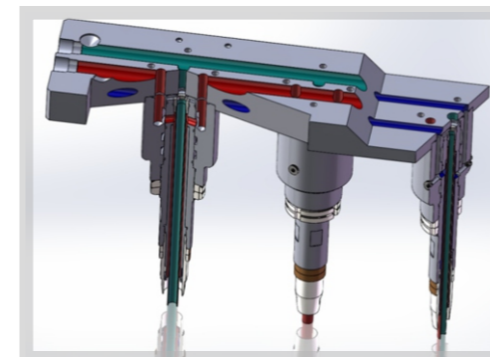
- Better cooling effect inside the bottle.
- Rapid cooling installation realizes bottle internal and external cooling speed 20%-40% increase.

Benefit comparison

Comparison of 1.29L Detergent Bottle Production

Project	Liter(L)	Weight(g)	Model	Number of module cavities
U series bottle blowing machine-detergent	1.29L	97g	100U2X4.15G	8
Athlon series bottle blowing machine-detergent	1.29L	97g	SL2-L2X4-1A	8
Project	Forming cycle	Output/24h	Output difference/24h	Output increase
U series bottle blowing machine-detergent	30	23040	8378	36.36%
Athlon series bottle blowing machine-detergent	20-22	31418-34560		

Athlon-Rapid Cooling Installation(RCI)



Comparison of 1.29L Detergent Bottle Production

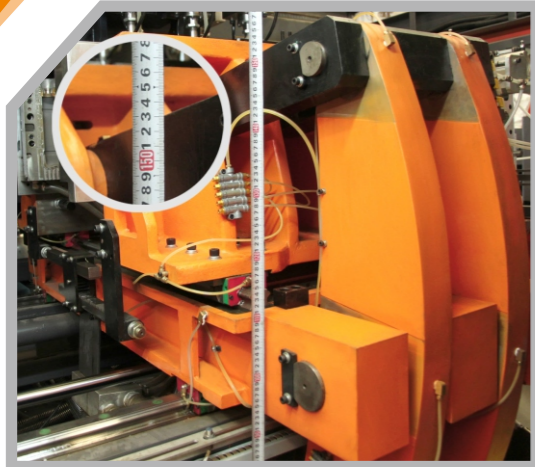
Project	Action time	Blowing time	Exhaust time	Post Cooling time	/
U Series	8.6s	18.4s	3s	/	/
Project	Action time	With RCI	Exhaust time	Post Cooling time	Improvement of production efficiency
Athlon	6s	14s	2s	2s	20-40%

Rapid Cooling Installation(Comparison of 2 Cavities 5L Detergent Bottle)

Project	Cycle time (seconds)	In-bottle thermometer (degrees)
RCI off	28s	52.8° C
RCI on	24s	28.2° C

Athlon Series-Features

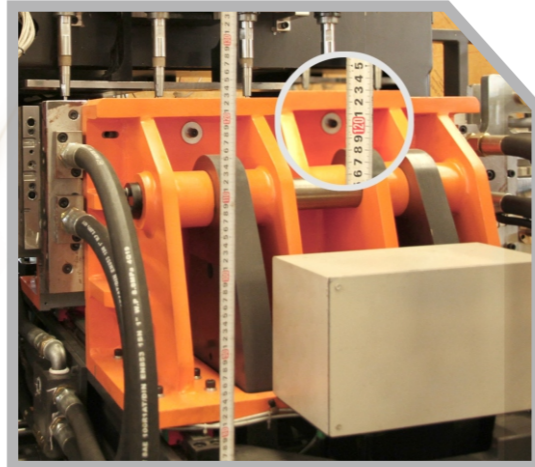
point 2: Athlon Clamping Frame



Before optimization (regular machine)

- The Pq valve or proportional valve controls the hydraulic system.
- Counterbalance toggle clamping mechanism.
- The conventional locking frame is slightly higher.

VS



After optimization (Athlon Machine)

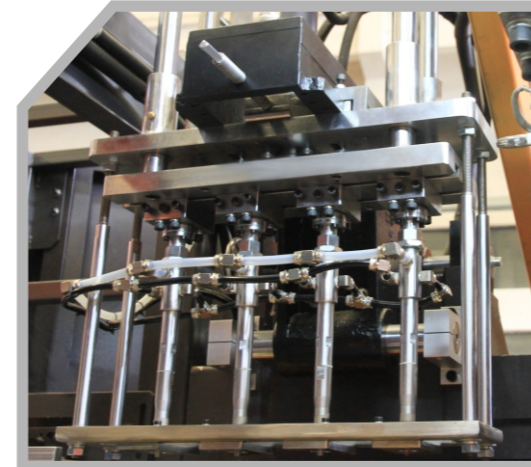
- Clamping frame is controlled by electronic ruler for higher accuracy
- New horizontal motion type clamping frame design.
- The clamping frame has a balanced force, fast speed and low center of gravity.
- Lower clamping frame ensures higher adjusting efficiency.

Comparison Clamping Frame Technology

Category	Regular Machine Clamping Frame	Athlon Clamping Frame
Lock mode force	12.7/ Tons	24/ Tons
Shaft lubrication	Need	NO
Pin bearings are subjected to force	Double	Standard
The plane height on the lock template	Beyond the human operating height	Highly humanized
The movement of the mold frame	Symmetrical elbow-cut locking frame mechanism	Horizontal movement balancing force
Swing brake mode	no	Electronic brakes
The position of the conveyor belt inside the locking frame	no	The locking frame is directly below
Image		

Athlon Series-Features

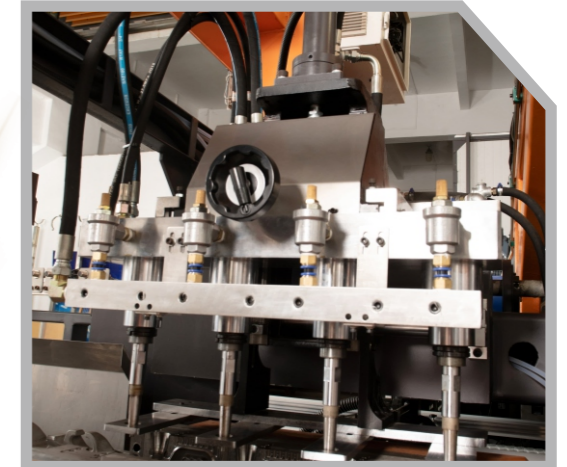
point 3: Integrated Blowing Pin



Before optimization (regular machine)

- Linear guide railway sliding seat.
- There is a pipe wired connection pen rod.

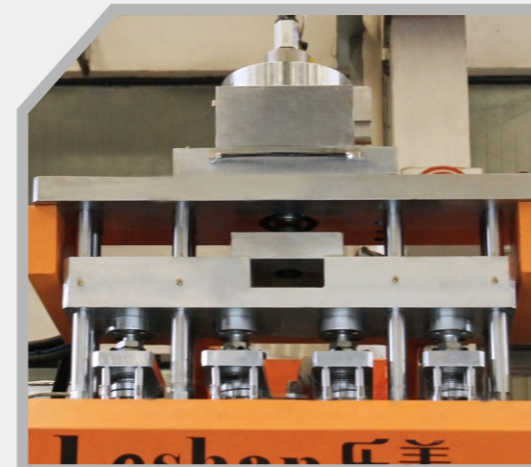
VS



After optimization (Athlon Machine)

- Precise linear rail pen system.
- High flow without a tying rod.
- Integrated with rapid cooling installation.

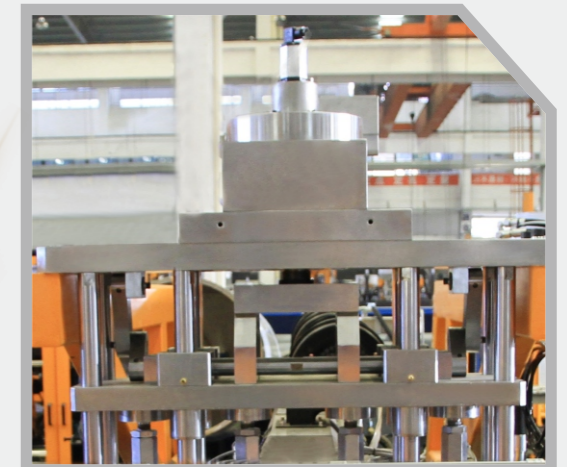
point 4: Electric Servo Balancing System



Before optimization (regular machine)

- Slight bottle weight deviation.
- No addition of electric servo balancing mechanism.

VS

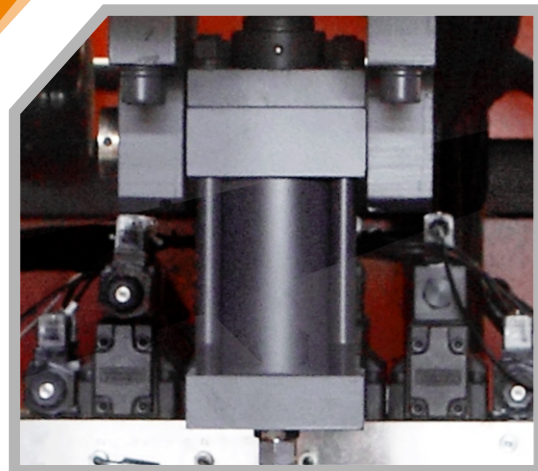


After optimization (Athlon Machine)

- Equipped with electronic servo balance system for bottle weight stability.
- Precise control and the bottle weight deviation of $\pm 1\%$.
- The flow pressure is more balanced.

Athlon Series-Features

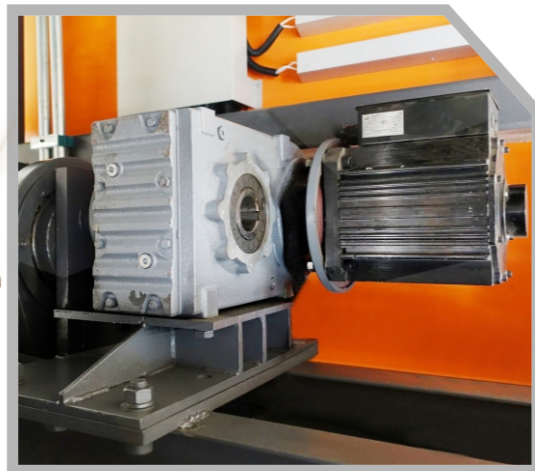
point 5: Servo Electric Headlifting Device



Before optimization (regular machine)

- Fixed headlifting time control.
- Fixed pause time control.

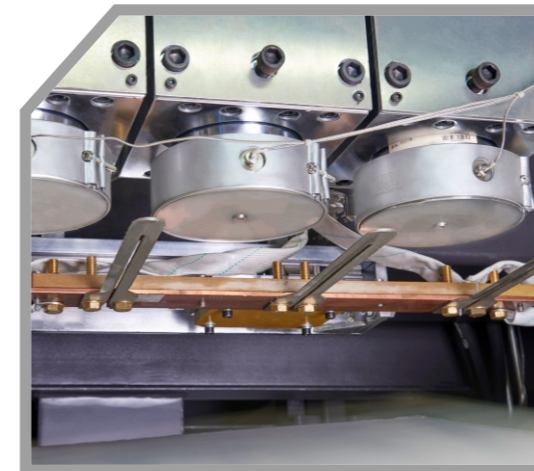
VS



After optimization (Athlon Machine)

- Precise headlifting time control.
- Precise pause time control.

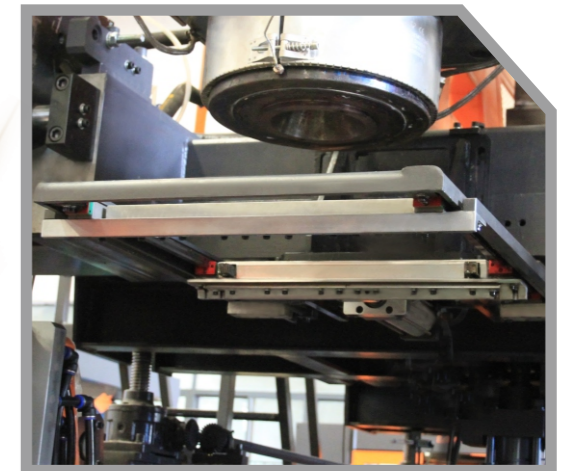
point 7: Pre-Seal Cutter Device



Before optimization (regular machine)

- Left and right horizontal cutter.
- Universal hot knife (Front and back).

VS



After optimization (Athlon Machine)

- Equipped with proper pneumatic and suitable for special products.
- Obvious sealing effect.

point 6: Die Head Adjustment



Before optimization (regular machine)

- Internal parison thickness adjustment
- Inadequate operator safety.

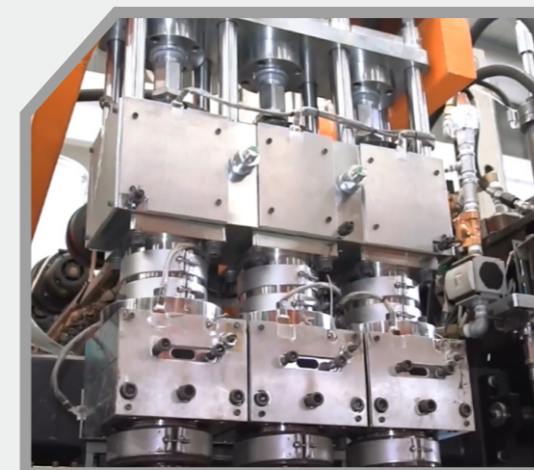
VS



After optimization (Athlon Machine)

- External parison thickness adjustment.
- Effectively protect the safety of operator.

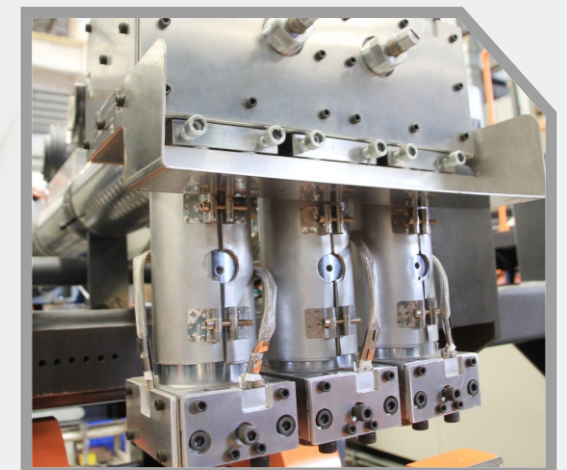
point 8: German Design Die Head



Before optimization (regular machine)

- Circumference adjustable die head or front.
- Adjustable die head. Hydraulic servo die head/electric servo.

VS



After optimization (Athlon Machine)

- German design.
- Fast color changing and stable product weight.
- Well-distributed parison thickness.

Athlon Series-Features

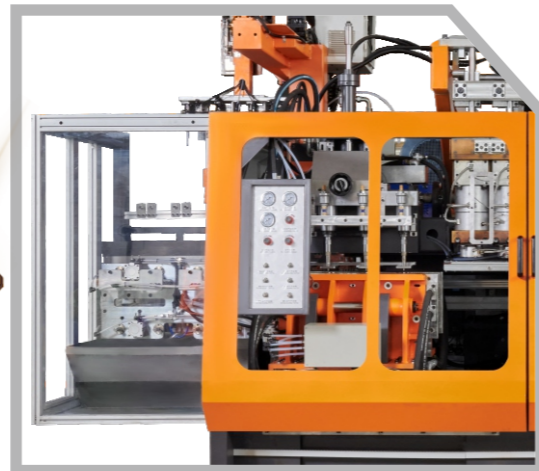
point 9: Safety Door/Side Box



Before optimization (regular machine)

- Fixed combined safety door.
- Sheet metal side box.

VS



After optimization (Athlon Machine)

- The Athlon safety door has a free opening structure and reserves enough space to install molds, which is highly efficient.
- Long lasting aluminum alloy side box.

point 10: Servo Manipulator



Before optimization (regular machine)

- Pick up the bottle robot

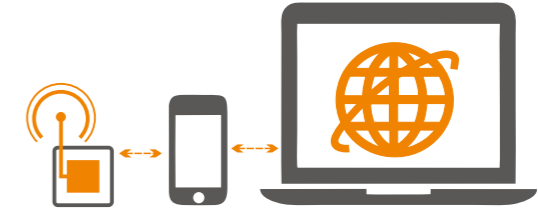
VS



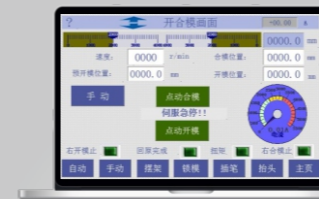
After optimization (Athlon Machine)

- Vertical robot/cross robot
- Equipped with post cooling system for high cooling speed

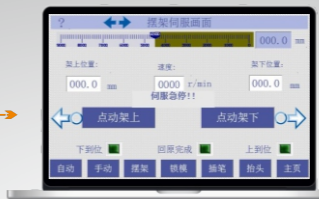
Electric control system:
Fully computer control, automatic process parameters. Optimization and fault diagnosis, high control precision. Ensure the reliability and safety of the operation of machinery and equipment.



Easy to Operate



The motor is numerically adjusted for the opening and opening modes

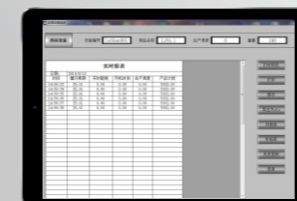


The motor swing is numerically adjusted



The gas cycle parameters can be adjusted

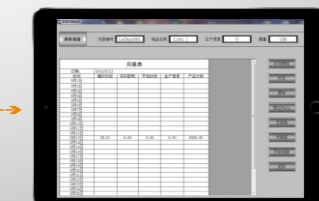
Glance



Real-time reports



Annual report



Monthly report

The Detection Device



The number shows the thick gauge



Visual thermostat

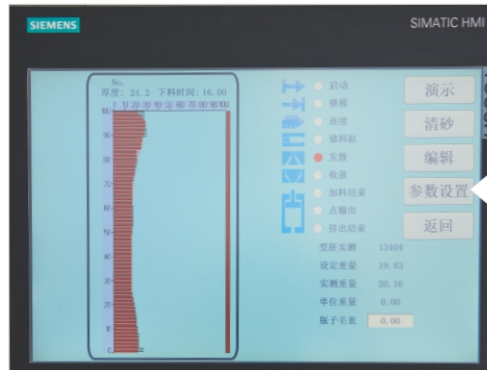


The force value shows the controller



Precision processing equipment. perfect testing equipment. the realization of a sophisticated process. to ensure excellent product quality.

Optional Function



Thickness Control

- This function enables weight reduction and directional adjustment of the product. The wall thickness of the product part enhances the anti-fall performance of the product.



Electric Wall Thickness System Control

- Brand new 100 point electric servo control system, Response speed 1ms, repeated accuracy 0.005mm.
- Servo driven by electric and power transfer by ballscrew, Cup pulling die head for more easier to control the accuracy and guaranteed quality



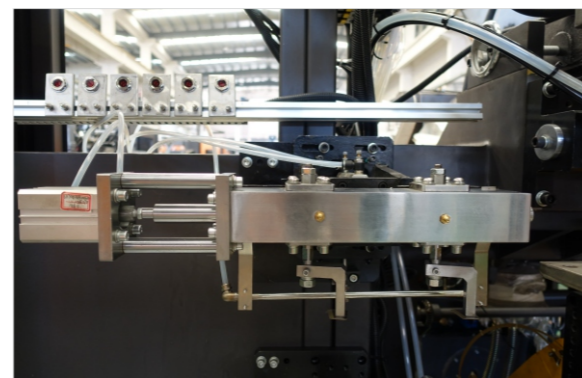
External Spin Trimmer

- To remove the scraps from the bottle mouth



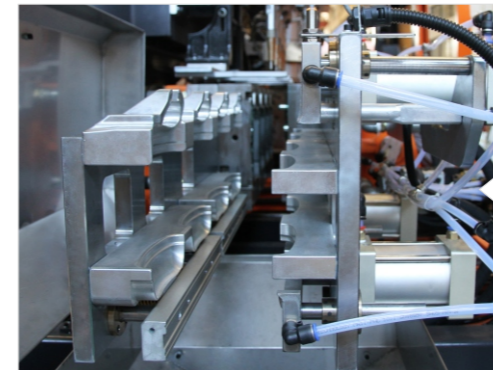
Internal Spin Trimmer

- Servo motor control, high-speed smooth cutting bottle breath bag. And make sure the cut is flat.



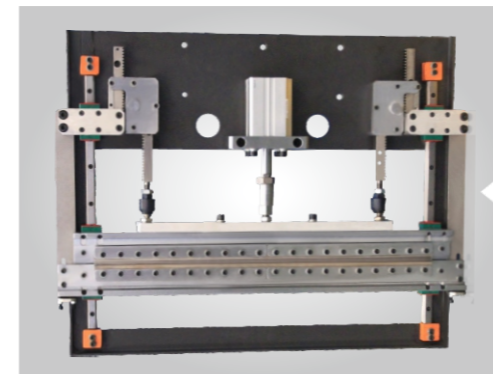
Rotary Cutting Device

- Suitable for airbag design product, the automatic part of the airbag resection and the product tail resection.



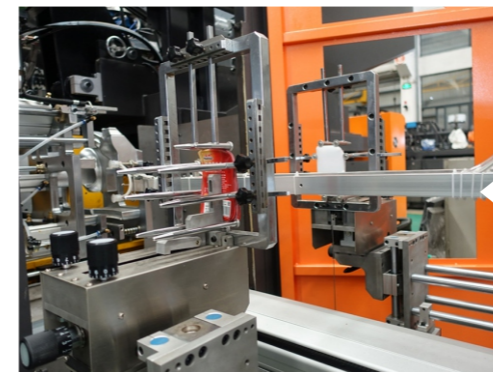
Auto Deflasher Function

- Push the top and bottom scraps.



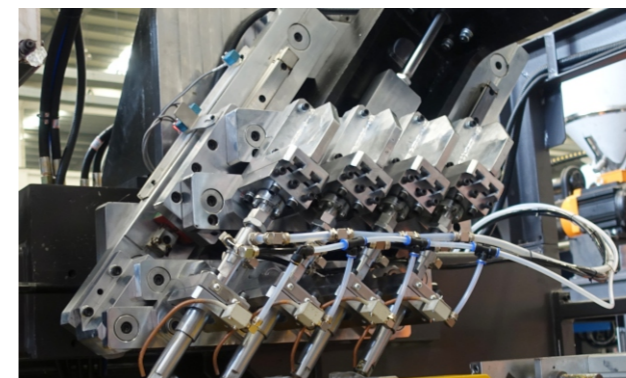
Pre-Sealed Cutter

- Controlled by pneumatic system, it has light and agile movement. And it can reduce the scrap ratio suitable for making larger products.



In-Mold Labelling

- Before blowing the product, put the label into the mold, and then use the heat of the product itself to stick the sticker on the surface of the product.



Oblique Blow Pin

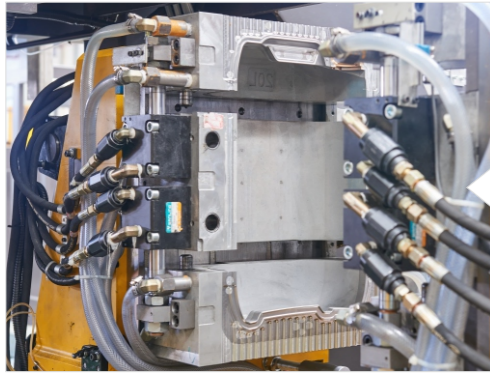
- According to different technological requirements of bottle, for some special one, machine will install slant blow pin.



Servo Blow Pin

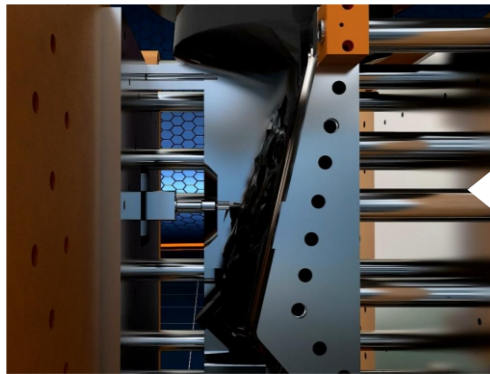
- Double direction guide rail design for blow pin, with precise ball screw, increasing the riding stability of blow pin.

选配功能 Optional function



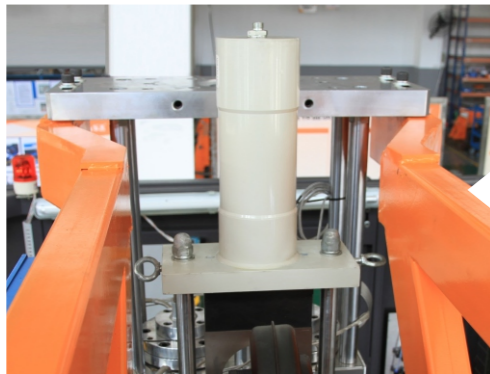
Mold Stretching Function

- suitable for product has a concave surface.



Side Needle Function

- It is suitable for products with no bottle mouth or 2 or more bottles in different directions.



Automatic Filter Device

- Filter out the impurities in the material.



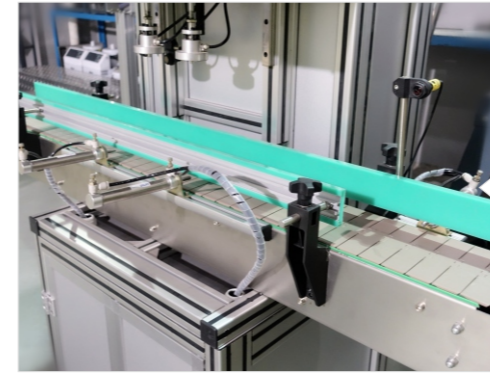
Manually Filter Screen

- Filter out the impurities in the material.



Visual Inspection

- The inspection of the appearance and appearance of the products is suitable for the areas with high labor cost or difficulty in recruiting workers.



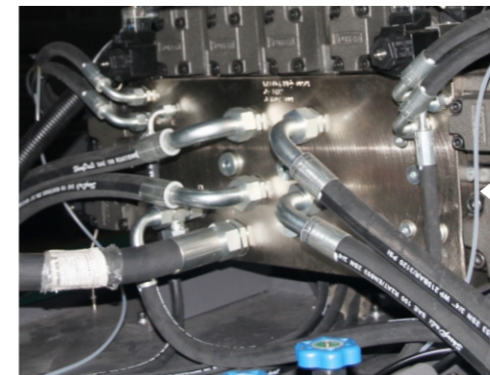
Leakage Detection Machine

- Test whether bottle leakage on production line



Central Feeding System

- The latest electromatic system,it could achieve remote access.or monitoring after connecting Ethernet.Offer the real-time.monitoring.It could connect the your database and upload production statement.



Oil Block Device

- The structure is used with no material assembly joint



Automatic Production Line

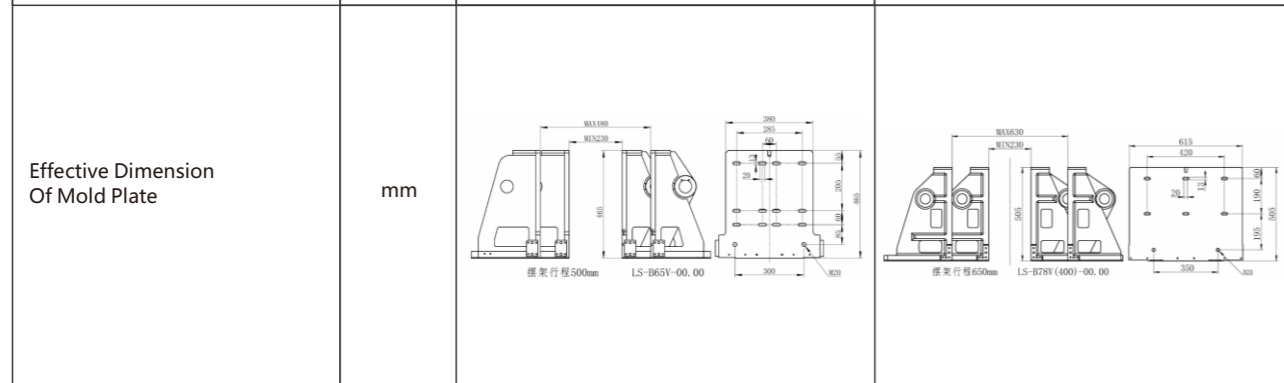
- One-stop automation solution with automatic control of the production process.

Category	Athlon Series(Linear Guide Way)	
Model	SL2-L1X3-2A (75-55)	SL2-L1X4-2A(85-55)

Items	Units	Specification			
Category	/	Double	Double.		
Max. Blow Volume	L	1	1		
Material	/	PE,PP	PE,PP		
No.Of Die Head	/	3	4		
Die Head Distance (Center to Center)	mm	120	130		
Net Weight	kg	10000	14000		
Machine Dimension	mm, L×H×W	约L4550×W3500×H3310	约L5000×W3600×H4100		
Die Head					
Die Head Heating Zone	/	7	9		
Die Head Heating Power	kW	11.42	13.83		
Clamping Unit					
No.Of Station	/	2	2		
Min Clamping Distance Of Mold	mm	230	230		
Max Clamping Distance Of Mold	mm	480	630		
Effective Dimension Of Mold Plate	mm W×H	380×465	615×505		
Carriage Stroke	mm	500	650		
Clamping Force	kN	165	256		
Extruder Unit					
Extruder Diameter	mm	75	55	85	55
Extruder Length/Diameter Ratio	L/D	24	23	24	23
Extruder Rotating Speedr/min	r/min	20-65	20-48	20-67	20-40
Max Extrusion Capacity	kg/h	90	25	130	25
Extruder Motor Power	kW	22	7.5	30	7.5
Barrel Heating Zone	/	3	3	3	3
Barrel Heating Power	kW	9.2	6.3	9.6	6.3
Cooling Fan Power	kW	0.3	0.08	0.54	0.08
Power Unit					
Oil Pump Motor Power	kW	23	32		
Hydraulic System Pressure	Mpa	0.1	21		
Pneumatic System Pressure	Mpa	0.8	0.8		
Cooling System Pressure	Mpa	0.4	0.4		
Air Consumption	m³/h	23	21		
Hot Cutter Power	kW	3	2		
Total Power	kW	84.9	104.95		
Remarks					
Total Installed Power I	L	46#/300	46#/300		
Chiller Recommend	hp	15/10	15/10		
Air Compressor recommend	hp	10	10		

All the machines above can be optionally equipped with 100 points parison control system,parameters would be changed as below:

After with parison control			
Model	/	SL2-L1X3-2A (75-55)	SL2-L1X4-2A(85-55)
Servo Motor Power	kW	5.5	5.5
Total Power	kW	90.4	110.45



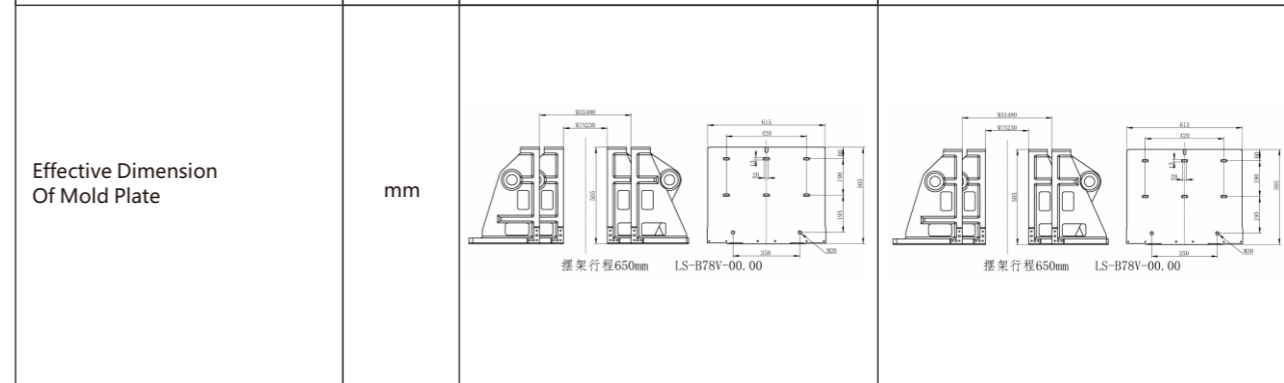
The page data are derived from the Leshan Smart Factory testing, the equipment specific data to customize the situation of the equipment.

Category	Athlon Series(Linear Guide Way)	
Model	SL2-L5X2-2A(90-55)	SL2-L5X2-1A(90)

Items	Units	Specification		
Category	/	Double	Single layer	
Max. Blow Volume	L	5	5	
Material	/	PE,PP	PE,PP	
No.Of Die Head	/	2	2	
Die Head Distance (Center to Center)	mm	250,280	250,280	
Net Weight	kg	17500	17500	
Machine Dimension	mm, L×H×W	约L4982×W4078×H3398	约L4978×W4138×H3288	
Die Head				
Die Head Heating Zone	/	5	5	
Die Head Heating Power	kW	23.85	16.61	
Clamping Unit				
No.Of Station	/	2	2	
Min Clamping Distance Of Mold	mm	230	230	
Max Clamping Distance Of Mold	mm	480	480	
Effective Dimension Of Mold Plate	mm W×H	615×505	615×505	
Carriage Stroke	mm	650	650	
Clamping Force	kN	256	256	
Extruder Unit				
Extruder Diameter	mm	90	55	90
Extruder Length/Diameter Ratio	L/D	24	23	24
Extruder Rotating Speedr/min	r/min	10-66	20-40	10-66
Max Extrusion Capacity	kg/h	160	25	160
Extruder Motor Power	kW	37	7.5	37
Barrel Heating Zone	/	4	3	4
Barrel Heating Power	kW	16	6.34	16
Cooling Fan Power	kW	0.72	0.08	0.72
Power Unit				
Oil Pump Motor Power	kW	30	30	
Hydraulic System Pressure	Mpa	0.1	0.1	
Pneumatic System Pressure	Mpa	0.8	0.8	
Cooling System Pressure	Mpa	0.4	0.4	
Air Consumption	m³/h	19	19	
Hot Cutter Power	kW	3	3	
Total Power	kW	126.59	105.43	
Remarks				
Total Installed Power I	L	46#/300	46#/300	
Chiller Recommend	hp	15/10	15/10	
Air Compressor recommend	hp	10	10	

All the machines above can be optionally equipped with 100 points parison control system,parameters would be changed as below:

After with parison control			
Model	/	SL2-L5X2-2A(90-55)	SL2-L5X2-1A(90)
Servo Motor Power	kW	5.5	5.5
Total Power	kW	110.45	110.93



The page data are derived from the Leshan Smart Factory testing, the equipment specific data to customize the situation of the equipment.

Category		Athlon Series(Linear Guide Way)	
Model		SL2-L2X4-1A(100)	SL2-LIX6-1A (100)

Items	Units	Specification	
Category	/	Single layer	Single layer
Max. Blow Volume	L	2	2
Material	/	PE,PP	PE,PP
No.Of Die Head	/	4	6
Die Head Distance (Center to Center)	mm	200	125
Net Weight	kg	16000	14000
Machine Dimension	mm, L×H×W	约L5900×W4970×H4000	约L6000×W6600×H3000
Die Head			
Die Head Heating Zone	/	10	13
Die Head Heating Power	kW	22.21	21.3
Clamping Unit			
No.Of Station	/	2	2
Min Clamping Distance Of Mold	mm	230	230
Max Clamping Distance Of Mold	mm	480	480
Effective Dimension Of Mold Plate	mm W×H	750×465	750×465
Carriage Stroke	mm	900	900
Clamping Force	kN	256	256
Extruder Unit			
Extruder Diameter	mm	100	100
Extruder Length/Diameter Ratio	L/D	27	27
Extruder Rotating Speedr/min	r/min	10-66	10-66
Max Extrusion Capacity	kg/h	280	280
Extruder Motor Power	kW	75	75
Barrel Heating Zone	/	5	5
Barrel Heating Power	kW	21.6	21.6
Cooling Fan Power	kW	1.85	1.85
Power Unit			
Oil Pump Motor Power	kW	32	32
Hydraulic System Pressure	Mpa	21	21
Pneumatic System Pressure	Mpa	0.8	0.8
Cooling System Pressure	Mpa	0.4	0.4
Air Consumption	m³/h	19	24
Hot Cutter Power	kW	2	3
Total Power	kW	157.76	156.85
Remarks			
Total Installed Power I	L	46#/300	46#/300
Chiller Recommend	hp	15/10	15/10
Air Compressor recommend	hp	10	10

All the machines above can be optionally equipped with 100 points parison control system,parameters would be changed as below:

After with parison control			
Model	/	SL2-L2X4-1A(100)	SL2-LIX6-1A (100)
Servo Motor Power	kW	5.5	5.5
Total Power	kW	163.26	162.35

Effective Dimension Of Mold Plate	mm		
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The page data are derived from the Leshan Smart Factory testing, the equipment specific data to customize the situation of the equipment.

Category		Athlon Series(Linear Guide Way)	
Model		SL2-L5X2-3A(90-65-30)	

Items	Units	Specification		
Category	/	Double-layer plus level line		
Max. Blow Volume	L	5		
Material	/	PE,PP		
No.Of Die Head	/	2		
Die Head Distance (Center to Center)	mm	250		
Net Weight	kg	13000		
Machine Dimension	mm, L×H×W	About:L5060×W3540×H3500		
Die Head				
Die Head Heating Zone	/	7		
Die Head Heating Power	kW	21.39		
Clamping Unit				
No.Of Station	/	2		
Min Clamping Distance Of Mold	mm	230		
Max Clamping Distance Of Mold	mm	480		
Effective Dimension Of Mold Plate	mm W×H	615×505		
Carriage Stroke	mm	650		
Clamping Force	kN	256		
Extruder Unit				
Extruder Diameter	mm	90	65	30
Extruder Length/Diameter Ratio	L/D	24	24	23
Extruder Rotating Speedr/min	r/min	66	10-48	10-21
Max Extrusion Capacity	kg/h	160	30	4
Extruder Motor Power	kW	37	15	2.2
Barrel Heating Zone	/	4	4	2
Barrel Heating Power	kW	16	7.42	2.7
Cooling Fan Power	kW	0.72	0.12	/
Power Unit				
Oil Pump Motor Power	kW	23		
Hydraulic System Pressure	Mpa	0.1		
Pneumatic System Pressure	Mpa	0.8		
Cooling System Pressure	Mpa	0.4		
Air Consumption	m³/h	22		
Hot Cutter Power	kW	3		
Total Power	kW	130.65		
Remarks				
Total Installed Power I	L	46#/300		
Chiller Recommend	hp	15/10		
Air Compressor recommend	hp	10		

All the machines above can be optionally equipped with 100 points parison control system,parameters would be changed as below:

After with parison control			
Model	/	SL2-L5X2-3A(90-65-30)	
Servo Motor Power	kW	5.5	
Total Power	kW	136.15	

Effective Dimension Of Mold Plate	mm		
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The page data are derived from the Leshan Smart Factory testing, the equipment specific data to customize the situation of the equipment.

Unit	Configuration and Function	Standard configuration	Optional configuration
Extruder and Die Head Parts	Inlaid alloy main screw	●	
	Belt drive	●	
	Three-phase asynchronous motor	●	
	Stainless steel hopper (with discharge port)	●	
	Wired heating coil or heating plate	●	
	Barrel cooling fan	●	
	Continuous extrusion die	●	
	Motor directly connected gearbox mechanism (ZLYJ extrusion system)		○
	The extrusion system uses German technology		○
	Die head uses German technology		○
	Automatic material shortage alarm		○
	Magnetic stand		○
	Cooperate with hoppers used for vacuum feeder, four-in-one feeder system, screw feeder, etc.		○
	Cooperate with hoppers used for vacuum feeder, four-in-one feeder system, screw feeder, etc.		○
	Manual screen changing mechanism (frame assembly needs to be changed)		○
	Manual screen changing mechanism (frame assembly needs to be changed)		○
	Cone sleeve type belt drive mechanism		○
	Porcelain joint heating coil or heating plate		○
Ceramic heating coil and heating plate		○	
Clamping Mechanism Parts	Pull arm type clamping mechanism	●	
	The swing frame uses electronic brakes	●	
	Clamping force of standard model (refer to catalog parameter)	●	
	Standard model capacity die size (refer to catalog parameters)	●	
	Swing frame movement is driven by hydraulic cylinder	●	
	Mould opening and closing movement is driven by hydraulic cylinder	●	
	Motion guide adopts linear guide	●	
	Synchronous gear mechanism	●	
	Mould mounting mechanism (electric hoist)		○
	Ejector		○
Increase the clamping stroke		○	
Increase or decrease the die size		○	
Frame Parts	Frame body (no lifting mechanism)	●	
	Electric head-up mechanism	●	
	Die support frame	●	
	Casing lifting mechanism		
	Reserve the manipulator installation position stairs		
	Platform fence		○
	Extrusion platform moving left and right		○
	Suspension feet		○
Safety Door Parts	Standard Athlon-type series machine safety door appearance(Refer to album)	●	
	Standard color(Refer to album)	●	
	Light blue translucent acrylic viewing window	●	
	Main carbinet	●	
	Hanging rear door	●	
	Front safety door protection net	●	
	Standard U-type series machine safety door appearance(Refer to album)	●	
	Standard color(Refer to album)	●	
	Light blue translucent acrylic viewing window	●	
	Different color requirements from standard color		○

Unit	Configuration and Function	Standard configuration	Optional configuration	
Blow Pin Parts	Blow pin up and down movement use hydraulic cylinder drive	●		
	Up and down motion guide using linear guide rail	●		
	Manual hand wheel to adjust the blow pin from front to back	●		
	Fixed pen holder	●		
	Removable cutting ring	●		
	Rapid cooling system in the bottle and pen insertion	●		
	Electric pen		○	
	Side injection device		○	
	Pen holder with simple manipulator function		○	
	Rotating inclined pen holder		○	
	Up-lift pen holder		○	
	Knife Parts	Sealing cutter	●	
		Universal cold and hot shared cutter (horizontal)		○
1-2kw hot cutter transformer			○	
General hot cutter (front and rear) or left and right horizontal cold cutter			○	
Multi-die head special cold knife			○	
Cold cutting blade			○	
Imported hot cutting blade			○	
Electrical Control Parts	SIEMENS S7-1200 control system	●		
	inch color touch screen	●		
	SIEMENS AC Contactor	●		
	Md500Inovance inverter Md500	●		
	CO-TRUST Temperature Control Module	●		
	Speed, displacement, pressure, flow, temperature and time parameters can be set, edited, accessed	●		
	Receipt Data Storage of 100 Sets of Mould	●		
	Malfunction Alarm, Malfunction Record, Malfunction Self-diagnose	●		
	Monitoring of Input, Output, Action State and Action Time	●		
	Output Auto-counting, Auto-reset	●		
	Station auto-balanced system	●		
	Auto-reset	●		
	Protecting Extruder from Low Temperature and High Temperature	●		
	Mould Temperature Alarm	●		
	Oil High Temperature Alarm	●		
	Chinese and English operation screen, multilingual HMI	●		
	Remote maintenance function	●		
	Die nozzle thermostat		○	
) Computer temperature control for die nozzle (choose 1 of 2 temperature control with controller)		○	
	Opposite light curtain		○	
	In-mold labeling function		○	
	Side injection function		○	
	Mold core pulling function		○	
	Secondary clamping function		○	
	Die head anti-static device		○	
	Hydraulic 100-point wall thickness control system		○	
	Electric 100-point wall thickness control system		○	
15 inch color touch screen		○		
Hydraulic System Parts	YUKEN Oil Valve	●		
	Cooler	●		
	In-line filter	●		
	Level gauge	●		
	Pressure Meter	●		

