

PACKAGING TESTING EQUIPMENT

Overall Solution for Flexible Packaging Testing And Quality Control

- 1. A series of testers to inspect property of films, pouches, Alum foil, etc.**
- 2. Testing as a service within our CNAS lab.**
- 3. Self-researched and manufactured PET films with specific values to calibrate WVTR/OTR/GTR testers**
- 4. On-site assembling, training and maintenance**



Guangzhou Biaoji Packaging Equipment Co., Ltd was awarded **High Tech Enterprise** on December 28th, 2008 and passed review in October 2015.



Guangzhou Biaoji Packaging Equipment Co., Ltd passed the authentication of **Software Enterprise** on June 28th, 2013 and was awarded the certificate. We enjoy national preferential policies.



GBPI passed the auditing of the reference materials of the oxygen permeability of polyester film on June 14th, 2014, and gained the production qualification. On December 29th 2015, GBPI passed the auditing of reference materials of the gas permeability and water vapor permeability of polyester film, and gained the production qualification, becoming the the **first developer and producer of permeability certified reference materials in Asia-Pacific area.**



There are two types o polyester film oxygen permeability reference materials: 25 μ m/125 μ m. Their certificate numbers are respectively GBW(E) 130497 and GBW(E) 130498. Applied to **Coulometric Sensor Method oxygen permeability analyzer.**



There are two types of polyester film gas permeability reference materials: 125 μ m/300 μ m. Their certificate numbers are respectively GBW(E) 130541 and GBW(E) 130542. Applied to **Pressure Differential Method gas permeability analyzer.**









There are two types of polyester film water vapor permeability reference material: 125 μ m /300 μ m. Their certificate numbers are respectively GBW(E) 130543and GBW(E) 130544. Applied to **Dish Method, Electrolytic Sensor Method, and IR Sensor Method water vapor permeability analyzer.**







Guangzhou Biaoji Packaging Equipment Co., Ltd passed the authentication of ISO9001.



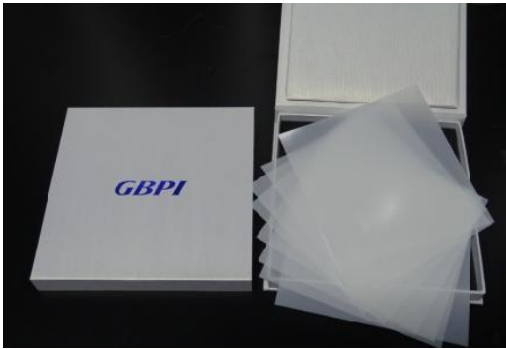
Guangzhou Biaoji Packaging Equipment Co., Ltd passed the authentication of CNAS (issued by China National Accreditation Service for Conformity Assessment) on December 21th, 2015 and was awarded the certificate. **GBPI testing center has the third-party testing ability.**

Water vapor Permeability Analyzer	Electrolytic Sensor Method	 W201 Water Vapor Permeability	1 Chamber	Standards: ASTM E 398, ISO 15106-3, DIN 53122-2, GB/T 21529, YBB00092003-2015, etc. Applications: To test the water vapor transmission rate (WVTR) of packaging materials, such as plastic film, aluminum foil, sheets, bottle, can, and so on, widely used in the industries of food, pharmaceuticals, packaging, personal care, and so on. Testing range: 0.001 ~ 50g/ (m ² ·24h)
		 W203 Water Vapor Permeability	3 Chambers	
	Infrared Sensor Method	 W401 Water Vapor Permeability	1 Chamber	Standards: ISO 15106-2, ASTM F 1249, TAPPI T557, JISK7129, GB/T 26253, YBB00092003-2015, etc. Applications: To test the water vapor transmission rate (WVTR) of packaging materials, such as plastic film, aluminum foil, sheets, bottle, can, and so on, widely used in the industries of food, pharmaceuticals, packaging, personal care, and so on. Testing range: 0.001 ~ 100g/ (m ² ·24h)
		 W403 Water Vapor Permeability	3 Chambers	
	Wet Dish Method	 W301 Water Vapor Permeability	1 Chamber	Standards: ASTM E96, ASTM D1635 TAPPI T464, ISO 2528, GB/T 1037, GB/T 16928, YBB00092003-2015, etc. Applications: To test the water vapor transmission rate (WVTR) of packaging materials, such as plastic film, aluminum foil, sheets, bottle, can, and so on, widely used in the industries of food, pharmaceuticals, packaging, personal care, and so on. Testing range: 0.1 ~ 10000g/ (m ² ·24h)
		 W303 Water Vapor Permeability	3 Chambers	



Dry Dish Method		1 Chamber	Standards: ASTM D1635 TAPPI T464, ISO 2528, ASTM E96, GB/T1037, GB/T 16928, YBB00092003-2015, etc. Applications: To test the water vapor transmission rate (WVTR) of packaging materials, such as plastic film, aluminum foil, sheets, bottle, can, and so on, widely used in the industries of food, pharmaceuticals, packaging, personal care, and so on. Testing range:0.01 ~ 10000g/ (m ² ·24h)
		3 Chambers	


Oxygen Permeability Analyzer	Coulometric Sensor Method		1 Chamber	Standards: ASTM F 1927, ASTM F 1307, ASTM F 2622 GB/T 19789-2005, ASTM D 3985, YBB00082003-2015, etc. Applications: To test the oxygen transmission rate (OTR) of packaging materials, such as plastic film, aluminum foil, sheets, bottle, can, and so on, widely used in the industries of food, pharmaceuticals, packaging, personal care, and so on. Testing range:0.02 ~ 16500cm ³ /(m ² ·24h)
			3 Chambers	

CNAS Lab		Functions: As a third party certification body, we have provided testing service for customers from home and abroad.
	CNAS Lab to Provide Test Service	

Reference material		Functions: To calibrate WVTR/OTR/GTR testers.(PET films with specific values)
	Certificated Reference Material(PET films)	

Type of polyester film (PET) reference materials	Transmission Rate Reference Value	Specification
OTR PET reference materials	(62.8±2.9)cm ³ /(m ² ·24h)	25μm
OTR PET reference materials	(12.3±0.9)cm ³ /(m ² ·24h)	125μm
GTR PET reference materials	(11.2±2.1)cm ³ /(m ² ·24h·0.1MPa)	125μm
GTR PET reference materials	(4.7±1.2)cm ³ /(m ² ·24h·0.1MPa)	300μm
WVTR PET reference materials	(4.4 ± 0.8)g/ (m ² ·24h)	125μm
WVTR PET reference materials	(1.8 ± 0.3)g/ (m ² ·24h)	300μm

GC Tester		Standards:GB/T 10004-2008, YBB00132002 Functions:To test the smell and solvent residues of printed packaging materials; test the quality and purity of the solvent.
	GC-9803 Gas Chromatograph	
Gas Generator		Functions: To generates high purity nitrogen, hydrogen and air; can supply stable and high quality gas for Gas Chromatography. Nitrogen purity: $\geq 99.999\%$ Hydrogen purity: $\geq 99.99\%$
	NHA-300 Gas Generator	

Gas Permeability Analyzer	Pressure differential method		1 Chamber	Standards: ISO 2556, ISO 15105-1, ASTM D 1434, JIS K 7126-A, YBB00082003-2015, GB/T 1038, etc. Applications:To test the oxygen transmission rate (OTR)of packaging materials, such as plastic film, aluminum foil, sheets, bottle, can, and so on, widely used in the industries of food, pharmaceuticals, packaging, personal care, and so on. Testing range: 0.02 ~ 50000cm ³ /(m ² ·24h·0.1MPa) (Optional:60000cm ³ /(m ² ·24h·0.1MPa))
		N500 Gas Permeability Analyzer		
			3 Chambers	
			Single Chamber	Standards: GB/T 5453-1997、ISO 9237-1995、GOST ISO 9237-2013、GB/T 10655-2003、QB/T 2799-2006、ISO 4638-1984、ASTM D737-2004(2016) Applications:To to test woven fabric materials, including industrial fabric, non-woven fabric, and other permeable textile materials on the permeability properties. Testing range: 1~4000Pa (Self-setting pressure drop)
		N900 Gas Permeability Analyzer		

Evaporated Residues Tester



ZF800A Evaporated Residues Tester

Standards: GB/T 5009.60-2003, GB/T 5009.64-2003, GB/T 5009.68-2003, GB/T 5009.69-2008, GB/T 5009.203-2003, GB/T 9740-2008

Applications: To test the dissolving-out amount of test sample soaked in specified liquid. Applicable to tableware, food containers, packaging films, bags, cap sealing rubber pad, painted coating for inner wall of cans or tins, plant fiber container and so on made from polyethylene, polystyrene, polypropylene, perchloroethylene resin, epoxy novolac etc.

Testing range: 0 ~ 80g (residue weight)



ZF1800A Full-automatic Total Migration Tester

Standards: GB 31604.8-201, GB 31604.1-2015, GB/T 5009.156-2016, GB/T9740-2008, GB/T23949-2009, YBB00342002-2015, YBB00102005-2015, YBB00082002-2015

Applications: To test the dissolving-out amount of test sample soaked in specified liquid. Applicable to tableware, food containers, packaging films, bags, cap sealing rubber pad, painted coating for inner wall of cans or tins, plant fiber container and so on made from polyethylene, polystyrene, polypropylene, perchloroethylene resin, epoxy novolac etc.

Testing range: 0.167mg/dm²-167000mg/dm²

Universal Testing Machine



GHH Universal Testing Machine

Standards: ASTM D828,ASTM E4, ASTM D882,ASTM D1938,ASTM D3330,ASTM F88,

ASTM F904,ISO 37,JIS P8113,QB/T 2358 etc.

Applications: Applicable in various kinds of metal and non-metallic materials, such as plastic film, non-woven fabrics, woven bags, packaged with the tensile, peel, heat sealing, tear, puncture,compression, bending, shear test, and some product's special tests. Automatically calculated tensile strength, bending strength, elongation at break, fixed elongation stress, modulus of elasticity, and other parameters according to JIS, ASTM, DIN standards.

Testing range: 0 ~ 5000N

Electronic Tensile Tester



GBH-1 Electronic Tensile Tester

Testing range:
0 ~ 500N
(0 ~ 3000N optional)
Elongation rate:
1500%

Standards: ASTM D828, ASTM E4, ASTM D882, ASTM D1938, ASTM D3330, ASTM F88, ASTM F904, ISO 37, JIS P8113, QB/T 2358, etc.

Applications: Applicable in various kinds of metal and non-metallic materials, such as plastic film, non-woven fabrics, woven bags, packaged with the tensile, peel, heat sealing, tear, puncture,compression, bending, shear test, and some product's special tests.





GBL-L Electronic Tensile Tester



Testing range:
0 ~ 300N
(0 ~ 500N optional)
Elongation rate:
1250%

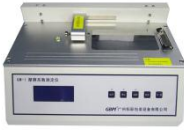

Standards: ASTM D828, ASTM E4, ASTM D882, ASTM D1938, ASTM D3330, ASTM F88, ASTM F904, ISO 37, JIS P8113, QB/T 2358, etc.

Applications: Applicable in various kinds of metal and non-metallic materials, such as plastic film, non-woven fabrics, woven bags, packaged with the tensile test, peeling test and heat sealing test and tearing test.



Sample Cutter		<p>Functions: To cut samples of plastic film, paper and so on in preparation for other tests, such as traction, stripping and heat sealing etc.</p> <p>Cut sample size: 15mm×210mm (width is adjustable)</p>
	LC-1 Sample Cutter	




Oven		<p>Functions: To dry, bake, melt and sterilize test sample, widely used in industrial and mining enterprises, laboratory, research institute, inspection agency, college and so on.</p> <p>Temperature range: room temperature+10℃~+300℃</p>
	Drying Oven	



Heat Sealing Tester		<p>Standards: ASTM F 2029, QB/T 2358, YBB 00122003-2015</p> <p>Applications: To test the temperature, pressure, time and strength for heat sealing of various plastic films, composite film, aluminum foil and so on</p> <p>Heat sealing temperature: room temperature ~ 300℃</p>
	GBB-F Heat Sealing Tester	
		
	GBB-A1 Heat Sealing Tester	


Coefficient of Friction Tester		<p>Standards: GB 10006, ASTM D 1894-01, ISO 8295, TAPPI 816</p> <p>Applications: To test the static friction coefficient and dynamic friction coefficient of plastic film, paper and other materials, used in packaging industry, membrane industry, inspection agency and so on.</p> <p>Coefficient testing range: 0.001 ~ 0.999</p>
	GM-1 Coefficient of Friction Tester	
		
	GM-4 Coefficient of Friction	

Inverted Pressure Sterilized Boiler		
Model	ZM-100 Inverted Pressure Sterilized Boiler	ZM-40G Inverted Pressure Sterilized Boiler
Standards	GB 150, GB/T 10004, GB 4793, YY 1007-2005	
Functions	Applicable for the packaging, film-making, food industries, testing institutions, scientific research institutes, and medical organizations to sterilize materials and test the resistance property of high temperature boiling of the packaging materials.	
Specifications	Φ400mm×500mm	Φ370mm

Volume	50L	40L
Appearance		


Modified Atmosphere Refrigerator			
Model	GQ-160A	GQ-300	GQ-900
Functions	For making preservation experiment on fruits, vegetables, flowers and plants in modified atmosphere.		
Testing range	O ₂ : 0~100%; CO ₂ : 0~20%; Other is N ₂		
Readout accuracy	O ₂ : 0.01%; CO ₂ :0.01%		
Temperature range	0~60°C (3~50°C when humidifying)	-3~60°C	-3~60°C
Humidity range	normal~98%RH	normal~98%RH	normal~98%RH
Appearance			


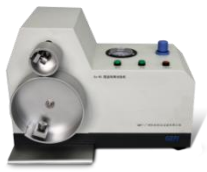

Model	GBG-L Pendulum Impact Tester	GBD-L Falling Dart Impact Tester
Standards	ASTM D 3420, GB 8809	ISO 7765-1, GB/T 9639, GB/T 15267, ASTM D 1709
Function	To test the impact resistance of various films, and foils.	To test the impact resistance of various films, and foils.
Maximum impact energy	3J	--
Resolution	0.001J	--
Impact height	--	1500mm/660mm
Appearance		


Hot tack		Standards: ASTM F 1921, ASTM F 2029, QB/T 2358, YBB00122003-2015
	GBR Hot Tack Tester	Functions: To test the sticking strength of packaging films after heat sealed with different temperature, pressure and time. Temperature range: room temperature~250°C Temperature accuracy: ±1°C Hot tack time: 0~99s




Heat Shrinkage		Standards: GB/T 13519, ASTM D 2732 Functions: To test the heating shrinkage of packaging films submerged in liquid in different temperatures. Temperature range: room temperature ~ 250 °C Temperature accuracy: ±1 °C
	GBK-1 Heat Shrink Tester	
Torque Tester		Standards: GB/T 17876, ASTM D2063, ASTM D3198, ASTM D3474, BB/T 0025 Functions: To test the screwing locking strength and tightness, and unscrewing strength, of the caps of packaging bottles, tubes, spouts and so on. Temperature range: 0.01 ~ 10N
	HP-100 Cap Torque Tester	
Tear Tester		Standards: GB/T 16578.2, GB/T 455, ASTM D1922, ASTM D1424, ASTM D689 ISO 6383, ISO 1974, TAPPI T414 Functions: To test the tear property of paper , mainly using for tearing strength of not more than 1000mN quantitative paper, plastic and foil. Temperature range: 0 ~ 6400gf
	GBD-S Tear Strength Tester	
Leakage Tester		Standards: ASTM F1140, ASTM F2054, GB 10440, GB 18454, GB 19741, GB 17447, ISO 11607-1, ISO 11607-2, etc. Functions: To test the leakage amount and seal strength of closed packaging bag. Seal testing range: 0 ~ 1MPa Leakage testing range: 0 ~ 100KPa
	GB-MX2 Leakage and Seal Strength Tester	
		Standards: GB/T 15171, ASTM D3078 Functions: To test the hermetic sealing quality and performance of packaging bags, bottles, cans and so on, used in industries of food, beverage, pharmaceuticals, personal care and so on. Vacuum m degree: 0 ~ -95KPa
	GB-M1 Electronic Leakage Tester	
		Standards: GB/T 15171, ASTM D3078 Functions: To test the hermetic sealing quality and performance of packaging bags, bottles, cans and so on, used in industries of food, beverage, pharmaceuticals, personal care and so on. Vacuum degree: 0 ~ -90KPa
	GB-M Electronic Leakage Tester	


Thickness Tester		<p>Standards: ISO 4593, ISO 534, ISO 3034, GB/T 6672, GB/T 451.3, GB/T 6547 ASTM D645, ASTM F2251, etc.</p> <p>Functions: To make thickness measuring or comparative measuring of plastic film, metal foil, paper and so on.</p> <p>Temperature range: 0~3mm</p> <p>Resolution: 0.1μm</p>
		<p>Standards: ISO 4593, GB/T 6672, ASTM F2251, etc.</p> <p>Functions: To make thickness measuring or comparative measuring of plastic film, metal foil, paper and so on.</p> <p>Temperature range: 0.001~12.5mm</p> <p>Resolution: 0.001mm</p>
		<p>Functions: To test the thickness of aluminized film.</p> <p>Temperature range: 50-1200Å</p>
GH-D Automatic Digital Thickness Tester		
GH-3 Digital Thickness Tester		
GH-E Alum Film Thickness Tester		


Balance		Precise Balance	Measure range: 0~200g Accuracy: 1mg	<p>Functions: For precision measuring and analysis, widely used in industry, commerce, laboratory, university, institute, inspection agency, etc.</p>
	Electronic Balance	Analytical Balance	Measure range: 0~100g Accuracy: 0.1mg	

Ink Fastness Tester		Rolling speed: 300mm/min	<p>Standards: GB/T 7707-2008, JIS C2107, JIS Z0237</p> <p>Functions: To test the ink layer bonding strength of printed (intaglio) plastic film, composite film, cellophane and so on; test the layer bonding status formed by vacuum coating, surface coating and composite technology etc.</p>
	Gx-Y1 Adhesive Tape Rolling Pressing Machine		
		Peeling speed: 0.8M/S	
Gx-B2 Disk Stripping Tester			
	Scratching speed: 43 times/min	<p>Standards: GB/T 7706-2008</p> <p>Functions: To test the rub resistance of ink layer of printed (relief printing) material, rub resistance of light sensing layer of PS plate, and coatings of other products.</p>	
Gx-C1 Ink Rub Tester			

Burst strength		<p>Standards: ISO 2759, JIS P8112, ASTM D2210, TAPPI T403, QB/T 1057-2004, GB/T 454-2002, GB/T 1539, GB 6545,</p> <p>Functions: To test the bursting resistance strength of paper, paper board, fabrics, leather, thin metal plate and so on.</p>
	GNP-1 Bursting Strength Tester	

Compression Tester		<p>Standards: , ASTM D642, ASTM D4169, TAPPI T804, ISO 2872, ISO 12048, JIS Z0212GB/T 16491, GB 4857.16</p> <p>Functions: To test the compression, deformation resistance and stacking of corrugated carton, honeycomb board box and so on.</p> <p>Max load: 20KN</p>
	GBN2000Z Box Compression Tester	
		<p>Functions: To test the compression resistance of filled packaging bags.</p> <p>Testing range:0 ~ 200kg</p> <p>Travel distance: 0 ~ 100mm</p>
GBN200Z Bag Compression Tester		
	<p>Functions:To test the compression resistance of filled packaging bags.</p> <p>Testing range:0 ~ 3000N</p> <p>Travel distance: 0 ~ 135mm</p>	
GBN200A Compression Tester		

Paper Testing		<p>Standards: TAPPI T472, JIS P8126</p> <p>Functions: To test the compression (crush) resistance in vertical direction of corrugated paper, craft paper and paper board. Can also test the bonding strength and horizontal pressure resistance.</p> <p>Temperature range: 50 ~ 600N</p> <p>Resolution: 1N</p>
	GY-1 Crush Resistance Tester	

Melt Flow		<p>Standards: GB/T 9643, GB/T 3682, JB/T 5456, ISO 1133</p> <p>Functions: To test the melt flow rate (MFR, unit: g/10min) of thermoplastic material in high temperature.</p> <p>Test method: weight method (MFR), volume method (MVR)</p> <p>Test range for weight method: 0 ~ 200g</p> <p>Test range for volume method: 0 ~ 80cm³</p>
	GBB-R Melt Flow Indexer	

Optical tester



SGW-810 Light Transmittance and Haze Tester

Standards: GB2410-2008, ASTM D1003, GB/T 2410-2008

Functions: To test the light transmittance and haze degree of all transparent and semi-transparent parallel plane samples (plastic plate, sheets etc), and turbidity or clarity of liquid samples (water, drinks etc)

Temperature range: light transmittance: 0 ~ 100.0%; haze degree: 0 ~ 30.00%



GBPI is a professional manufacturer focused on developing and producing packaging material test instruments. Founded in 2002, the company has received IOS9001 certification and recognized as high-tech enterprise and software enterprise by national authority. We hold numerous technology patents and software certificates from the national authority, and gained awards for technological progress.

We are the provider of certified reference material in Asia-Pacific plastic packaging industry.

Guangzhou Biaoji Packaging Equipment Co., Ltd (GBPI)

Add: No.1 Minghua 3 St. Jinxiu Rd., Economic Development Zone, Guangzhou 510730, China

Tel: +86-20-82222550; +86-20-86153742

Service hotline: 400-7886855; +86-20-29136972

Fax: +86-20-82087405

Email: info@gbtest.cn

Web: www.gbpitester.com

Our Customers

