

# GBPI®

**GBPI®** | 包装检测仪器 | 广州标际  
Testing instruments



## PACKAGING TEST EQUIPMENT

Leader of packaging test solutions



## ABOUT US

GBPI is one of the leading manufacturer of flexible packaging testing equipment, face mask testing equipment, packaging machine and provider of reference material and testing solutions and services since 2002.

Our strengths:

1. With powerful R&D team, each year we have upgraded and new equipment. And with self-developed software we could meet c different requirements.
2. Have CNAS accredited test lab to provide WVTR, OTR test service etc.
3. Provide solutions of lab constructions for clients.
4. With professional after-sales team to guarantee services.
5. With worldwide agents to provide local services.
6. Have set up an digital lab to remote control and diagnosis equipment at clients' site.
7. Certificates we have: CNAS, ISO9001, reference material certificate, CE certificate, calibration certificate, etc.
8. Developed reference material with specific value to calibrate WVTR, OTR tester.
9. Reference clients: SunChemical, Amcor, Sealed Air, Wipak, ePac, Oben Group, DS Smith, Nestel, Intertek, SGS, Bureau Veritas etc.

## CERTIFICATE





Packaging Material Control Index and Significance

Barrier Performance

Barrier performance refers to the barrier effect of packaging materials against permeation such as water, steam, and liquids. Barrier testing includes opposite bodies (oxygen, nitrogen, carbon oxide, air, organic water, etc.) and steaming performance. The barrier performance of two types of materials is an important indicator that affects the quality of the product during the shelf life, and it is also an important basis for analyzing the shelf life. This test solves the problems of the deterioration of the product sensitive to water, oxygen, and mildew, etc.

Physical and Mechanical Performance Testing

The physical and mechanical properties are the basic performance indicators that measure the protection of the packaging during production, transportation, shelf life, and use. General properties include: tensile strength, heat seal strength, peeling, puncture resistance, and pressure resistance, impact resistance, tear resistance, suspension pull-off performance and other indicators to ensure.

Total Migration and Non-Volatile Matter Detection

Packaging materials such as secondary utensils, metals, chemicals, etc., the total migration or non-volatile matter does not meet the standards, and the product will precipitate a large amount of toxic components when it encounters wine, vinegar, oil and other contents during use. After being absorbed by the body, it will be harmful to health and precipitate into it will also affect the stable performance, color, odor, taste and other qualities of substances, drugs, and chemical substances.

Packaging Sealing Performance Testing

The sealing performance of the package is the reliability of the sealing of the packaging bag, bottle, box, tube, filling, etc. The test can ensure the integrity of the seal of the entire package product, and prevent the package from leaking due to poor product sealing performance, and the package is affected pollution deteriorates.

Surface Performance Testing

Friction resistance and friction coefficient are important indicators for evaluating the slip performance of various metals and non-metal materials inside and outside of packaging materials. The measurement of friction resistance and friction performance can ensure its production and use occasions, art production, actual safety and comfort during application, smoothness during long-term use.

Cap Torque Detection

In-bottle packaging is one of the commonly used packaging. The cap is locked and the opening torque is an important process parameter controlled by the production unit or online. Whether the torque is appropriate is the guarantee of the quality of the product transportation process and the safety of consumers. The protection of the country plays an important role.

Retort Resistance Test

Cooking packaging is widely used in the food field, but whether the performance of packaging materials still meet the requirements after the cooking sequence, the cooking performance must be tested, and the changes in packaging performance and expansion changes before and after cooking are evaluated through the high-temperature counter-pressure cooking pot.





Solvent Residue Detection

A large amount of organic solvents, such as toluene, xylene, ethyl acetate, ethanol, are used in the composite coating process in the packaging production process. Many or less of these chemical solvents remain in the packaging materials, leaving too much packaged food or drugs will endanger human health.

Water Vapor Permeability Analyzer

Widely used in quality inspection organizations, drug control institutions, research institutes, packaging, thin film, food companies, pharmaceutical enterprises, personal care industry, electronics industry and so on.



Infrared Sensor Method Water Vapor Permeability Analyzer

Technical Specification/Model	W401 2.0	AUTO W46/1	W405 L	W413 2.0
Test range	0.002~100g/(m <sup>2</sup> ·24h)	0.002~200g/(m <sup>2</sup> ·24h)	0.01~200 g/(m <sup>2</sup> ·24h)	0.002~200g/(m <sup>2</sup> ·24h) film and sheet
Test resolution	0.0001g/(m <sup>2</sup> ·24h)film and sheet			
Temperature range	15~45°C (15~60°C Optional)			
Transmission dimensions	50.24cm <sup>2</sup>			
Humidity range	(5~90)%RH, 100%RH			
Temperature accuracy	±0.1°C	±0.1°C	±0.2°C	±0.1°C
Humidity accuracy	±1%RH	±2%RH	±2%RH	±1%RH
Sample number	1piece	6pieces	3pieces	3 pieces
Carrier gas pressure	≥0.1MPa	≥0.1MPa	≥0.1MPa	≥0.1MPa
Carrier gas flow	5~100 mL/min	5~100 mL/min	5~100 mL/min	5~100 mL/min
Gas connection	1/8inchmetal pipe	1/8 inch metal pipe	1/8 inch metal pipe	1/8 inch metal pipe
				




Electrolytic Sensor Method Water Vapor Permeability Analyzer

Technical Specification/Model	W203 2.0
Test range	0.001~50g/(m <sup>2</sup> ·24h)
Test precision	0.001g/(m <sup>2</sup> ·24h)
Temperature range	15~45°C
Temperature accuracy	±0.1°C
Humidity range	0%RH,30~90%RH,100%RH
Humidity accuracy	±2%RH
Transmission dimensions	50.24cm <sup>2</sup>
Sample number	3 pieces
	

Gravimetric Method Water Vapor Permeability Analyzer

Technical Specification/Model	W301 2.0	W303 2.0
Test range	0.1~10000 g/(m <sup>2</sup> ·24h)	
Test precision	0.0001 g/(m <sup>2</sup> ·24h)	
Temperature range	15~55°C	
Temperature accuracy	±0.1°C	
Humidity control range	≤10%RH	
Humidity accuracy	±2%RH	
Transmission dimensions	50.24 cm <sup>2</sup>	
Sample number	1 piece	3 pieces
Sample thickness	≤3mm	≤3mm
Sample dimensions	Φ90mm	Φ90mm
Blowing speed	0.5~2.5m/s	0.5~2.5m/s
		

## Gravimetric Method Water Vapor Permeability Analyzer

Technical Specification/Model		AUTO W806	AUTO W809	AUTO W812
Test range		film0.05~10,000 g/(m <sup>2</sup> ·24h), Container 0.0002~30/g(pkg·24h)	0.05~20g/(m <sup>2</sup> ·24h)	0.05~10,000 g/(m <sup>2</sup> ·24h), Container0.0002~30/g(pkg·24h)
Resolution		0.0001g/(m <sup>2</sup> ·24h)		
Test temperature		10~50±0.1 °C		
Temperature accuracy		±0.3°C		
Test Humidity		5~95%RH, 100%RH		
Air speed		0.5~2.5 m/s (0.03~0.5 m/s optional)		
Transmission dimensions		50.24cm <sup>2</sup> (Installation of adapter 0.785cm <sup>2</sup> )		
Test station		6	9	12
Carrier gas pressure		≥0.6MPa	≥0.6MPa	≥0.6MPa
Standard test area		33 cm <sup>2</sup>	33 cm <sup>2</sup>	33 cm <sup>2</sup>
Connection size		Φ6 mm Polyurethane tube	Φ6 mm Polyurethane tube	Φ6 mm Polyurethane tube
				




## Gas Permeability Analyzer

Widely used in quality inspection organizations, drug control institutions, research institutes, packaging, thin film, food companies, pharmaceutical enterprises, personal care industry, electronics industry and so on.

### Gas Permeation Analyzer

Technical Specification/Model		N500L	AUTO N53/1	N530L	AUTO N50/1
Test range		0.05~50000 cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1MPa)	0.01~50000 cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1MPa)	0.05~50000 cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1 MPa)	0.01~5000 cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1 MPa)
Vacuum Level		<20 Pa	<20 Pa	<20 Pa	<20 Pa
Sample dimensions		Φ110 mm	Φ110 mm	Φ110 mm	Φ110 mm
Sample number		1 piece	3 pieces	3 pieces	1 piece
					


### Gas Permeation Analyzer

Technical Specification/Model		N530 2.0	N500 2.0	AUTO N56/1
Test range		0.01~50000 cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1MPa)	0.01~50000 cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1 MPa)	0.01~5000 cm <sup>3</sup> /(m <sup>2</sup> ·24h·0.1 MPa)
Vacuum Level		<10 Pa	<10 Pa	<20 Pa
Sample dimensions		Φ110 mm	Φ110 mm	Φ110 mm
Sample number		3 pieces	1 pieces	6 pieces
				



## Oxygen Permeability Analyzer

Widely used in quality inspection organizations, drug control institutions, research institutes, packaging, thin film, food companies, pharmaceutical enterprises, personal care industry, electronics industry and so on.


### Coulometric Sensor Method Oxygen Permeability Analyzer

Technical Specification/Model		Auto Y36/1
Test range		0.05~1000 cm <sup>3</sup> /(m <sup>2</sup> ·24h)
Test resolution		0.0001 cm <sup>3</sup> /(m <sup>2</sup> ·24h))
Temperature range		15~45°C
Temperature accuracy		±0.1°C
Pneumatic pressure		dry=0%RH, 30~90%RH, 100%RH
Carrier gas pressure		≥0.3MPa
Transmission dimensions		50.24cm <sup>2</sup>
Sample number		6 piece
Carrier gas flow		0~100mL/min
Gas connection		1/8 inch metal pipe
		




### Coulometric Sensor Method Oxygen Permeability Analyzer

Technical Specification/Model		Y110 2.0	Y310 2.0
Test range		0.01~1000 cm <sup>3</sup> /(m <sup>2</sup> ·24h)	
Repeatability		0.01 or2%	
Temperature range		15~45°C	
Temperature accuracy		±0.1°C	
Humidity range		dry=0%RH, 30~90%RH, 100%RH	
Carrier gas pressure		≥0.1 MPa	
Transmission dimensions		50.24cm <sup>2</sup>	
Sample number		1 piece	3 pieces
Carrier gas flow		5~100 ml/min	5~100 ml/min
Gas connection		1/8 inch metal pipe	1/8 inch metal pipe
			





### Heat Seal Tester

Technical Specification/Model		GBB-F1	GBB-A1	GBB-F	GBB-A
Heat sealing temperature		Room temperature ~ 250 °C		Room temperature ~ 250 °C	
Temperature Control accuracy		±0.1°C		±1°C	
Seal time range		0.1s~99.99h		0.01s~99.99h	
Pressure range		0.1~0.8MPa		0~1MPa	
Heat seal method		Upper bar and lower bar double heating		Upper bar and lower bar double heating	
					





## Universal Material Testing Machine/ Sample Cutte / Electronic Tensile Tester

Technical Specification/Model	GHH	GBH-2	LC-1S
Test speed	0~500 mm/min (continuously variable speed)		
Effective test width	30 mm	30 mm (50 mm customised)	
Force measurement range	0-3000N(can be customized within 20000N)	0-500N(Optional 0-1500N )	Cut sample quantity:10pcs(single layer)
Displacement measurement accuracy	± within 0.5% of the indicated value	Indicated value± within 0.5%.	Sample thickness:≤300μm
			


## Electronic Tensile Tester / Sample Cutter

Technical Specification/Model	GBL-H2	GBL-L2	LC-3S	LC-2
Force measurement range	0~300 N (optional 0~500 N), 1250% elongation			
Size	475 mm×460 mm×1430 mm	600 mm×500 mm×1300 mm	Material thickness:6 μm~0.5 mm Cutting size: 15 mm × 235 mm	
Effective test stroke		750mm		Cut sample quantity:12pcs(single layer)
Effective test width	30 mm (50 mm can be customized)			Sample thickness: ≤200μm
				





## Coefficient Friction Tester

Technical Specification/Model	GM-1	GM-4	GM-6	GM-F1
Test range	0.001~0.999	0.001~0.999	0.001~0.999	Angle range: 0°~85°
Slider speed	100,150,500 mm/min	0~500 mm/min	0~500 mm/min	Resolution: 0.01°
Force range	0~9.8N	0~9.8N	0~9.8N	Sensor accuracy: 0.1 %FS
Distance travelled	100 mm±5 mm	100mm	0~150mm	Inclined friction tester
				





## Pendulum Impact Tester

Technical Specification/Model	GBG-L	GBD-B	GBG-L2
Maximum impact energy	5 J (8J optional)	3J	5 J (8J optional)
Pendulum angle	90°	90°	90°
Resolution ratio	0.001J	0.001J	0.001J
Pendulum swing radius	285mm	285mm	285mm
			




## Impact Tester

Technical Specification/Model	GBD-L	GB-LQ	GQ-D1	GBD-L2
Impact height	1500mm/660mm	Adjust arbitrarily within 20~2000mm	0~900 mm	1500 mm/660 mm
Dart head size	50-2000g, 5g/increment, quality error≤0.5%			Φ38 mm±1 mm in method A Φ50 mm ±1 mm in method B
Specimen size	180×180mm	≤150×150mm	325 mm×550 mm×1341 mm	Pneumatic gripper, inner diameter 125 mm
				





## Compression Tester

Technical Specification/Model	GBN200A	GBN200G	GBN200Z	GBN2000Z
Test range	0~3000 N	Pressure range: 100~700 kPa	0~2000 N	20 KN
Test Stroke	0~135mm	0~100 mm	0~100 mm	
Test speed range	0-500mm/min (continuously variable speed)			0-300mm/min (continuously variable speed)
Force measurement accuracy		±0.8%		Within ±1% of the displayed value
				

## Vacuum Coating Thickness Tester




Technical Specification/Model	GH-3	GH-D	GH-E
Test range	0.001-12.5 mm	0~6 mm	50~1200 Å (emi)
Resolution	Value variability: 1 μm	0.1 μm	±5 %Fs
Measuring force	0.5~1 N	0.4 N	Square resistance test range: 0.3~10 Ω
Measuring head	Φ5 mm (customizable)	Φ6 mm	Sample size: 300 mm×100 mm
			

## Gas Chromatography / Gas generator



Technical Specification	GC-9802	GC-9803	NHA-300	DHG-9030A
Temperature range	Highest 400°C	Room temperature plus15°C~399°C(increment 1°C)	>99.999%	Room temperature ±10°C~+200°C
Temperature accuracy	0.1%	Better than ±0.1 (Measured at 200°C)	>99.999%	
Carrier gas source	N2,Purity 99.99%,0.4MPa,dry	Number of simultaneous installations: 3 pieces at most;	N2、H2:0~300ml/min	
Hydrogen gas source	Purity 99.99%,0.4MPa,dry	Type of injection unit: packed column and split flow;	Temperature:10°C-40°C	
Air source	0.4MPa,dry clean,oil-free	Flow setting range: H2:0-200ml/ min, N2:0-150ml/min.	Air source:0~2000ml/min	
				






## Leakage Tester

Technical Specification/Model	AUTO GBM-L1	GB-M1	GB-M2
Vacuum degree	0~-100 kPa	—(0~90)kPa	—(0~90) kPa
Vacuum precision	Detection sensitivity: 1~3 μm	1% of the indicated value	1% of the indicated value
Vacuum retention time	Reference vacuum decay: -2000 Pa~2000 Pa	1s~99h59m59s	1 s~99 h59 m59 s
Intake pressure	Vacuum purge time: 1 to 3600 s	(0.6~0.8)MPa	(0.6~0.8)MPa
			


## Leakage Tester

Technical Specification/Model	GB-M	GB-M3	AUTO GBM-D1
Test range	—(0~90)kPa	—90 kPa~400 kPa	0.1 Kpa~1 Mpa
Resolution	1% of indicated value	Maximum input pressure: 400 kpa	0.1 kpa
Vacuum retention time	0.01s~99.99h	1 s~999 s	Test time:1~1000 s
Intake pressure	(0.6~0.8)MPa	Test barrel capacity:10L	Test type: burst, leakage, creep, bubble method
			


## Standard Light Source / Intelligent Gloss Tester / Light Transmittance and Haze Tester

Technical Specification /Model	KGZ—1C	P60	SGW-810
Test range	0~199.90 gloss units	Light source:D65, TL84, FUV	Light transmittance 0~100.0%,haze degree 0~30.00%
Test accuracy	±1.0 gloss units		Light transmittance Accuracy: ≤1%
Instrument Stability	No more than 0.5 gloss unit/30 minutes		Light transmittance: 0.5%
Repeatability	No more than 0.5 gloss unit		Light transmittance 0.01%, haze degree 0.01%
Detector size	180mm×100mm×50mm	Outer size:700mm×420mm×550mm	Preheating time: 30min
Power	25w		
Power supply	220V AC,50HZ	Weight: 21kg	
			

## Pressure Sterilized Boiler


Technical Specification /Model	ZM-100	
volume	50L,75L,100L	
Sterilization temperature	Room temperature 105°C-134°C	
Holding time	1-999min	
Overpressure release pressure	0.23MPa (safety valve discharge)	
Sterilization water	medical distilled water	
Spray and make-up water pressure	≥0.22MPa	

## Hot Tack Tester


Technical Specification /Model	GBR	
Temperature range	Room temperature~250 °C	
Temperature accuracy	±1°C	
Heat Seal Dwell Time	0s-99s	
Heat sealing pressure	0.1-0.8MPa	
Cooling time	Can be set	
Test range	0-50N (can be customized)	

## Bursting Strength Tester




Technical Specification/Model		GNP-1
Measurement range	40~1600kPa range can be customized	
Measurement precision	Indication error:±0.5%FS, Indication fluctuation:<0.5%	
Pressurization (oil delivery) speed	(95±5)ml/min	
Film resistance	Bulge degree:9mm Film resistance :(30±5)kPa	
Specimen holding force	(0-2000)kPa (adjustable)	
System seal degree	1 min pressure decrease <10%p max	
Instrument size	500mm × 750mm × 505mm	
weight	47kg	
Pressure gauge pressure setting	(0.2~0.22)MPa	
Equipped with air compressor	Discharge capacity:(0.02~0.4)m³/min Rated pressure:(0.6~0.8)Mpa	




## Tear Tester

Technical Specification/Model	GBD-S	
Test range	0-6400gf 0-66203mN	
Tearing arm	104±1mm	
Initial tearing angle	27.5°±0.5°	
Indication error	within ±0.5% in 20%-90% of max range	
Gas supply pressure	0.2~0.4MPa	
Relative fluctuation	within 1%	
Power supply	AC 220V, 50Hz	



## Paper Stiffness Tester / Paper Bowl Stiffness Tester / CrushTester

Technical Specification/Model	RH-T500	RH-BT10	GY-1
Test range	0.5-500mN,(0-25)mN.m	(50±0.1) mm/min Resolution0.01N	(30~3000) N, Resolution 1N
Test speed	300/min , 200°/min	(30~80) mm/min is adjustable	Test Speed Default(12.5±2.5)mm/min; And
Accuracy of indication	2%	Indicating value error ±1%, variability of indicating value ≤1%	switchable manual speed adjustment 5~100 mm/min
Resolution	0.01mN		
Load arm length	50mm		
			




## Heating Shrink Tester

Technical Specification /Model	GBK-D1	
Systolic force accuracy	Measured value ±0.5% (10%-100% of sensor specification), ±0.05%FS (0%-10% of sensor specification)	
Display Resolution	0.001 N	
Displacement measurement range	0.1~70 mm	
Displacement Sensor Accuracy	±0.07 mm	
Temperature fluctuations	±0.2°C	
Temperature Accuracy	±0.5°C (single point calibration)	
Number of workstations	1 group (2)	



Spout Sealing Machine

Technical Specification/Model		GF-2600X	GF-1600H
Whole machine size		5800 mm x 4100 mm x 1800 mm	2900 mm x 2400 mm x 2000 mm
Package Type		Stand-up spout pouches, three-side seal spout bags, organ spout bags, shaped spout bags	
Material type		Bag: inner layer PE, inner layer PP material, tube: PE, PP material	
Working speed		Double channel 70pcs/min, single channel 35pcs/min	Max 90 pcs/min
			


Modified Atmosphere Refrigerator

Technical Specification/Model		AUTO GQ 900	AUTO GQ 300	AUTO GQ 100
Gas measurement range		O <sub>2</sub> : 0% to 25%; CO <sub>2</sub> :0% to 20%; C <sub>2</sub> H <sub>4</sub> : 0 to 220 ppm; the rest of the gas is N <sub>2</sub>		
Gas testing accuracy		O <sub>2</sub> :0.01%;CO <sub>2</sub> :0.01%;C <sub>2</sub> H <sub>4</sub> :0.1 ppm		
Temperature control range		-5°C~45°C	-5°C~45°C	-5°C~45°C
Test chamber		9 pieces	3 pieces	1 piece
				




Intelligent Compost Degradation Tester

Technical Specification /Model		GBDA-180W	AUTO GBDA-180
Temperature range		Room temperature -80°C, step 0.1°C	Room temperature ~80°C
Temperature control accuracy		≤±0.2°C	±0.5°C
Testing range		0~4200g	Pressure detection range:0~200KPa
Testing accuracy		±0.01g	Flow control accuracy:±1.0%FS
Number of test chambers		18	18
Dimension		2700mm×560 mm×1800 mm	3600 mm*810 mm*1930 mm
			




Melt Index Tester

Technical Specification/Model		GBB-R
Test Method		(40~1600)kpa
Test range for MFR method		0-200g
Test range for MVR method		0-80cm <sup>3</sup>
Test accuracy of mess		0.1g
Auto test timing		0.1-999.9s
Temperature range		Room temperature~300°C
Temperature accuracy		±0.5°C
Temperature fluctuation		1°C
		




Full-Automatic Overall Migration Tester

Technical Specification/Model		AUTO ZF3600	AUTO ZF2400	AUTO ZF1800
Measurement Range		0 g~80 g		
Balance Resolution		0.01 mg		
Number of specimens		36	24	18
Temperature accuracy		±0.5°C	±0.5°C	±0.5°C
				




Full-Automatic Overall Migration Tester

Technical Specification/Model		AUTO ZF1800G	AUTO ZF1200	AUTO ZF900
Measurement Range		0 g~80 g		
Resolution		0.01 mg		
Number of specimens		18	12	9
Evaporation dish volume		200 mL	50 mL	100 mL
				

Torque Testing Equipment

Technical Specification/Model		HP-D1	HP-200	HP-100
Sensor Specifications		10 N·m,20 N·m, 40 N·m(optional)	0~20 N·m	0.01-10N.m
Torque Resolution		0.0001 N·m	0.001 N·m	
Clamping Force		Free adjustment of clamping force according to material properties		Φ10~150mm
Air source Pressure		0.7 MPa (101.5 psi)		
				

Ink Layer Bonding Fastness

Technical Specification/Model		GX-C2	GX-Y2	GX-B3
Speed		Rolling speed: 0~600 mm/min	Friction speed: 5~43 cpm(times/min)	Peeling speed: 100N
Pressure		Friction speed: 5~43 cpm(times/min)	Friction speed: 5~43 cpm(times/min)	Peeling speed: 0~1 m/s
Dimension		440 mm×400 mm×200 mm	440 mm×400 mm×200 mm	546 mm×360 mm×300 mm
Diameter		Pressure roller diameter: 84 mm		Diameter of A plate: 170 mm, diameter of B plate: 65 mm
				



## »» Our Company



## »» Our Customers

### Printing & packaging:



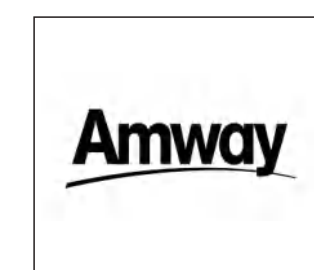
### Drink:



### Food:



### Pharma & Health care:



### Cosmetic & Skin care:



### Research institute:

