

GBPI® | 包装检测仪器 | 广州标际
TESTING INSTRUMENTS



GBPI®

PACKAGING TESTING EQUIPMENT

Leader of packaging testing solutions



Guangzhou Biaoji Packaging Equipment Co., Ltd



TECHNOLOGY INNOVATION GBPI

ABOUTUS

GBPI is a supplier of flexible packaging testing equipment, with a focus on water - permeability testing series, mechanical performance testing series, spout sealing machine series, and testing solutions. It has more than 20 years of experience in the field of testing equipment.

The company has a dedicated R & D and after - sales team, which can provide customer testing and on - site machine training services. Moreover, we can also help customers with one - stop customized laboratory testing solutions.

GBPI has passed ISO9001 certification. We have become a large - scale testing agency supplier and cooperate with many international standards organizations. According to customer requirements, we can provide CE, ISO, CNAS calibration certificates, etc.

CERTIFICATE



Barrier Performance

Barrier performance refers to the barrier effect of packaging materials against permeation such as water, steam, and liquids. Barrier testing includes support bodies (oxygen, nitrogen, carbon dioxide, air, organic water, etc.) and steaming performance. The important performance indicators of packaging materials also include: antibacterial effect, temperature resistance, light resistance, acid and alkali resistance, and antioxidation (this solves the problem of product deterioration, provides waterproof, oxygen, and ultraviolet light, 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 like secondary utensils, metals, chemicals, etc., if total migration or non - volatile matter fails to meet standards, products get contaminated by toxic components when exposed to wine, vinegar, oil and similar substances. Once ingested, they harm the human body and affect the stable performance, color, odor, taste and other qualities of substances, drugs and chemicals.

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 packaged product, prevent the package from leaking due to poor sealing performance, and avoid the package being contaminated or deteriorating.

Surface Performance Testing

The measurement of friction resistance and friction performance can ensure smoothness during long - term use, and guarantee safety and comfort in application scenarios such as production, handling, and usage, for both the interior and exterior of packages

Cap Torque Testing

In - bottle packaging is one of the commonly used packaging types. The cap is sealed, and the opening torque is a key process parameter controlled by the production unit online. Whether the torque is appropriate ensures the quality during product transportation and consumer satisfaction. Additionally, it plays a crucial role in product protection

Retort Resistance Testing

Cooking packaging is widely used for single - piece, bulk, and ready - to - cook packaging. After cooking, the packaging materials must still meet requirements. The cooking performance (including seal integrity) must be tested, and changes in packaging performance and expansion before and after cooking are evaluated via high - temperature counter - pressure cooking tests

Solvent Residue Testing

A large amount of organic solvents, such as toluene, xylene, ethyl acetate, and ethanol, are used in composite coating, packaging process, and production. Many of these chemical solvents remain in the packaging materials

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	W401 L	W405L	W4132.0
Test range	0.002~100g/(m ² ·24h)	0.001~200g/(m ² ·24h)	0.01~200g/(m ² ·24h)	Films & sheets: 0.002 - 100 g/(m ² ·24h) Packages: 0.00001 - 0.5 g/(pkg·day)
Test resolution	0.0001g/(m ² ·24h)film and sheet			Films and sheets: 0.0001 g/(m ² ·24h) Packages: 0.0001 - 0.5 g/(pkg·day)
Temperature range	15~45°C (15~60°C Optional)			
Transmission dimensions	50.24cm ²			
Humidity range	(5~90) %RH, 100%RH			
Temperature accuracy	±0.1°C	±0.1°C	±0.2°C	±0.5°C
Humidity accuracy	±1%RH	±2%RH	±2%RH	±2%RH
Sample number	1piece	1pieces	3pieces	3 pieces
Carrier gas pressure	≥0.1MPa	≥0.1MPa	≥0.1MPa	≥0.1MPa
Carrier gas flow	5~100mL/min	5~100mL/min	5~100mL/min	5~100mL/min
Gas connection	1/8inch metal pipe	1/8inch metal pipe	1/8inch metal pipe	1/8inch metal pipe
				

Electrolytic Sensor Method Water Vapor Permeability Analyzer

Technical Specification/Model	W203 2.0	W201 2.0
Test range	0.001 - 40g/(m ² ·24h) (films and sheets)	0.001~40g/(m ² ·24h) (films and sheets)
Test precision	0.0001g/(m ² ·24h) (films and sheets)	0.0001g/(m ² ·24h) (films and sheets)
Temperature range	15 - 45°C	15~45°C
Temperature accuracy	±0.1°C	±0.1°C
Humidity range	(5 - 90)%RH	(5~90)%RH
Humidity accuracy	±1%RH	±1%RH
Transmission dimensions	50.24cm	50.24 cm ²
Sample number	3pieces	1 piece
		

Gravimetric Method Water Vapor Permeability Analyzer

Technical Specification/Model	W301 2.0	W303 2.0
Test range	0.1~10000 g/(m ² ·24h)	
Test precision	0.0001g/(m ² ·24h)	
Temperature range	15~55°C	
Temperature accuracy	±0.1°C	
Humidity control range	≤10%RH	
Humidity accuracy	±2%RH	
Transmission dimensions	50.24cm ²	
Sample number	1piece	3pieces
Sample thickness	≤3mm	≤3mm
Sample dimensions	Φ90mm	Φ90mm
Weight	22 kg	66 kg
		

Gravimetric Method Water Vapor Permeability Analyzer

Technical Specification/Model	AUTOW806	AUTOW809	AUTOW812
Testrange	0.05~10,000 g/(m ² ·24h)	0.05~10,000 g/(m ² ·24h)	0.05~10,000 g/(m ² ·24h)
Resolution	10~50°C	10~50°C ±0.1°C	10~50°C ±0.1°C
Test temperature	0.0001 g/(m ² ·24h)		
Temperature accuracy	±0.1°C		
Test Humidity	(5~90)%RH, 100%RH		
Air Speed	0.5~2.5m/s (0.03~0.5m/soptional)		
Transmission dimensions	33 cm ²		
Teststation	6	9	12
Carrier gas pressure	≥0.6MPa	≥0.6MPa	≥0.6MPa
Standard test area	33cm ²	33cm	33cm ²
Connection size	Φ6mmPolyurethanetube	Φ6mmPolyurethanetube	Φ6mmPolyurethanetube
			

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	N500 2.0	N530L	N530 2.0
Test range	0.05 - 50000 cm ³ /(m ² ·24 h·0.1 MPa)	0.02 - 50000 cm ³ /(m ² ·24 h·0.1 MPa) By expanding the upper limit of volume, it can test up to 600000 cm ³ /(m ² ·24 h·0.1 MPa)	0.02 - 50000 cm ³ /(m ² ·24 h·0.1 MPa) By expanding the upper limit of volume, it can test up to 600000 cm ³ /(m ² ·24 h·0.1 MPa)	0.02 - 50000 cm ³ /(m ² ·24 h·0.1 MPa) By expanding the upper limit of volume, it can test up to 600000 cm ³ /(m ² ·24 h·0.1 MPa)
Test pressure	0.1 MPa	0.1 MPa	0.1 MPa	0.1 MPa
Temperature control precision	±0.2°C	±0.1°C	±0.2°C	±0.1°C
Sample number	1piece	1pieces	3pieces	3piece
				

GasPermeationAnalyzer

Technical Specification/Model	N500A 2.0	N530A 2.0
Test range	0.01~25000 cm3/(m ² ·24h·0.1MPa)	0.01~25000 cm ³ /(m ² ·24 h·0.1 Mpa) Up to 600000 cm ³ /(m ² ·24 h·0.1 MPa) with expanded volume limit
Vacuum Level	<10Pa	<10Pa
Temperature control range	15~60°C	15~60°C
Sample number	1pieces	3pieces
		

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.

CoulometricSensor Method Oxygen Permeability Analyzer

Technical Specification/Model	Y310 L	Y110 L	Y110 2.0	Y310 2.0
Test range	0.05 - 1000 cm ³ / (m ² ·24h·0.1MPa)	0.05 - 1000 cm ³ / (m ² ·24h·0.1MPa)	0.01~1000 cm ³ / (m ² ·24h·0.1MPa)	0.05 - 1000 cm ³ / (m ² ·24h·0.1MPa)
Test resolution	0.0001 cm ³ / (m ² ·24h·0.1MPa)	0.0001 cm ³ / (m ² ·24h·0.1MPa)	0.0001 cm ³ / (m ² ·24h·0.1MPa)	0.0001 cm ³ / (m ² ·24h·0.1MPa)
Temperature range	15 - 45°C	15~45°C	15~45°C	15~45°C
Temperature accuracy	±0.2°C	±0.2°C	±0.1°C	±0.2°C
Pneumatic pressure	≥0.1 MPa	≥0.1 MPa	≥0.3MPa	≥0.3MPa
Carriergas pressure	≥0.1 MPa	≥0.1 MPa	≥0.1 MPa	≥0.1 MPa
Transmission dimensions	50.24 cm ² Customized adapters, minimum to 0.785 cm ²	50.24 cm ² Customized adapters, minimum to 0.785 cm ²	50.24 cm ² Customized adapters, minimum to 0.785 cm ²	50.24 cm ² Customized adapters, minimum to 0.785 cm ²
Sample number	3 pieces	1piece	1piece	3piece
Carrier gasflow	5 - 100 mL/min	5 - 100 mL/min	5 - 100 mL/min	5 - 100 mL/min
Gas connection	-	99.999% Nitrogen (User - provided)	99.999% Nitrogen (User - provided)	-
				

Heat Seal Tester

Technical Specification/Model	GBB - A3 Lid Film Heat Sealer	GBB - C Vertical Heat Sealer
Temperature range	Room temperature ~ 250°C	Room temperature ~ 250°C
Heat sealing time	±1°C	±1°C
Heat sealing pressure	0.1s ~ 99.99h	0.1s ~ 99.99h
Operation mode	(0 - 1)MPa	(0 - 1)MPa
Air source	Automatic and manual modes	Automatic and manual modes, air cylinder external
Heat sealing surface	-	-
		

Heat Seal Tester

Technical Specification/Model	GBB-F1	GBB-A1	GBB-F	GBB-A
Heatsealing temperature	Roomtemperature~250°C		Roomtemperature~250°C	
Temperature Controlaccuracy	±0.1°C		±1°C	
Seal time range	0.1s~99h 59min 59.9s		0.01s~99.99h	
Pressure range	0.1~0.8MPa		0~1MPa	
Heating mode	Double heating		Double heating	
				

Universal Material Testing Machine / Electronic Tensile Tester

Technical Specification / Model	GHH	GBH-2	GBL-L2	GBL-H2	GBS
Force Range	0~3000 N (multi-sensor optional within 20000 N)	0~500 N (0~2000 N optional)	0~300 N, 1250% elongation	0~300 N, 1350% elongation	0~3000 N (multi-sensor optional within 20000 N)
Force Accuracy	≤±0.5% FS	≤±0.5% FS	≤±1% FS (Class 1)	≤±1% FS (Class 1)	≤±0.5% FS
Test Speed	0~500 mm/min (stepless speed)	0~500 mm/min (stepless speed)	0~500 mm/min (stepless speed)	0~500 mm/min (stepless speed)	0~500 mm/min (stepless speed)
Speed Accuracy	≤±1% of indicated value	≤±0.5% of indicated value	≤±1% of indicated value	≤±1% of indicated value	≤±1% of indicated value
					

Sample Cutter

Technical Specification / Model	LC-1S	LC-3S	LC-2
Material Thickness	≤1mm	≤1mm	≤1mm
Cutting Specification	15mm×210mm (width optional)	15mm×220mm (width optional)	15mm×230mm (width optional)
Product Size	400mm*250mm*300mm	-	410mm*250mm*180mm
Weight	12kg	9kg	12kg
			

Coefficient Friction Tester

Technical Specification / Model	GM-1	GM-4	GM-6	GM-F1 Inclined friction tester
Test range	0.001~0.999	0.001~0.999 (stepless speed regulation)	0.001~0.999	Anglerange:0°~85°
Slider speed	100,150,500mm/min	0~500mm/min	1~500mm/min	Resolution:0.01°
Force range	0~9.8N	0~10N	0~10N	Sensor accuracy:0.1%FS
Distance travelled	100mm±5mm	0~150mm	0~150mm	Angular velocity: 0.1°/s ~ 10°/s
				

Pendulum Impact Tester

Technical Specification / Model	GBG-L2	GBD-B
Maximum impact energy	1J, 2J, 3J, 5 J (8J optional)	3J
Pendulum angle	90°	90°
Resolution ratio	0.001J	0.01J
Pendulum swing radius	285mm	285mm
		

Impact Tester

Technical Specification / Model	GBD-L2 Dart Impact Tester	GQ-D1 Falling Ball Impact Tester
	Measurement Metho: dA Method, B Method, Single Sheet Method	Impact Height: 0~900 mm
	Test Range: A Method: 50~2000 g; B Method: 300~2000 g	Steel Ball Diameter: 23 mm (50 g), 25 mm (60 g), 28.6 mm (100 g), 38.1 mm (225 g)
	Test Range of Single Sheet: 20 g~2000 g	Sample Clamping Range: 120 mm * 85 mm
		

Compression Tester

Technical Specification / Model	GBN200A	GBN200G	GBN200Z	GBN2000Z
Test range	0~3000N	Pressure range: 50 - 700 kPa	0 - 2000 N	20 KN
Test Stroke	0 - 185mm	0~100mm	0 - 100 mm	-
Test speed range	0 - 300mm/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
Test range	0~12.7mm	0~6mm
Resolution	0.001 mm	0.1μm
Measuring force	0.5~1N	0.4N
Measuring head	Φ5mm (customizable)	Φ6mm
		

Gas Chromatography / Drying Oven

Technical Specification / Model	GC9802-K	GC-9803	DHG - 9030A
Temperature range	Room temp. +3°C - 399°C	Column oven: 5°C - 400°C	Room temp. ±10°C - +200°C
Temperature accuracy	0.1%	Better than ±0.1	
Carrier gas source	N ₂ , Purity 99.99%, 0.4MPa, dry	-	
Hydrogen gas source	Purity 99.99%, 0.4MPa, dry	-	
Air source	0.4MPa, dry clean, oil - free	-	
			

LeakageTester			
Technical Specification/Model		AUTO GBM - L1	AUTO GBM - L2
Vacuum Range		Absolute Pressure (0~300) kPa; Differential Pressure (-2~2) kPa	Absolute Pressure (0~300) kPa; Differential Pressure (-2~2) kPa
Vacuum Accuracy		Detection Sensitivity 1~2 μm	Detection Sensitivity 1~3 μm
Vacuum Holding Time		Balance/Test, Vacuum Purge: 1~3600 s each	Balance/Test, Vacuum Purge: 1~3600 s each
Power Supply		AC 220V, 50HZ	AC 220V, 50HZ
			

LeakageTester				
Technical Specification/Model		GB-M	GB-M3	GB - M2S
Vacuum Range		-(0~90) KPa	—90kPa~400kPa	-(0~95) KPa
Vacuum Accuracy		1% of Indication Value	Maximuminputpressure:400kpa	1% of Indication Value
Vacuum Holding Time		0.01s~99.99h	1s~999s	0.01s~99.99h
Power Supply		220V, 50Hz	Testbarrelcapacity:10L	220V, 50Hz
				

Standard Light Source / Intelligent GlossTester / Light Transmittanceand Haze Tester			
TechnicalSpecification/Model		KGZ—1C	P60
Testrange		0~199.90glossunits	Lightsource:D65, TL84, FUV
Testaccuracy		±1.0glossunits	-
InstrumentStability		Nomorethan0.5glossunit/30minutes	-
Repeatability		Nomorethan0.5glossunit	-
Detectorsize		180mm×100mm×50mm	Outersize:700mm×420mm×550mm
Power		25w	-
Powersupply		220VAC,50HZ	Weight:21kg
			

Pressure Sterilized Boiler		
Technical Specification /Model		ZM-100
Volume		50L
Sterilization temperature		100~135°C
Operating Pressure		0~0.22Mpa
Safety Automatic Control Pressure		0~0.23Mpa
WaterSupplyPressure		≥0.32 Mpa
Back Pressure		0.14~0.165 Mpa
		

Hot Tack Tester		
Technical Specification/Model		GBR
Temperature range		Roomtemperature~250 ℃
Temperature accuracy		±1℃
HeatSeal Dwell Time		0s-99s
Heatsealingpressure		0.1-0.8MPa
Specimen Length		200mm
Measurement Range		0~300N
		

Bursting Strength Tester		
Technical Specification/Model		GNP-1
Measurement range		40~1600kPa can be customized
Measurement precision		Indication error:±0.5%FS,Indication fluctuation:<0.5%
Pressurization(oildelivery) 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		1min pressure decrease<10%pmax
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
		

TearTester		
Technical Specification/Model		GBD-S
Test range		0-68648mN
Tearing arm		104±1mm
Initial Tear Angle		27.5° ±0.5°
Indicated Value Error:		Within 20%-90% of the force scale's max range, indicated value error ≤ ±0.5% of it.
Gas supply pressure		0.2~0.4MPa
Relative fluctuation		within1%
Power supply		AC220V, 50Hz
		

Heating Shrink Tester		
Technical Specification/Model		GBK-D1
Sensor Specification		5 N (Standard); 10 N, 30 N (Customizable)
Shrinkage Force Accuracy		±0.5% of Indication (10%-100% of Sensor); ±0.05% FS (0%-10% of Sensor)
Display Resolution		0.001 N
Displacement Measurement Range		0.1~70 mm
Displacement Sensor Accuracy		±0.07 mm
Shrinkage Rate Measurement Range		0.1%~95%
Operating Temperature Range		Room Temperature~250°C
		

Spout Sealing Machine		
Technical Specification/Model		GF-1700XB
Whole machine size		5800mm×2100mm×1800mm
Package Type		Stand-upspoutpouches,three-sidesealspoutbags,organspoutbags,shapedspoutbags
Material type		Bag:innerlayerPE,innerlayerPPmaterial,tube:PE,PPmaterial
Working speed		80-90 pcs/min, single-channel 40-45 pcs/min (varies by material and bag size)
		80-90 pieces per minute, 40-45 pieces per minute for single channel
		

Spout Sealing Machine

Technical Specification/Model		GF-2200Z	GF-3000Z
Whole machine size		2900mm x 2400mm x 2000mm	3900mm x 2900mm x 2000 mm
Sealing Pouch Type		Stand-up spout pouches, three-side sealed pouches, gusseted pouches, special-shaped pouches (customized)	
Product Specs		Bag Length: 100-180mm (L), Width: 70-120mm (W); Seal Length: 60-120mm	Bag Length: 80-180mm (L), Width: 70-120mm (W); Seal Length: 60-120mm
Temperature Range		Room Temp ~ 300°C	
			

Modified Atmosphere Refrigerator

TechnicalSpecification/Model		AUTO GQ900	AUTO GQ300	AUTO GQ100
Gas measurement range		O ₂ : 0%~30%; CO ₂ : 0%~20%; C ₂ H ₄ : 0~200 ppm; the remaining gas is N ₂		
Gas testing accuracy		O ₂ : 0.01%; CO ₂ : 0.01%; C ₂ H ₄ : 1 ppm		
Temperature control range		-5°C~45°C	-5°C~45°C	-5°C~45°C
Test chamber		9pieces	3pieces	1piece
				

Intelligent Compost Degradation Tester

Technical Specification/ Model		AUTO GBDA-180	-
Temperature range		Roomtemperature-80°C,step0.1°C	
Temperature control accuracy		≤±0.2°C	
Testing range		0~4200g	
Testing accuracy		±0.01g	
Number of test chambers		18	
Dimension		2700mm×560mm×1800mm	
			

Melt Index Tester

Technical Specification/Model		GBB-R	
Test Method		Mass Flow Rate (MFR), Volume Flow Rate (MVR)	
Measurement Range (Mass Method)		0~200 g/10 min	
Measurement Range (Volume Method)		0~41.81 cm³/10 min	
Mass Measurement Accuracy		0.1 g/10 min	
Automatic Test Timing		0.1~999.9 s	
Temperature Control Range		Room Temp ~ 300°C	
Temperature Control Precision		±1°C (10mm ±1mm above the top of the standard die)	
Temperature Fluctuation		±1°C (10mm ±1mm above the top of the standard die)	

Full-Automatic Overall Migration Tester

Technical Specification/Model		ZF900	AUTO ZF3600	AUTO ZF1800G
Measurement Range		(0~80) g		
Resolution		0.01 mg		
Number of specimens		9	36	18
Vaporating Dish Volume		100 mL	100ml	200 mL
				

Migration Cell Series

Technical Specification/Model		MC-A	MC-B	MC-C1	MC-D
Contact Form/Type		Single-Sided			
Contact Area		196cm²	196cm²	100cm2 (Φ112.8 mm)	Φ112.4 mm
Contact Diameter		Φ158 mm	Φ158 mm	-	9
Volume/Capacity		200mL	50mL	200 mL	100mL
					

Torque Testing Equipment

Technical Specification/Model		HP-D1	HP-200	HP-100
Sensor Specifications		10N·m, 20N·m, 40N·m(optional)	0~20N·m	0.01~10N.m
Torque Resolution		0.0001N·m	0.001N·m	0.001N.m
Clamping Force		Freely Adjustable per Material Properties		
Airsource Pressure		0.7MPa(101.5psi)	-	-
				

Ink Layer Bonding Fastness

TechnicalSpecification/Model		GX-C2	GX-Y2	GX-B3	GX - C3
Friction Pressure		20 ± 0.2 N	Rolling Speed:0 - 600 mm/min	Pressure Between Disks:100 N	8.9 N (2 lb); 17.8 N (4 lb)
Friction Speed		43 cpm (times/minute)	Pressure Roller Load:20 N ± 0.5 N	Peeling Speed:100 N:0 - 1 m/s	10 - 200 cpm (times/minute)
Number of Frictions		1 - 999999 times	Pressure Roller Diameter:84 mm	Diameter of Disk A:170 mm	1 - 999999 times
Sample Size		320 (L) × 50 (W) mm	Pressure Roller Width:45 mm	Diameter of Disk A:65 mm	Friction Method: Arc Reciprocation
					

» Our Company



» Our Customer

Printing&packaging:



Drink:



Food:



Pharma&Healthcare:



Cosmetic & Skincare



Research Institute

