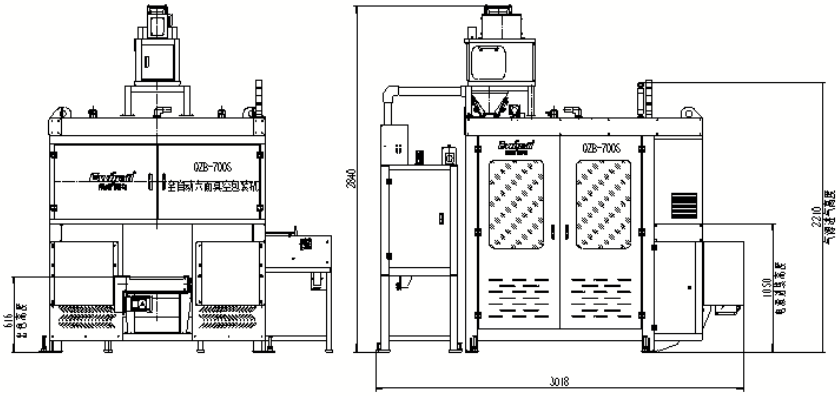
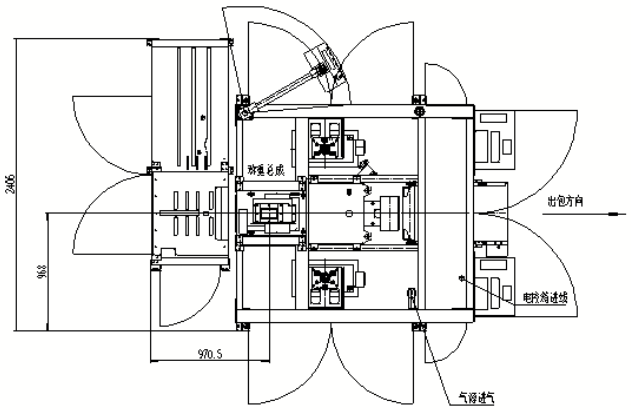
QZB-700S Fully Automatic Six-sided Vacuum Shaping Packaging Machine Product Description





1、Equipment components

QZB-700S fully automatic six-sided vacuum shaping packaging machine consists of a bag feeding machine, an automatic packaging scale, a material discharge component, a vacuum shaping component, and a bag taking and reversing mechanism.

1.1 Bag feeding machine

Manual bag placement, automatic bag supply and automatic bag delivery, one-button automatic switching of different packaging phases, no manual adjustment required. After the manual bag is placed in the bag warehouse, the equipment automatically sends the bag to the bag picking station, and then the bag picking module grabs the bag and sends it to the shaping and bag transfer station. The bag opening component opens the bag mouth and sends it to the discharge mechanism.

1.2 Automatic packaging scale

The latest and most advanced weighing calculation method adopts a three-sensor structure. The weighing cylinder has a balanced layout and reasonable force, which increases the service life of the equipment. It is not affected by the vibration of the workshop machines and has higher stability and anti-interference ability.

1.3 Unloading components

The material discharge assembly consists of two sets of material storage barrel mechanisms. The bag feeding mechanism puts the packaging bag into the material guide barrel and fixes it. After the material receives the signal, it is placed in the material storage barrel and then introduced into the fixed mold according to the equipment signal.

1.4 Vacuum shaping components

After the material guide cylinder puts the packaging bag and the material into the mold, the vacuum component moves to the bottom of the discharge component, and the vacuum component moves down to the sealed chamber for vacuuming and sealing.

1.5 Package Picking and Pushing Mechanism

After the vacuum component completes the vacuum heat sealing of the material bag, it is placed in the bag taking position. The bag taking mechanism takes the material bag out from the vacuum shaping mechanism and sends it to the bag inverting mechanism station. The whole process is completed automatically.

2、Main technical parameters of packaging unit

Dimensions (length × width × height): 3018mm × 2406mm × 2840mm

Packing range (kg): 0.5～5;

Packaging bag: accordion plastic packaging bag;

Packing speed: (500-600) bags/hour.

Air pressure：（0.5～0.7）MPa

Total gas consumption：340L/min；

Ambient temperature：（0～40）℃

Ambient humidity: not more than 90%RH at 40℃, higher humidity is allowed at low temperature

Rated power：6kW；

Grounding form：TN-S

Maximum dimensions of packaging bags (mm): width: 80-235; thickness: 40-80; length: 250-480.

4、Features

QZB-700S fully automatic six-sided vacuum shaping packaging unit is a rice and grains fully automatic six-sided vacuum packaging equipment with manual bag placement - continuous bag supply - automatic material discharge - automatic vacuum heat sealing, which can achieve (0.5~5) kg six-sided vacuum shaping packaging.

1、After the bag is placed manually, the equipment can automatically complete the filling and sealing process, which is convenient and simple to operate. The equipment has the function of automatic adjustment in place to realize the storage of system parameter formula.

2、It adopts touch screen, PLC programmable centralized control system, and servo control for transmission, with high degree of automation. It can change specifications quickly and automatically change product packaging specifications to meet the needs of flexible production.

3、The equipment has a self-diagnosis and prompt function, and the fault can be quickly eliminated according to the fault prompt. Maintenance is simple and convenient.

4、The equipment adopts a closed structure design and has a safety interlocking device.

5、The quantitative packaging scale adopts a separate cylinder to drive the feeding and a three-sensor weighing structure.

6、All weighing components are placed in a closed working room to reduce corrosion and wear of the components.

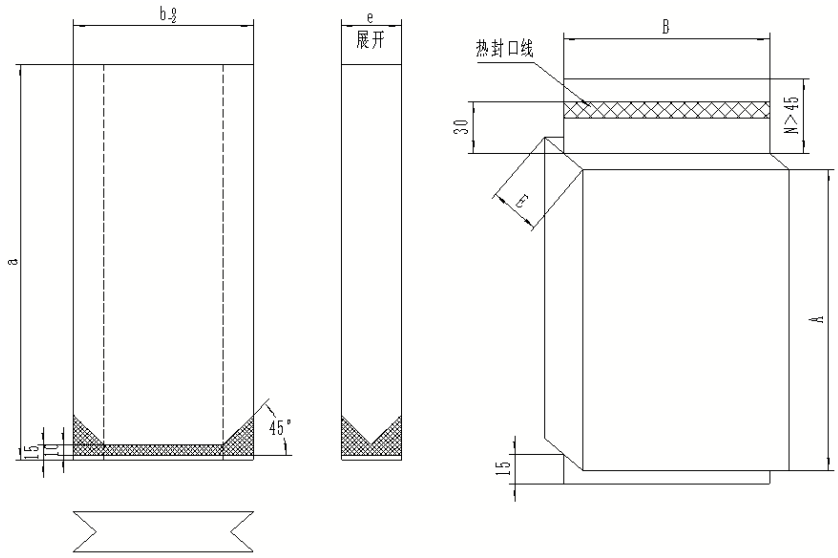
5、Main configuration list

No.	Parts Name	Brand	Category
1	PLC	Omron or Delta	Electrical part
2	Touch screen	MCGS	
3	Low voltage electrical	CHNT or EATON	
4	Limit switch	Omron	
5	Photoelectric/ proximity switch	Turck	
6	vacuum pressure switch	SMC or Delta	
7	Load cell	Mettler Toledo (USA) or HBM (Germany)	
8	Relay	IDEC	
9	Vacuum suction cup	ZD	
10	vacuum pump	Homemade with special craft	Mechanical part
11	cylinder	AirTAC	
12	The electromagnetic valve	Mindman	
13	servo motor	Inovance or Delta	
14	Planetary reducer	Hubei Kefeng or Delta	
15	Bearing	C＆U	

6、Packaging bag requirements

Bag size range（mm）

Width：80～235；Thickness：40～80；Length：250～480。



1、Standard packaging bag size for polished rice and reference size for rice bricks:

		Bag size				Reference size of brick			Remark
	Specification（kg）	Length a（mm）	Width b（mm）	Thickness e（mm）	Wall thickness（mm）	Height A（mm）	Width B（mm）	Thickness E（mm）	
Standard size (Japonica rice)	0.5	255	80	50	0.11~0.12	136	80	50	Standard mold
	2.5	430	220	40	0.13~0.14	309	220	40	
	5	465	228	78	0.13~0.14	306	228	78	
	0.5	290	80	40	0.11~0.12	170	80	40	Standard mold
	1	325	100	60	0.11~0.12	181	100	60	
	2.5	390	180	60	0.13~0.14	252	180	60	

2、Standard packaging bag size for indica rice and reference size for rice bricks:

		Bag size				Reference size of brick			Remark
	Specification（kg）	Length a（mm）	Width b（mm）	Thickness e（mm）	Wall thickness（mm）	Height A（mm）	Width B（mm）	Thickness E（mm）	
Standard size (Indica rice)	0.5	255	80	50	0.11~0.12	139	80	50	Standard mold
	2.5	430	220	40	0.13~0.14	316	220	40	
	5	465	228	78	0.13~0.14	312	228	78	
	0.5	290	80	40	0.11~0.12	174	80	40	Standard mold
	1	325	100	60	0.11~0.12	185	100	60	
	2.5	390	180	60	0.13~0.14	257	180	60	

3、Notes：

（1）Due to the differences in bulk density of different materials, the above standard packaging bag sizes are reference sizes calculated based on the different bulk densities of polished japonica rice (bulk density 0.92kg/L) and indica rice (bulk density 0.9kg/L). If you use rice or other materials with different bulk densities, please inform us in time and the packaging bag size will be adjusted.

（2）Due to the difference in the size of rice bricks with different bulk densities, if secondary bagging or boxing is required, please adjust the size of the outer bag and carton according to the different bulk densities. It is recommended to add 5mm~10mm to the reference height of the rice brick. For example, if the height of the rice brick is 174mm, the recommended height of the carton is 184mm.

（3）The actual width and thickness of the bag are required to have a negative tolerance, generally -2mm (i.e. 2mm smaller than the specification size. For example, for a specification of 80mm, the actual size is required to be between 78mm and 80mm).

（4）Due to the error in bag size and the material density varying with different varieties, the actual brick size will have errors. Please refer to the actual size.