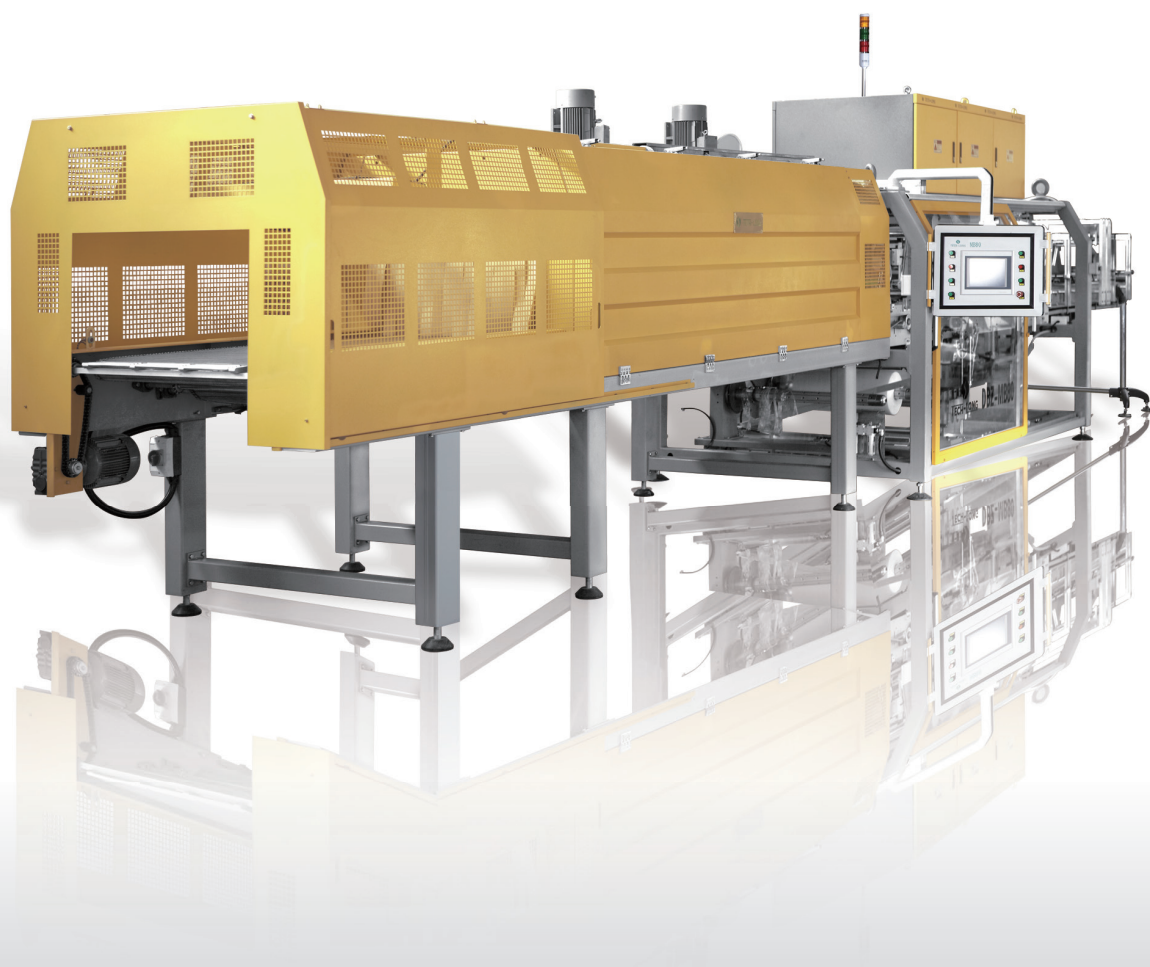


TECH-LONG HEAT SHRINKING WRAPPING MACHINE



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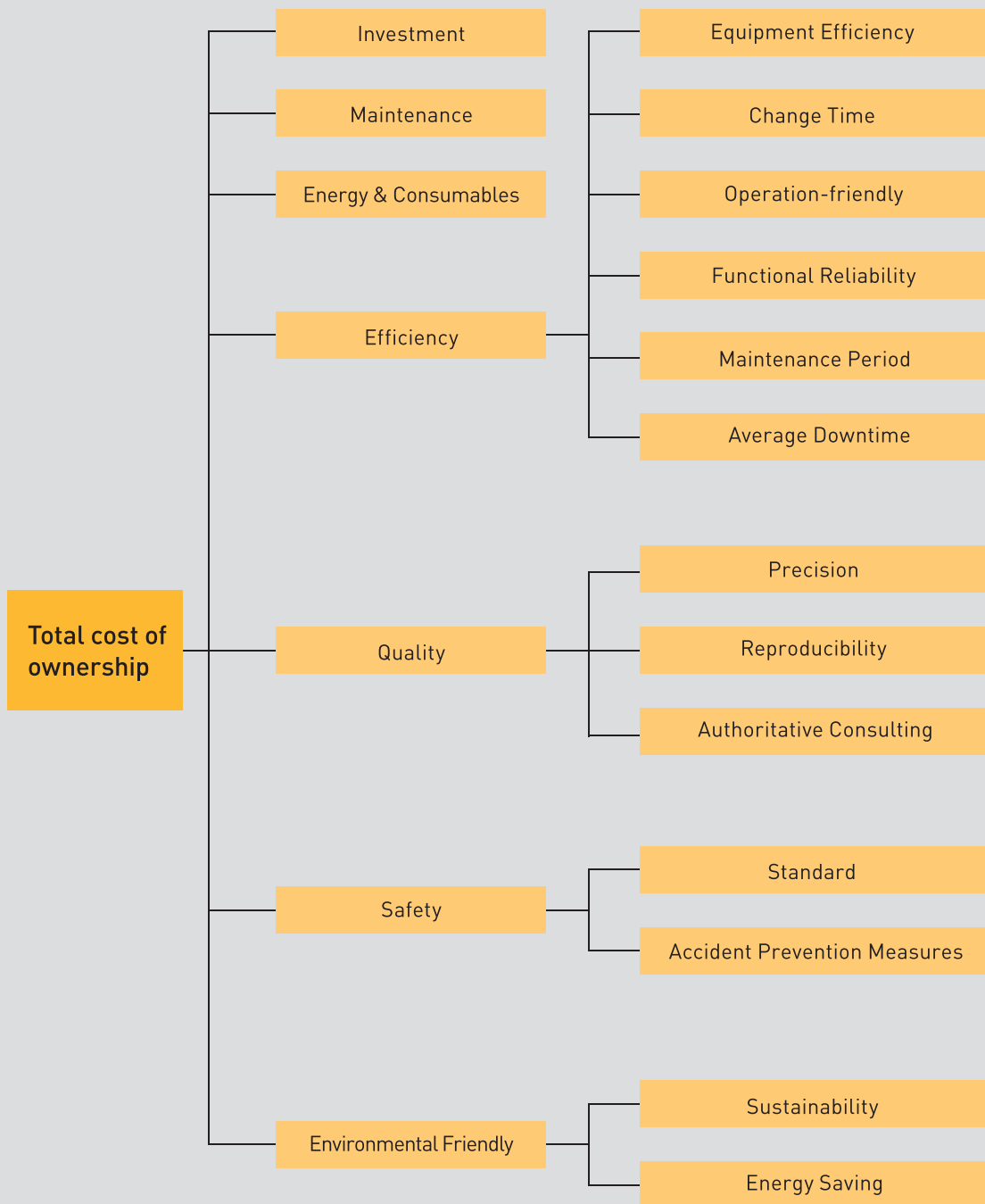
Overview

Tech-Long shrinking wrapper packaging machine is driven by multiple servo motors, which is convenient for presetting various bottle types and packaging specifications. It's suitable for fast-changing production of a variety of packaging specifications; for paper pad, half tray, white film, colored film, the energy-saving oven with adjustable air direction and volume can be realized on the same machine, which guarantees the appearance effect and shrinkage quality of the film package.

The product has the advantages of a high degree of automation, reliable control, simple adjustment, convenient operation, and maintenance, etc. To further develop the market, we have been committed to the research and development of new products, and strive to create more and more high-quality packaging products in multiple fields that meet customer Requirement.



The value we provide to our customers



Application Field

It is widely used in industrial packaging of water, beverages, beer, food, condiments, daily chemicals, medicine, etc., with glass bottles/PET bottles/cans, and other fields.



Condiments



Daily Chemicals



Hot-filled Beverage



Carbonated Drinks



Drinking Water

Scope of application

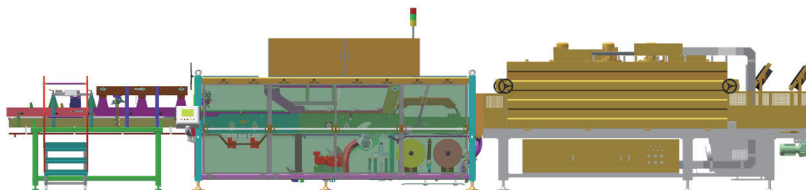
- * Applicable packaging types: pure film or colored film, pure film or colored film + paper pad, pure film or colored film + half tray;
- * Applicable packaging format: 2×2, 2×3, 3×4, 4×4, 4×5, 4×6, 5×6, 5×8;
- * Applicable bottle type and diameter: round bottle $\Phi 50\sim\Phi 165$, square bottle $\square 50\sim\square 165$, special-shaped bottle (sample confirmation required);
- * Applicable bottle bottom requirements: it should be quite stable (sample confirmation required for five-claw bottle or other special bottle bottom);
- * Applicable bottle volume: 200~5000ml;
- * Applicable bottle height: 120~360mm;
- * The best environmental temperature: 5~40°C;
- * The best environmental humidity: 50~65%RH;
- * The best altitude: 5~3000 meters;
- * Packaging output range: 20~90 packs/min.



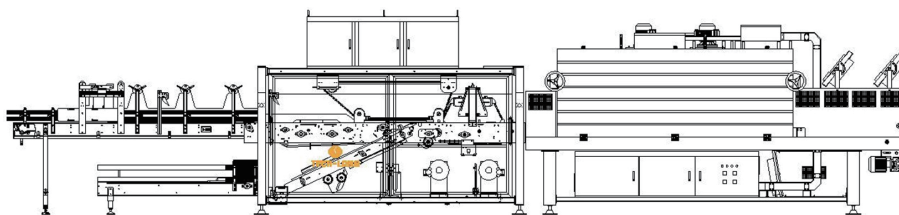
Model and Capacity

Model	Packaging capacity	Technical Parameters (size: length × width × height)	Remark
DBZ-MB30	30 packs/min	11190mm×1570mm×2470mm Total installed power: about 73KW Rated power: about 68KW	Servo rod type bottle dividing heat shrinking wrapping machine
DBZ-MBD30	30 packs/min	11190mm×1570mm×2470mm Total installed power: about 73KW Rated power: about 68KW	Servo rod type bottle dividing with paper pad heat shrinking wrapping machine
DBZ-MB45	45 packs/min	11190mm×1570mm×2470mm Total installed power: about 75KW Rated power: about 69KW	Single-lane heat shrinking wrapping machine, with ultrasonic film roll inspection as high configuration
DBZ-MBD45	45 packs/min	11190mm×1570mm×2470mm Total installed power: about 75KW Rated power: about 69KW	Single-lane heat shrinking wrapping machine with paper pad, with ultrasonic film roll inspection as high configuration
DBZ-MBX40	40 packs/min	11190mm×1570mm×2470mm Total installed power: about 75KW Rated power: about 69KW	Carton film wrapping machine, used for the secondary film package after the carton package, the film package of Tetra Pak, etc. (servo unwinding optional as high configuration)
DBZ-MB60	60 packs/min	12000mm×1870mm×2500mm Total installed power: about 82KW Rated power: about 75KW	High-speed pre-cut film heat shrinking wrapping machine (servo unwinding + ultrasonic film roll inspection)
DBZ-MBX90	90 packs/min	15865mm×1870mm×2300mm Total installed power: about 140KW Rated power: about 130KW	Double-channel pre-cut film heat shrinking wrapping machine (Compatible with single-channel 45 packs/min and dual-channel 90 packs/min, high-configuration servo unwinding for 40 packs or more)
DBZ-MBT35	35 packs/min	12690mm×1870mm×2470mm Total installed power: about 82KW Rated power: about 75KW	Half-tray heat shrinking wrapping machine, with ultrasonic film roll inspection as high configuration (function compatible with paper pad and pure film)

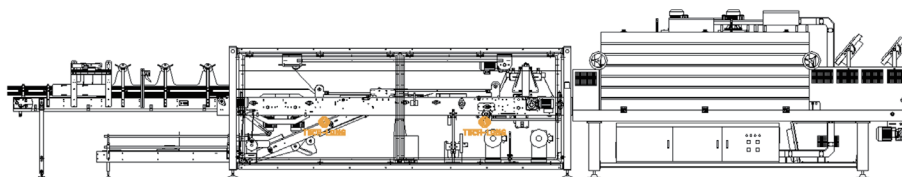
Types of Packaging Products



▲ Pure Film or Colored Film



▲ Pure Film + Paper Pad



▲ Pure Film + Half Tray



Technical Parameters of Packaging Configuration

■ Application Parameters of Heat Shrinkable Film

Item	Testing standard	Unit	Parameter
Material			PE or LDPVC (antistatic formula is required)
Density		g/cm ³	0,928
Degree of polymerization		grade	0,3
Maximum diameter of film roll		mm	500
Maximum width of film roll		mm	Maximum width of film roll = bottle diameter × number of bottles + 120~200mm
Diameter of film reel core		mm	φ76~77(3 inches)
Thickness		um	40~90 (40um ultra-thin film is generally used for the film package after the Carton packing)
Longitudinal shrinkage		%	>65
Lateral shrinkage		%	15~30
Breaking strength	ASTM D 882	N/mm ²	30~24
Yield strength	ASTM D 882	N/mm ²	13~13
Limit elongation	ASTM D 882	%	450~700
Tear strength	ASTM D 1922	g	300~495
Deep drawing	ITP 104	N mm.	25~24
Dynamic	ASTM D 1894	g	>0.40
Hot stickiness	ITP	g/75 mm ²	250
Welding temperature	ITP	C	130-200
Welding strength after cooling	ITP	N/cm ²	24
Gloss	ASTM D 2457	%	45
Turbidity	ASTM D 1003	%	15
Remark: size of the film needs to be confirmed with Tech-Long technical department			



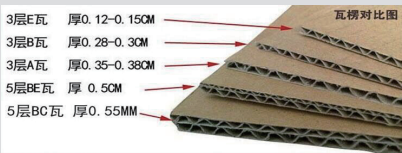
Technical Parameters of Packaging Configuration

■ Application Parameters of Paper Pad and Half Tray

Project Indicators	Unit	Parameter
Material	---	Three-layer corrugated paper
Thickness of paper pad or half tray	mm	3mm±0.25
Size of paper pad	mm	Cartonboard length = bottle diameter × number of bottles + 3mm Cartonboard width = bottle diameter × number of bottles + 3mm (Note: The paper pad needs to be chamfered with rounded corners of the same size as the bottle radius)
Size of half tray	mm	Cartonboard length = bottle diameter × number of bottles + half tray height + 8mm Cartonboard width = bottle diameter × number of bottles + half pallet height + 2mm (Note: The creases need to be threaded, and the specific dimensions are subject to the Cartonboard picture after confirmation)
Cartonboard storage of Cartonboard warehouse	PC	n≤300
Coverage pressure	g/m ²	150~200
Center coverage pressure	g/m ²	150~180

The paperboard material requirements and manufacturing are implemented in accordance with the national standard GB/T 6544-2008. Generally, the following points should be noted:

- *The Cartonboard is not allowed to have delamination without external force;
- *The color of each batch of Cartonboard should be basically the same, and no bottoming is allowed;
- *The surface of the Cartonboard should be flat and no obvious blanket prints are allowed;
- *The Cartonboard is not allowed to have folds, cracks, holes and other paper defects;
- *The cutting edges of flat paper should be neat and clean, and no missing edges, missing corners, thin edges, etc.
- *According to the quality, the Cartonboard is divided into five grades: A, B, C, D, E, of which A, B, and C are liner paperboards. The technical indicators should meet the parameters in the following table

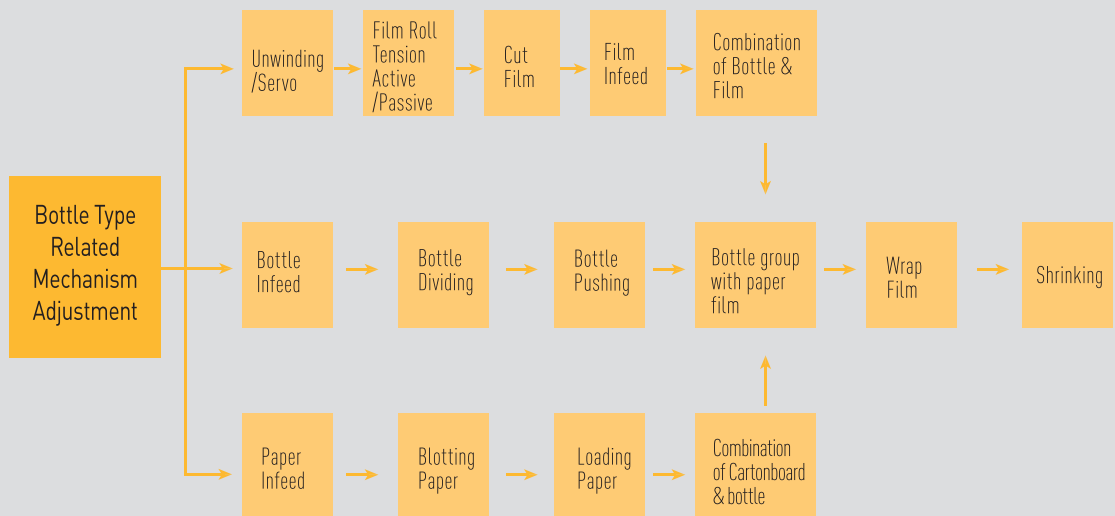
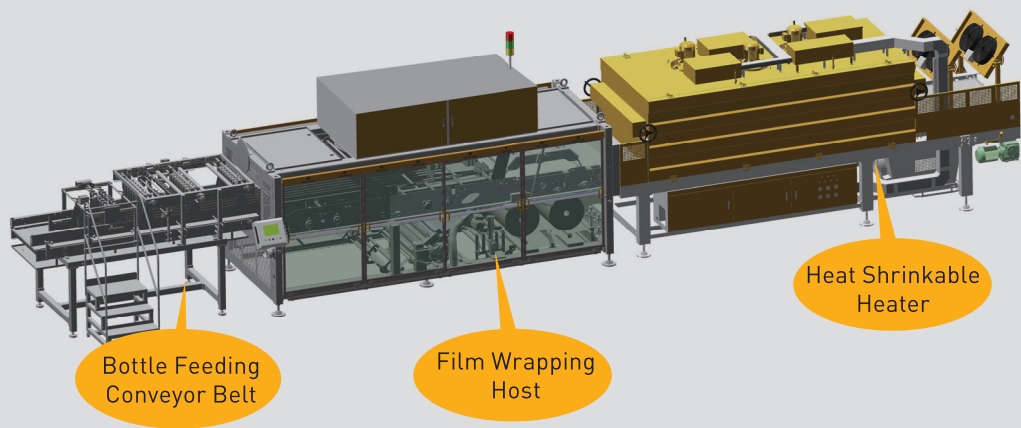


Item	Unit	Parameter				
		A	B	C	D	E
Quantitative	g/m ³	200±10.0 250±12.5 420±21.0	320±16.0 360±18.0 280±14.0	230±11.5 340±17.0 300±15.0	310±15.5 420±21.0 530±26.5	360±18.0 475±23.0
Tightness not less than	g/m ³	0.72	0.70	0.65	0.60	
Bursting index is not less than 200-230g/m ² ≥250g/m ²	kpa·m ² /gkgf/cm ² ·m ² /g	2.95 (0.030) 2.75 (0.028)	2.65 (0.027)	1.5 (0.015)	1.10 (0.011)	0.90 (0.0092)
The transverse ring crush index is not less than 200-230g/m ² ≥250g/m ²	N/m·m ² /g kgf/0.152m·m ² /g	8.4 (0.130) 9.7 (0.150)	8.4 (0.130)	6.0 (0.093)	5.2 (0.080)	4.9 (0.076)
The transverse folding resistance is not less than 340g/m ² 360g/m ² 420g/m ² 475g/m ² 530g/m ²	Times	80 80 80 80 80	50 50 50 50 50	18 14 10	6 5 4 3	3 2 2 1 1
Water absorption (positive/reverse) not more than	g/m ²	35/50	40/-	60/-	-	-
Delivery moisture	%	8.0±2.0	9.0±2.0	11.0±2.0	11.0±3.0	

Structural Principle

Working principle: According to the product packaging specifications, firstly adjust the bottle type related mechanism, the product is input from the bottle conveyor, the bottle is divided into several rows by the bottle dividing belt, and then the bottle divider gathers the moving bottles into several rows as a bottle group continuing to travel. When the bottle travels to the bottle pushing part, the uncovering part transports the paper pad or half tray in the Cartonboard bin to the bottom of the bottle group through the climbing belt; at the same time, the hob assembly transfers the roll-shaped packaging material on the bracket, cut into a certain length and place it at the bottom of the entire bottle group, and then wrap the packaging material on the bottle group from back to front by the film wrapping device; then the wrapped bottle group is heated in the oven, and the packaging material will be softened and shrunk after being heated, and then sticks to the bottle. At the end, the fan at the outlet of the heat shrinking oven is cooled and shrunk by blowing to complete the wrapping, and the entire packaging process is completed.

- Note:**
- 1 The Cartonboard at the bottom of the bottle set can be selected by the customer and has no obvious impact on the packaging quality of the finished product.
 - 2 The standard MB45 can be equipped with ultrasonic film roll detection, which is more convenient to use.
 - 3 The standard MBX90 is available for more than 40 packs/min. Equipped with servo unwinding, film loading is more stable



Design Features

■ The automatic control system with multiple servo motors:

The automatic film shrinking wrapping machine is driven by 6~9 servo motors. This transmission control system guarantees the constant tension of the film. It is convenient for various bottle types and packaging specifications: the program is pre-set to ensure the fast change of production specifications, with automatic fault alarm and processing prompt function, convenient for maintenance.

■ Heating furnace and temperature automatic control system for film heat shrinkage:

The oven is designed with concentrated heating, and adjustable shrinkage temperature, film blowing air volume, and conveying speed, which can improve the applicability of the oven to various films. The total air volume is controlled by the frequency converter to control the speed of the fan motor and is bound to the recipe, the local air volume is adjusted and distributed by the mechanical structure, and the conveying speed is controlled by the frequency converter to control the speed of the conveying motor. The temperature of the front and back zones in the oven channel is processed by the temperature control table after the temperature signal is detected by the thermocouple, and the heating tube of the heating chamber is controlled to make the temperature in the oven channel reach the set value and keep it warm. The whole process has another two sets of thermoelectrics. The temperature control meter detects and monitors the temperature in the two heating chambers. This temperature value can be used as a basis for judging whether the equipment is abnormally heated. The heated and contracted product package is cooled by a fan and output after cooling. The temperature, air volume, and conveying speed of the front and back zones of the product package in the oven channel can be adjusted arbitrarily within the range as required.

■ Servo unwinding and servo film cutting technology:

Servo unwinding ensures that the tension of the film does not change with the change of the film speed, thus ensuring the uniform ductility of the film, which is especially suitable for ultra-thin films (up to 0.04mm) and high-speed film loading. The servo film cutting length is accurately adjustable and can be used for positioning and high-speed film cutting of colored films.

■ Film wrapping servo control mechanism:

The mechanism can be adjusted flexibly, so that films of different lengths and widths can be evenly wound on the set bottle group, which is conducive to the uniform thermal shrinkage of the film and can achieve excellent shrinkage effects.



Design Features

Equipment Mechanical Configuration and Characteristics

- Single-lane or dual-lane transporting structure, the main work steps include: bottle feeding, grouping, Cartonboard feeding (optional), Cartonboard forming (optional), film wrapping, heat shrinking/cooling, etc.;
- Equipped with safety (noise) protection doors with safety switches, designed to comply with China's equipment safety protection rules;
- The driveshaft is made of high-quality carbon steel or quenched and tempered stainless steel, and other mechanical parts are made of high-quality carbon steel, stainless steel, and anti-corrosion aluminum;
- The bottle-feeding conveyor belt is composed of engineering plastic chainplates with low friction coefficient, which continuously feeds bottles and is guided by-lanes;
- The film roll is located in the lower part of the machine (optional external). One work, one standby; the mandrel of the film roll is pneumatically locked; when the film roll reaches the end, it will stop automatically;
- The unwinding of the film roll is controlled by a progressive braking device (servo unwinding is optional) to ensure its constant tension, and a compensation device is provided to ensure that the film maintains a constant tension during the conveying process and is even and flat; The manual sealing rod connects the ends of the two rolls of film together when the roll of film is used up
- Electromagnetic clutch or servo motor is used to precisely drive the rotating blade to cut the film, and the incision is precise and neat; (servo film cutting is optional);
- Electronically adjust the length of the film, with static elimination device; printing film positioning device (the static elimination device and the film positioning device are optional);
- The tunnel heating element is located at the top to heat concentratedly. The air volume at the side and bottom of the tunnel can be adjusted according to the actual situation. The total air volume is steplessly adjusted by the inverter; the double-row chain is used to drive the stainless steel mesh chain in the tunnel. In emergency situations (such as power outages) The conveyor belt can be shaken out manually to send out the finished product in the tunnel. The exit of the tunnel is equipped with a packaging cooling device;
- The main electrical cabinet is equipped with a heat dissipation device (air conditioner or powerful fan), and the air conditioning of the electrical cabinet adopts forced ventilation; electronic temperature control, display and fault alarm, etc., high-temperature control accuracy, which can achieve an accuracy high-temperature control;
- The bottle feeding and conveying are equipped with a bottle shaking device, and with the function of feeding Cartonboard, the Cartonboard is sprayed and formed into a half tray.

The main electrical materials are configured as follows:

Part		Standard Configuration	Optional Configuration	Part		Standard Configuration	Optional Configuration
Motor	Main drive	Well-known European and American brands	SEW	Cylinder electromagnetic valve	cylinder	SMC	----
	Bottle dividing	Well-known European & American brands	SEW		electromagnetic valve	SMC	----
	Bottle Infeed	Well-known European & American brands	SEW		Triple	SMC	----
	Bottle pushing	Well-known European & American brands	SEW		Electric clutch for film cutting	WARNER	Servo film cutting
	Film wrapping	Well-known European & American brands	SEW	main structure	Body material	quality steel	----
	Film delivery	Well-known European & American brands	SEW	Glue system (Applicable for semi-pallet Cartonboard models)	Glue machine	Nordson	GRACO
	Cartonboard forming	Well-known European & American brands	SEW		Glue gun	Nordson	Compatible with glue machine
	Loading paper (optional)	Well-known European & American brands	SEW		Glue hose	Nordson	Compatible with glue machine
	Cut film (optional)	Well-known European & American brands	SEW				

Design Features

Equipment Electrical Configuration and Characteristics

- The modular structure provides a high degree of flexibility; the linear arrangement of the machine makes the packaging particularly accurate;
- Precise operation and motion control through a multi-axis synchronous servo system can achieve an easy operation and one-key switching of format changes;
- International leading fieldbus control technology, which has millisecond response speed.;
- Each equipment of the production line is designed to indicate safety protection functions such as shutdown and interlock according to the alarm and alarm information of various abnormal production conditions;
- The alarm information is displayed on the 10-inch HMI with both graphics and text;
- Power supply: 380~480AC ($\pm 10\%$ maximum); 50~60Hz 3PH+N+PE; control voltage: DC24V;
- According to the IEC529 standard, the electrical cabinet protection level is IP31~IP54, and the button protection level is IP65; insulated flame-retardant cable (national industrial standard);
- The air conditioning of the electric cabinet adopts forced ventilation (air conditioning);

The main electrical materials are configured as follows:

Element		Standard Configuration	Optional Configuration
Electric control cabinet	Frequency converter	ABB	Danfoss etc.
	Servo Controller	B&R	SIEMENS
	Serial and parallel ports of electrical and automatic control systems	OPCUA	Profinet/PowerLink
	Terminals	Weidmuller	----
	Low voltage electrical switch	ABB	SIEMENS
	PLC (Programmable Computing Controller)	controller integration	----
	Button	ABB	----
Detection Systems	Photoelectric switch	Leuze	SICK
	Cylinder magnetic switch	AirTAC	----
	Proximity switch	P+F	----
HMI	Touch panel	SIEMENS	B&R

Remarks (mechanical and electrical selection):

- 1 If you choose an optional brand, the delivery date, price, and equipment-related parameters will change. The above standard configuration is tentative and will be notified in time if there is any change.
- 2 If the customer has special requirements, the sales representative must carefully negotiate and confirm with the customer and the relevant electrical and mechanical engineers of Party B's design before signing the contract.

Design Features

Equipment Maintenance Features

- The location and space distribution of the power unit of the whole machine is convenient for maintenance: 1 ordinary geared motor for bottle feeding, 1 main drive servo motor, 2 bottle dividing servo motors, 1 bottle driving servo motor, 1 film feeding servo motor, 1 film cutting servo motor (the standard configuration of MB30 and MB45 are electromagnetic clutches, and the standard configuration of MBX90 is servo film cutting), 1 servo motor for film wrapping, 1 servo motor for paper loading (optional, a standard configuration without paper loading function), Cartonboard forming 1 servo motor. 1 ordinary geared motor for the oven network chain, and 2 oven fan motors (3 for double-lane film wrapping machines).
- Each action of the film wrapping machine is individually controlled by each servo motor. The mechanical structure is simple, the wearing parts less, and the mechanical wear is light. If there's wearing, the control system can be adjusted to eliminate the fault, and the maintenance difficulty is low.
- Due to the multi-servo control technology, maintenance is also simple and convenient. The cylinder solenoid valves are all well-known international and domestic brands, which are durable. Even if the cylinder moves slowly, the cylinder or solenoid valve wears out and leaks, only corresponding parts need to be replaced.
- The motors of the film wrapping machine are all external, and each servo motor completes the main actions individually. Each part of the equipment has a separate detection device to detect the abnormal conditions of each part during production and operation, so as to make quick and accurate judgments and minimize the time for customers to overhaul the machine. After the equipment breaks down, it can be tested independently by the system, which is easy to check the fault location and the reason for repair.
- The film wrapping machine adopts the most advanced and simple structure design in the world. By reducing mechanical parts, it can achieve convenient access, easy operation, and maintenance. When we change the packaging specification, the time required is the shortest; When the film wrapping machine is in the operation of the equipment. In case of failures such as falling or bursting of bottles, you only need to straighten the bottle, and you can continue to run without finding the original position. It takes 0.5 to 1 minute.
- Before starting the machine, check whether there are sundries on each running chain and network chain to ensure smooth operation.
- Regularly check the lubrication degree and lubricating oil condition of each part of the bearing, and regularly add lubricating oil to the bearing and sprocket chain. When the bearing is found to run unsteadily or there is an abnormal sound, the bearing should be replaced in time to ensure the smooth operation of the machine.
- Since the Cartonboard sucker is a wearing part, it is necessary to check the operation of the Cartonboard sucker regularly to ensure the stable operation of the Cartonboard sucker, and replace the sucker and joints if necessary.
- In order to ensure the glue spraying effect of the glue machine, when you find that the glue spraying effect is not good, check whether the nozzle is blocked and check whether the pressure is normal. If necessary, use a cleaning tool-a needle to clean the nozzle. If there are other situations that cannot be solved by yourself, please contact the glue machine manufacturer or our company.



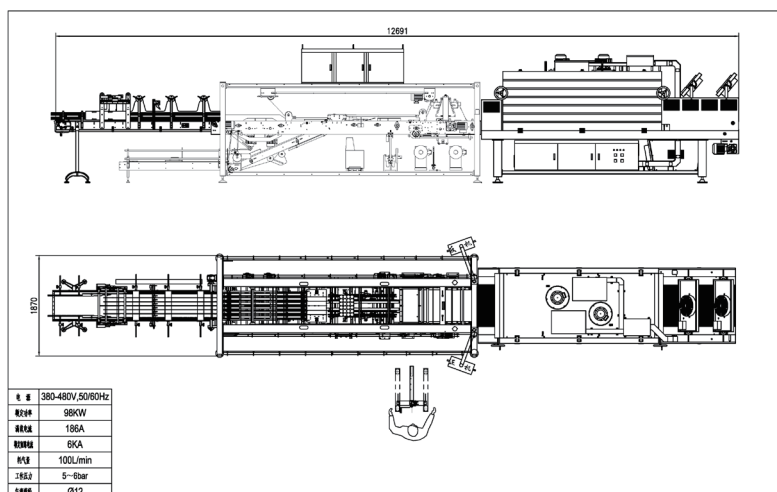
Heat Shrinking Wrapping Machine (MBT35)

Equipment Overview

- Equipment name: DBZ-MBT35 heat shrinking warpping machine
- Production capacity: 45 packs/min for pure film and paper pads, 35 packs/min for half tray pack
- Overall dimensions: L 12690 mm×W1870 mm×H2470 mm
- Total weight: about 7200kg
- Equipment composition:
 - Conveyor 1 set Dimensions: L3170mm×W990mm×H1670mm; weight: about 300kg
 - Packing machine 1 set Dimensions: L5030mm×W1870mm×H2470mm; Weight: about 3400kg
 - Heat shrinkable 1 set Dimensions: L4790mm×W1400mm×H2380mm; Weight: about 3500kg
- Packaging qualification rate: about 99.5%

MBT35 automatic shrink film packaging machine is a product developed by our company through technological improvement, and it is currently the most advanced shrink film packaging equipment in China. This equipment adopts multi-servo control technology and fully automatic operation; it is driven by well-known European and American brand servo motors; it has the advantages of high automation, reliable control, simple adjustment, and intelligent operation. It can be widely used in beverages, beer, chemicals, food, pharmaceutical and other industries. It can be used for various bottles and cans separately for the secondary packaging, and can also be used in conjunction with an automatic filling production line. The main parts of this machine are made of high-quality steel and aluminum profiles, and the electrical and pneumatic components are of international and domestic well-known brands, so the equipment has a low failure rate and high reliability.

Equipment Floor Plan



Heat Shrinking Wrapping Machine (MBT35)

Equipment Production Status

- Noise: ≤80 decibels;
- Note: The actual noise decibel value will be reduced or increased due to the influence of the processed container, packaging, machine power, and building acoustic characteristics.
- Electricity: [Customer supplies power to the main electrical cabinet]
- Power supply: 380~480AC(±10%); 50~60Hz3PH+N+PE;
- Lighting power supply: 220V / 50Hz, single-phase;
- [Special voltage needs to be notified in advance, equipment-related parameters, delivery date, and the price will be different]
- Control voltage: 24VDC.
- Compressed air: [customer supplies air to the host]
- Minimum working pressure: 5~6bar, Filtration, no water, no impurities are required;
- Air consumption: 100L/min.

Common Product Packaging Methods

Bottle Diameter	Capacity	Packing Format	Packing Speed (packs/min) Heat Shrinking Film		Packing Speed (packs/min) Half tray Heat Shrinking Film (except 3x2 under 750ml)	
			Can/Glass bottle And CSD Can	PET	Can/Glass bottle And CSD Can	PET
φ50~φ65	330ML	6×4 3×2	45PPM	40PPM	35PPM	35PPM
	500ML	6×4 3×2	45PPM	45PPM	35PPM	35PPM
	600ML	6×4 3×2	45PPM	45PPM	35PPM	30PPM
φ65~φ75	700ML	4×3 3×2	45PPM	45PPM	35PPM	35PPM
	750ML	4×3 3×2	45PPM	45PPM	35PPM	35PPM
φ75~φ120	1L	4×3 3×2	45PPM	40PPM	35PPM	30PPM
	1.5L	3×2	45PPM	40PPM	35PPM	30PPM
	2L	3×2	45PPM	40PPM	35PPM	30PPM

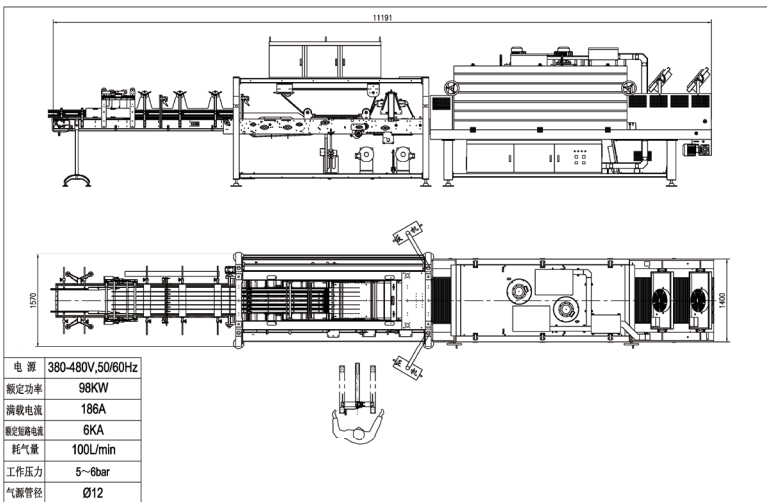
Heat Shrinking Wrapping Machine (MBT45)

Equipment Overview

- Equipment name: DBZ-MB45 heat shrinking wrapping machine
- Production capacity: 45 packs/min of pure film and paper pad
- Overall dimensions: L 11190mm×W1570 mm×H2470 mm
- Total weight: about 7000kg
- Equipment composition:
 - Conveyor 1 set Dimensions: L3170mm×W990mm×H1670mm; weight: about 300kg
 - Packing machine 1 set Dimensions: L3530mm×W1570mm×H2470mm; Weight: about 3200kg
 - Heat shrinking 1 set Dimensions: L4790mm×W1400mm×H2380mm; Weight: about 3500kg
- Packaging qualification rate: about 99.5%

The DBZ-MB45 automatic heat shrinking wrapping machine is a product developed by our company, and it is currently the most advanced heat shrinking wrapping machine in China. This equipment adopts multi-servo control technology and fully automatic operation; it is driven by well-known European and American brand servo motors; it has the advantages of high automation, reliable control, simple adjustment, and intelligent operation. It can be widely used in beverages, beer, chemicals, food, pharmaceutical and other industries. It can be used for various bottles and cans separately for the secondary packaging, and can also be used in conjunction with an automatic filling production line. The main parts of this machine are made of high-quality steel and aluminum profiles, and the electrical and pneumatic components are of international and domestic well-known brands. The equipment has a low failure rate and high reliability.

Equipment Floor Plan



Heat Shrinking Wrapping Machine (MBT45)

Equipment Production Status

- Noise: ≤80 decibels;
- Note: The actual noise decibel value will be reduced or increased due to the influence of the processed container, packaging, machine power, and building acoustic characteristics.
- Electricity: [Customer supplies power to the main electrical cabinet]
- Power supply: 380~480AC(±10%); 50~60Hz3PH+N+PE;
- Lighting power supply: 220V / 50Hz, single-phase;
[Special voltage needs to be notified in advance, equipment-related parameters, delivery date, and price will be different]
- Control voltage: 24VDC.
- Compressed air: [customer supplies air to the host]
- Minimum working pressure: 5~6bar, Filtration, no water, no impurities are required;
- Air consumption: 100L/min.

Common Product Packaging Methods

Bottle Diameter	Volume	Packing format	Packing Speed (packs/min)		Maximum Production Capacity (bottles/hour)	
			Can Glass Bottle	PET	Can Glass Bottle	PET
φ50~φ65	330ML	3×2	35PPM	25PPM	12600	9000
	500ML	4×3	45PPM	45PPM	32400	32400
	600ML	6×4	45PPM	45PPM	64800	64800
φ65~φ75	700ML	6×4、4×3、3×2	45PPM	45PPM	32400	57600
	750ML	4×3、3×2	45PPM	45PPM	32400	32400
φ75~φ120	1L	4×3、3×2	45PPM	40PPM	32400	14400
	1.5L	3×2	45PPM	40PPM	16200	14400
	2L	3×2	45PPM	40PPM	16200	14400

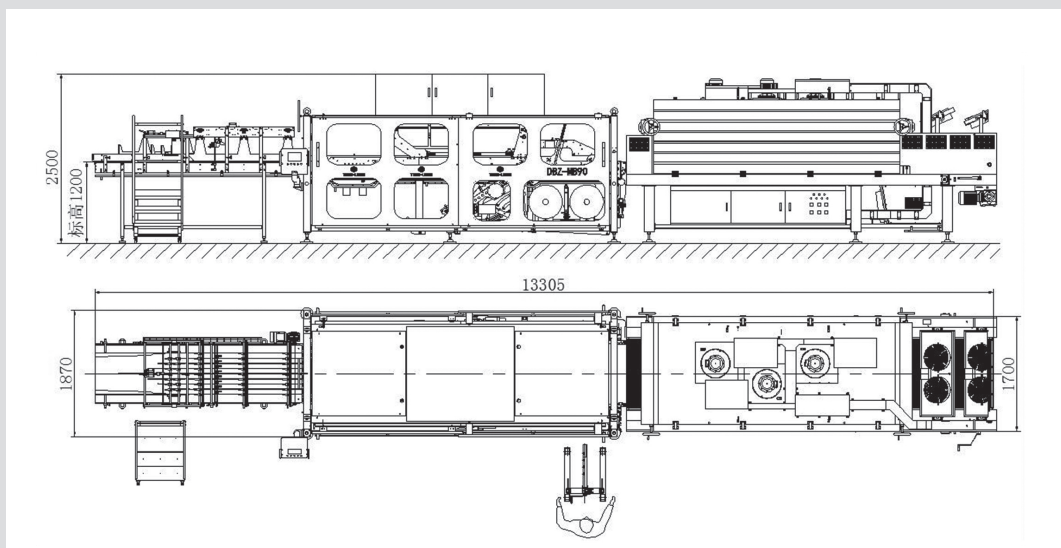
Heat Shrinking Wrapping Machine (MBX90)

Equipment Overview

- Equipment name: DBZ-MBX90 heat shrinking wrapping machine
- Production capacity: Dual-lane pure film 90 packs/min, compatible with single-lane 45 packs/min
- Overall dimensions: L 13305 mm×W1870 mm×H2470 mm
- Total weight: about 8000kg
- Equipment composition:
 - Conveyor 1 set Dimensions: L3070mm×W1150mm×H1800mm; weight: about 700kg
 - Packing machine 1 set Dimensions: L4830mm×W1890mm×H2500mm; Weight: about 3800kg
 - Heat shrinking 1 set Dimensions: L5480mm×W1700mm×H2440mm; Weight: about 3500kg
- Packaging qualification rate: about 99.5%

The DBZ-MBX90 full-automatic heat shrinking wrapping machine is a product developed by our company. It is currently the most advanced dual-lane heat shrinking wrapping machine in China. This equipment adopts multi-servo control technology and fully automatic operation; it is driven by well-known European and American brand servo motors; it has the advantages of high automation, reliable control, simple adjustment, and intelligent operation. It can be widely used in beverages, beer, chemicals, food, pharmaceutical and other industries. It can be used for various bottles and cans separately for the secondary packaging, and can also be used in conjunction with an automatic filling production line. The main parts of this machine are made of high-quality steel and aluminum profiles, and the electrical and pneumatic components are of international and domestic well-known brands. The equipment has a low failure rate and high reliability.

Equipment Floor Plan



Heat Shrinking Wrapping Machine(MBX90)

Equipment Production Status

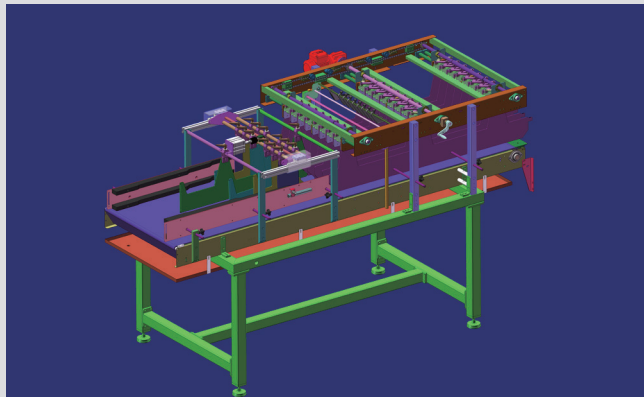
- Noise: ≤80 decibels;
Note: The actual noise decibel value will be reduced or increased due to the influence of the processed container, packaging, machine power, and building acoustic characteristics.
- Electricity: [Customer supplies power to the main electrical cabinet]
- Power supply: 380~480AC(±10%); 50~60Hz3PH+N+PE;
- Lighting power supply: 220V / 50Hz, single-phase;
(Special voltage needs to be notified in advance, equipment-related parameters, delivery date, and price will be different)
- Control voltage: 24VDC.
- Compressed air: [customer supplies air to the host]
- Minimum working pressure: 0.7MPa/7bar/100PSI, Filtration, no water, no impurities are required;
- Air consumption: 100L/min.

Common Product Packaging Methods

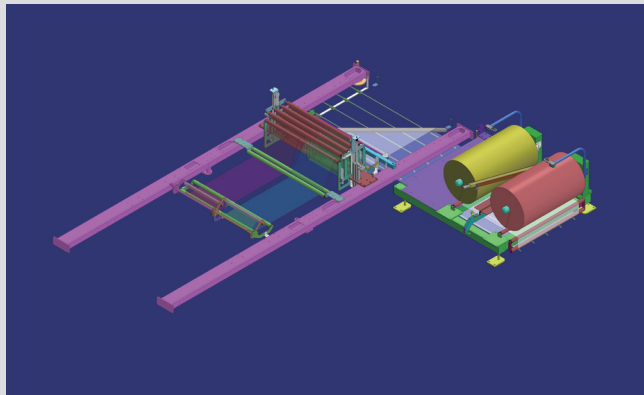
Bottle Diameter	Volume	Packing format	Packing speed: packs/min (the actual speed is related to the bottle type, the following is the conventional bottle type speed, the actual speed needs to be confirmed according to the bottle type)		Maximum Production Capacity (bottles/hour)	
			Can/Glass bottle And CSD Can	PET	Can/Glass bottle And CSD Can	PET
φ50~φ65	330ML	3×2	90PPM	90PPM	32400	32400
	500ML	4×3	90PPM	90PPM	64800	64800
	600ML	6×4	45PPM	45PPM	64800	64800
φ65~φ75	700ML 750ML	3×2	90PPM	90PPM	32400	32400
		4×3	90PPM	90PPM	64800	64800
		6×4	45PPM	45PPM	64800	64800
φ75~φ120	1L	4×3 3×2	80PPM	80PPM	57600	57600
	1.5L	3×2	80PPM	80PPM	28800	28800
	2L	3×2	80PPM	80PPM	28800	28800

Main Parts of Equipment

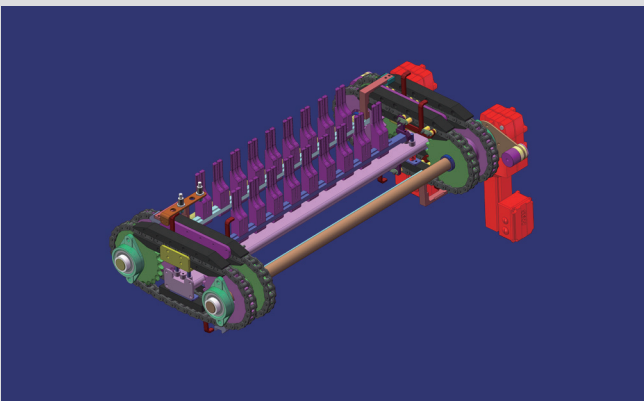
Conveyor Belt Parts



External Film Connecting Parts

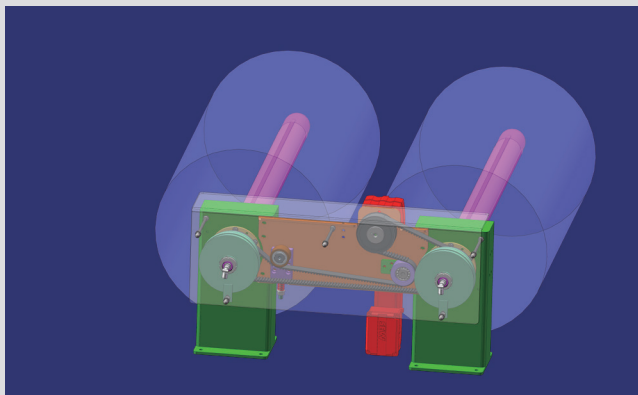


Bottle Divider Parts

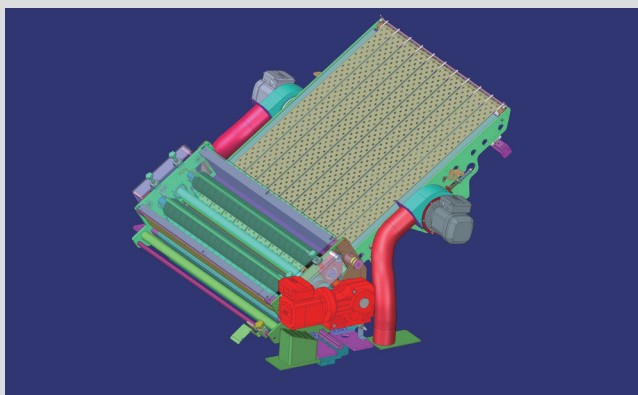


Main Parts of Equipment

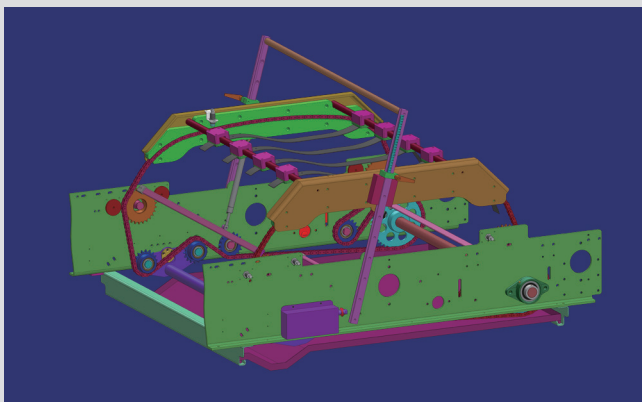
Servo Unwinding Parts



Film Pre-cutting Parts

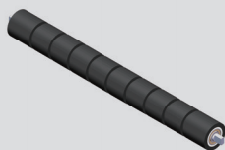


Film Wrapping Parts

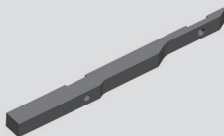


Key Parts of Equipment

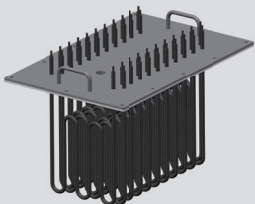
■ Rubber Coated Roller



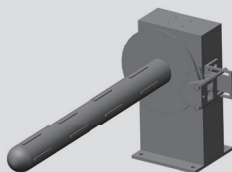
■ Step Board



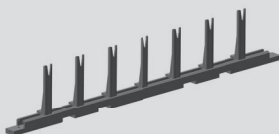
■ Heating Tube Assembly



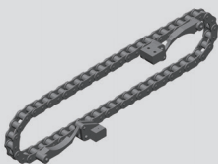
■ Film Support Assembly



■ Dial Grab Assembly



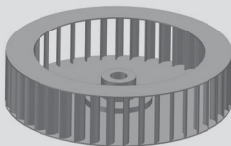
■ Bottle Dividing Chain Assembly



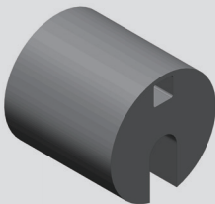
■ Spline End Cap



■ Dual-channel Reverse Wind Wheel



■ Cushion Block





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www.tech-long.com



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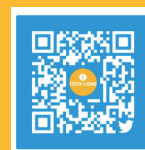
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