



CELL INSTRUMENTS |
Packaging Quality Control Solutions

PRODUCT CATALOG

ONE STOP MATERIAL TESTING SOLUTIONS

CELL INSTRUMENTS CO., LTD.

► *DECADES OF EXPERIENCE*

► *PRESENCE IN 70+ MARKETS*

www.celtec.cn

info@celtec.cn

目录

Plastic Film and Pack	4
Leak Tester	4
Vacuum Leak Tester	4
Gross Leak Tester	4
Micro Leak Tester	4
Burst Tester	5
Digital Burst Tester	5
Manual Burst Tester	5
Heat Seal Tester	5
Standard Heat Seal Tester	5
Gradient Heat Seal Tester	5
Hot Tack Tester	5
Horizontal Hot Tack Tester	5
Vertical Hot Tack Tester	5
Tensile Tester	6
Flexible Material Tensile Tester	6
Universal Testing Machine	6
Coefficient of Friction Tester	6
Horizontal Plane COF Tester	6
Inclined Plane COF Tester	6
Impact Tester	6
Falling Dart Impact Tester	6
Pendulum Impact Tester	6
Falling Ball Impact Tester	6
Thickness Tester	7
Tear Tester	7
Digital Elmendorf Tear Tester	7
Manual Elmendorf Tear Tester	7
Falling Ball Impact Tester	7
Flex Durability Tester	7
Four Station Flex Tester	7
Three Station Flex Tester	7
Shrink Tester	8
Free Shrink Rate Tester (Fluid Bath)	8

Shrink Rate and Force Tester (Hot Air Oven)	8
Peeling Cling Tester	8
Paper and Board	8
Bursting Tester	8
Rub Tester	9
COBB Tester	9
Tear Tester	9
Plybond Tester	9
Puncture Tester.....	10
Stiffness Tester.....	10
Folding Tester	10
Core Compression Tester	10
Crush Tester.....	11
Smoothness Tester	11
Thickness Gauges.....	11
Sample Cutters.....	11
Container	12
Box Compression Tester	12
Package Compression Tester	12
Torque Tester	12
Manual	12
Automatic	12
Bottle Verticality Tester	13
Bottle Thickness Tester	13
CO2 Volume Tester	13
Medical and Pharmaceutical	13
Ampoule Breaking Tester	13
Tablet Hardness Tester	14
Drawing Volume Tester	14
Medical Packaging Tester	15
Glass Grain Sample	15
Color	16
Haze Meter	16
Colorimeter Meter	16

Spectrophotometer	16
Gloss Meter	17
Adhesiveness	17
Ball Tack Tester	17
Holding Power Tester	17
Loop Tack Tester	17
High Speed Unwinding Tester	18
Peeling and Slow Speed Unwinding Tester	18
Plastics	18
Melt Flow Rate Tester	18
Izod Impact Tester	18
Charpy Impact Tester	19
Textile	19
Yarn Shrink Rate and Force Tester.....	19
Cleaning Efficacy Tester.....	19
Mop Cloth Coefficient of Friction Tester	20
Texture Analysis	20
Gel Strength Tester	20
Customized Projects.....	20
Stylus Pen Sliding and COF Tester.....	20
IEC 60068 Pendulum Hammer Striking Tester	21
More to be listed...	

Plastic Film and Pack/Leak Tester

Vacuum Leak Tester is a very common way to check seal integrity of packaging. Popular standard for this application is ASTM D3078. It's also referred to as water method, or bubble emission method. Methylene blue dye solution method is also its application.

Standards: ASTM D3078		
LT-01	LT-02	LT-03
		
Manual type leak tester, with pressure gauge display, manual time and pressure regulating.	1st generation automatic and digital leak tester, with precious timer and pressure control and display.	2nd generation PLC controlled, HMI touch screen automatic model, with embedded user-friendly program.
Pressure Range: 0~ -90 KPa		
Test Space: 270mm*210mm ϕ *H (usable space) Other size and shape available		
Gas input: 0.7 MPa Compressed air by ϕ 6mm pipe		
No Electricity Needed	Power: 220V 50/60HZ	Power: 110~220V 50/60HZ

Gross Leak Tester is a destructive test method for detecting gross leaks in packaging by internal pressurization. This is also called the bubble test and is primarily used for pouch, sterile packaging, etc.

Standards: ASTM D3078
LSST-01G

Pressure range: 0~30KPa (or as required)
Test Space: as required
Gas input: 0.7 MPa Compressed air by ϕ 6mm pipe
Power: 110~220V 50/60HZ

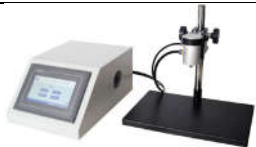
Micro Leak Tester is based on vacuum decay method, and is a non-destructive way for leak testing of rigid and semi-rigid non-lidded trays; trays or cups sealed with porous barrier lidding materials; rigid, nonporous packages; and flexible, nonporous packages.

Standards: ASTM F2338
MLT-01

Pressure range: 0~ -101 KPa
Sensitivity: 1~3 μ m leakage
Vacuum source: external vacuum pump
Power: 110~220V 50/60HZ

Plastic Film and Pack/Burst Tester

Burst Tester, also called the leak and seal strength tester, helps to determine the ability of an open or closed package to withstand internal pressurization.

Standards: ASTM F1140, ASTM F2054		
LSST-01 Closed Pack	LSST-01 Open Pack	LSST-01S Open Pack
		
Three test methods of burst, creep and creep to failure. Different units available.		Digital gauge operation and display, Burst test value auto recording.
Pressure Range: 0~600KPa (or as required)		
Gas input: 0.7 MPa Compressed air by $\phi 6$ mm pipe		
Power: 110~220V 50/60HZ		No Electricity Needed

Plastic Film and Pack/Heat Seal Tester

Heat Seal Tester is a lab sealer, which is used for evaluation of sealing parameters of time, pressure and temperature, before the material is used for packing line in large scale.

Standards: ASTM F2029			
HST-01	HST-02	GHS-01 Gradient	GHS-02 Gradient
			
PLC controlled, HMI touch screen, PID control, pressure transducer inside	LED digital type, PID control, pressure gauge display	LED digital type, PID control, pressure gauge display, 5 independent upper jaws	PLC, HMI screen, PID control, pressure transducer inside, 5 independent upper jaws
Temp Range: Ambient~300°C		Temp Range: Ambient~250°C	
Seal Jaw: 330 mm × 10 mm(upper)		Seal Jaw: 40mm×10mm×5 PCS (upper)	
Sealing Time: 0.1s ~ 999H			
Sealing Pressure: 0.15 MPa ~ 0.7 MPa			
Power: 220V 50/60HZ			

Plastic Film and Pack/Hot Tack Tester

Hot Tack Tester measures the strength of heat seals formed between thermoplastic surfaces of flexible webs, immediately after the seal has been made and before it cools to room temperature.

Standards: ASTM F1920	
HTT-01 Horizontal Type	HTT-01 Vertical Type
	
Temp Range: Ambient~250°C	
Test Range: 200N (or as required)	
Dwell Time 0.1s ~ 9999S	
Sealing Pressure: 0.15 MPa ~ 0.7 MPa	
Seal Jaws: 50 mm × 10 mm	
ASTM F1921 Method A	ASTM F1921 Method A and B
Power 220V 50/60HZ	

Plastic Film and Pack/Tensile Tester

Tensile Tester is a basic tool for checking mechanical properties of materials. It has various styles and load ranges, depending on the sample nature. Below TST-01 is specially designed for flexible packaging industries and have multiple test programs for different test types.

TST-01	TST-01S	TCT-01	TCT-01C	Other UTM
				
PLC controlled, HMI touch screen, multiple test program	PLC controlled, HMI touch screen, multiple test program	Economic key panel operated,	PC Controlled type UTM, range from 50N~5000N	PC Controlled type UTM, range from 10KN and above
Major function: tensile, elongation, strength, peel, tear, protrusion, penetration, etc		Major function: tensile, elongation, strength, compression, bending, etc		
Test Range: 500N	Test Range: 500N	Test Range up to 5000N	Test Range up to 5000N	Test Range $\geq 10000N$
Accuracy: 0.5% F.S.	Accuracy: 0.5% F.S.	Accuracy: 1% F.S.	Accuracy: 1% F.S.	Accuracy: 0.5%, 1% F.S.
Speed: 1-500 mm/min				0.001-500 mm/min
Clamps Width 27mm (standard)		Clamps Width 50mm (standard)		
Stroke 800mm	Stroke 200mm	Stroke 1000mm	Stroke 600mm	Stroke 600mm
Power 110~220V 50/60HZ		Power: 220V 50/60HZ		

Plastic Film and Pack/Coefficient of Friction Tester

Coefficient of Friction Tester is a basic tool for checking surface property of various materials, and it is used to measure static and kinetic coefficients of friction of plastic films, sheets, rubber, paper and paper board, textile, fabrics, cables, convey belts, wood, coatings, brake pads, windshield wipers, shoe materials and tires.

Standards: ASTM D1894, ISO 8298	
COF-01 Horizontal Type	COF-03 Inclined Type
	
Function: both static and kinetic COF	Function: static COF only
Test range: 5N	Test range: 0° ~ 60°
Sled: 200g	Sled: 200g, 235g or 1300g
Test Speed: 100, 150mm/min	Test Speed: 0.1°/s ~ 10.0°/s
Power 110~220V 50/60HZ	

Plastic Film and Pack/Impact Tester

Impact Tester is used for evaluating impact toughness of plastics, especially films and sheets.

FDT-01 Dart Impact Tester	FBT-01 Ball Impact Tester	PIT-01 Pendulum Impact Tester
		
Impact Height: 60mm/1500mm	Impact Height: 300mm-600mm	N/A
Accuracy: 0.1g (0.1J)	Accuracy: 0.1g (0.1J)	Resolution: 0.001J
Method A: 50~2000g; Method B: 300~2000g	Ball Diameter mm: 23, 25, 28.6, 38.1, 50.8	Impact Energy: 1 J, 2 J, 3 J
Specimen Size: >150*150mm	Specimen Size: >150*150mm	Specimen Size: 100*100mm or $\Phi 100$ mm
ASTM D1709, ISO 7765-1-1988, JIS K7124-1	GB/T15267	ASTM D3420, NF T54-116
Power: 110~220V 50/60HZ		

Plastic Film and Pack/Thickness Tester

Thickness Tester is a basic tool for checking material thickness. It is important index because any physical and mechanical properties of paper, paperboard and flexible packaging materials are dependent upon the thickness of the material.

Standards: ISO4593, ISO 534, ISO 3034, ASTM D374, ASTM D1777, TAPPI T41	
FTT-01	
	
Test range: 0~2mm	
Resolution: 0.1μm	
Measure Head: Hemispherical or Flat type	
Power: 110~220V 50/60HZ	

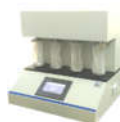
Plastic Film and Pack/Tear Tester

Tear Tester is a standard test for determining the tear resistance, which is named after its inventor, Armin Elmendorf. The Elmendorf test determines the average force required in grams or mN to tear a sample after the tear has been started.

ASTM D1922, ASTM D1424, ASTM D689, ISO 6383, ISO 1974	
SLD-01 Tear Tester	SLD-03Tear Tester
	
Automatic	Manual
Pendulum Capacity(gf) : 200,400,800,1600,3200,6400	Measuring Range: (10~1000) mN
Tearing Arm: 104±1mm	
Tearing Initial Angle: 27.5 ±0.5°	
Gas Source: 0.6MPa	N/A
Power 110~220V 50/60HZ	N/A

Plastic Film and Pack/ Flex Durability Tester

Flex Durability Tester is used to measure the resistance against repetitive strain for films, composites and coating films, etc. It is also called Gelboflex.

Standards: ASTM F392	
GFT-01	GFT-02
	
Four Test Station	Three Test Station
Flex Frequency: 45 /minute	
Flex Angle: 440° (90 mm) or 400° (80 mm)	
Horizontal Stroke: 155 mm or 80 mm	
Sample Size: 280 mm x 200 mm	
Twisting Capacity: 2.5 N.m	Twisting Capacity: 3.5 N.m
Power 110~220V 50/60HZ	

Plastic Film and Pack/ Shrink Tester

Shrink Tester is used for the shrinking forces (FSR-01) and shrinkage ratio measurement of heat shrinkable films.

ASTM D2732	ISO 14616, DIN 53369
FST-01	FSR-01
	
Shrink Rate	Shrink Force and Rate
N/A	Force Range: 5 N
Temp. Range: Ambient ~ 200°C	Temp. Range: Ambient ~ 210°C
Temp. Accuracy: 0.3 °C	Temp. Accuracy: 0.5 °C
Power 220V 50/60HZ	

Plastic Film and Pack/ Peel Cling Tester

Peel Cling Tester measures cling between two layers of stretching film and help to determine the property of stretch wrap material ability to adhere to it.

Standards: ASTM D5458
SPC-01

Test range: 5N
Force Accuracy: 0.5% F.S.
Test Speed: 125mm/min
Power: 110~220V 50/60HZ

Paper and Board/ Bursting Tester

Bursting Tester is used for the bursting strength test of paper and corrugated boards.

ISO 2759	ISO 2758
BNP-01 for Board	ZNP-01 for Paper
	
Test Range: 150 ~5600kpa	Test Range: 70 ~1600kpa
Plate Diameter upper:31.5±0.1mm, lower: 31.5±0.1mm	Plate Diameter upper:30.5±0.1mm, lower: 33.5±0.1mm
Clamping Force: 100kpa~1200kpa(adjustable)	
Resolution: 0.01 KPa	
Power 220V 50/60HZ	

Paper and Board/ Rub Tester

Rub Tester is to evaluate the scuffing or rubbing resistance of an ink film or fiber surface on container board and corrugated board.

Standards: TAPPI T830, ASTM D5264	
RT-01	RT-02
	
Arc Movement	Straight reciprocating
No. of Test Stations: 2	No. of Test Stations: 1
Rub Pressure: 8.9 N(2lb); 17.8N(4lb)	Rub Pressure: 20N (4.5lb)
Rub Speed: 20~120 cpm adjustable	Rub Speed: 21, 43, 85, 106cpm
Power 220V 50/60HZ	

Paper and Board/ COBB Tester

COBB Absorption Tester is for the measurement of surface water absorption of paper and paper board.

Standards: ISO 535
COBB-01 COBB Tester

Sample Size: 100cm ²
Metal Roller Diameter: 112.8±0.2mm
Metal Roller Mass: 10±0.5kg

Paper and Board/ Tear Tester

Tear Tester is used for determining the tear resistance and tear index of paper.

Standards: ASTM D1922, ASTM D1424, ASTM D689, ISO 6383, ISO 1974	
SLD-01 Tear Tester	SLD-03Tear Tester
	
Automatic	Manual
Range(gf): 200,400,800,1600,3200,6400	Measuring Range: (10~1000) mN
Tearing Arm: 104±1mm	
Tearing Initial Angle: 27.5 ±0.5°	
Gas Source: 0.6MPa	N/A

Paper and Board/ Plybond Tester

Plybond Tester is used for the internal bond strength test of paper and board. It is also called internal bond tester (Scott Type).

Standards: TAPPI T569
BGT-01 Internal Bond Tester

Range(J/M ²): A: 0-500 B: 500~1000 C: 1000~1500
Sample clamp force: 0~40kg/cm ² (adjustable)
Impact angle: 90°
Power 220V 50/60HZ

Paper and Board/ Puncture Tester

Puncture Tester measures the energy required to puncture board with a pyramidal head affixed to a pendulum arm.

ISO 3036, ASTM D781, DIN 53142, TAPPI T803
PST-01 Puncture Tester

Test Range: (1~48)
Four gears: A < 6J; B < 12J; C < 24J; D < 48J
Resolution: 0.001J
Pressure head: (100±2) KPa
Power 220V 50/60HZ

Paper and Board/ Stiffness Tester

Stiffness Tester is used to evaluate the stiffness and resiliency of cardboard by international Taber method.

Standards: ISO 5628, ISO 2493
WTD-01 Stiffness Tester

Test Range: 15-10000mN
Sample size: 38*70mm
Bending length: (50/25/20/15/10/5±0.1)mm
Bending angle: 1-90° adjustable)
Power 220V 50/60HZ

Paper and Board/ Folding Tester

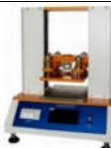
Folding Tester is used to test folding endurance of paper, paperboard and other sheet material.

Standards: ISO 5626, TAPPI T511
NZD-01 MIT Folding Tester

Test Range: 0 ~ 99999 times
Folding Angle: 0°~142° adjustable
Folding Speed: 10~2000 times/min adjustable
Tension: 4.9N, 9.8N, 14.7N
Power 220V 50/60HZ

Paper and Board/Core Compression Tester

Core Compression Tester is used to test compressive strength and stacking strength of paper tubes. It can be used for small carton, color boxes, paper pallets, paper tubes, paper drums and other paper products.

Standards: ISO12048, TAPPI T804
CST-PC Compression Tester

Test Range: (25~10000) N
Testing Space: 300*170*300 mm
Test Speed: 55mm/min adjustable
Resolution: 0.1N
Power 220V 50/60HZ

Paper and Board/ Crush Tester

Crush Tester is used for the ring crush (RCT) for paper with thickness between 0.15 and 1mm, edge crush (ECT), plybond adhesion (PAT) and flat crush (FCT) test for board. I

Standards: ISO12048, TAPPI T804
YSD-01 Crush Tester

Test Range: (5~3000) N
Plates Diameters: 125 mm
Test Speed: 12.5±1mm/min
Resolution: 0.1N
Power 220V 50/60HZ

Paper and Board/ Smoothness Tester

Smoothness Tester is used for the determination of smoothness of paper and board according to Bekk Method.

Standards: ISO 527, DIN 53107, TAPPI T479
ST-01 Smoothness Tester

Test Range: 5s,(15 ~ 300)s, ≥ 300s
Test area:(10±0.05) cm ²
Test Pressure: (100±2) KPa
Power 220V 50/60HZ

Paper and Board/ Thickness Gauge

Thickness Gauges are desktop type thickness measurement devices for paper, board and tissue.

Standards: ISO 438	ISO 534	ISO 12625-3
ZBH-01 Paper Thickness Tester	PBT-01 Board Thickness Tester	THD-01 Tissue Thickness Tester
		
Test Range (0~4) mm	Test Range (0~20) mm	Test Range (0~4) mm
Contact Area (200±5)mm ²	Contact Area (1000±20)mm ²	Contacting area: (1000±20) mm ²
Contact Pressure 100±10 KPa	Contact Pressure 20±2 KPa	Contacting pressure: 2±0.1 KPa
Resolution: 0.001mm		

Paper and Board/ Sample Cutter

Sample Cutter is used to make paper and board samples in an efficient and accurate way.

Strip Sample	ECT Edge Crush	RCT Ring Crush	Strip Sample	HAND GSM	MANUAL GSM	PNEUMATIC GSM
						
10, 15, 25.4mm	25*100 mm	152*12.7 mm	15*300mm	100 cm ²	100 cm ²	100 cm ²

Container/ Box Compression Tester

Box Compression Tester is for the compression strength and stacking ability of medium and small size packaging like corrugated carton, barrel, bottle, etc.

Standards: ISO12048, TAPPI T804	
CST-S (small size)	CST-M/L(M/L size)
	
Test Range 10KN	
Compressing Speed: 12mm/min	
Stacking Speed: 5mm/min	
Test Space: 400*600*600mm (LWH)	Test Space: 600*800*800; 800*1000*1000; 1000*1200*1200; 1200*1200*1200
Power 220V 50/60HZ	

Container/ Package Compression Tester

Package Compression Tester is for the compression strength and stacking ability of medium and small size packaging like corrugated carton, barrel, bottle, etc.

Standards: GB/T 10004, YBB 00112005
PCT-01 Package Compression Tester

Test Range: 2000N
Platen Size: 250mm*300mm
Time range: 0~10000S
Power 110~220V 50/60HZ

Container/ Torque Tester

Torque Tester measures the open force and lock force of the caps of medicine bottles, PET bottles, spout bags and flexible tube packages.

Standards: ASTM D2063, ASTM D3198, ASTM D3474	
TT-01 Torque Tester	MCT-01 Torque Tester
	
Manual	Automated
Test Range: 10N.m	
Resolution: 0.001 Nm	
Stacking Speed: 5mm/min	
Tearing Initial Angle: 27.5 ±0.5°	
Clamp Range: Φ~Φ170mm	Clamp Range: Φ~φ80mm for cap Φ~φ170mm for bottle
Power 110~220V 50/60HZ	

Container/ Bottle Verticality Tester

Bottle Verticality Tester is also called bottle perpendicularity tester, deviation tester, coaxial tester, coaxiality, or circle runout tester (for vials etc.)

PER-01 Perpendicularity Tester	
	
Sample Diameter: 5mm~145mm	
Test Range: 0~12.7mm	
Division value: 0.01 or 0.001mm	
Measurable Height: 15mm~300mm	

Container/ Bottle Thickness Tester

Bottle Thickness Tester measures the open force and lock force of the caps of medicine bottles, PET bottles, spout bags and flexible tube packages.

Standards: ASTM D2063, ASTM D3198, ASTM D3474	
WTT-01 Wall Thickness	WTT-02 Wall Thickness
	
Sample Diameter: 5~50mm	Sample Diameter: 10~120mm
Test Range: 12.7mm	
Division value: 0.01 or 0.001mm	
Measurable Height: 100mm	Measurable Height: 300mm

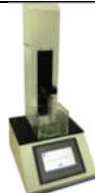
Container/ CO2 Volume Tester

CO2 Volume Tester is suitable for beverage carbon dioxide volume testing and gives a way to find out relationship between pressure and temperature.

Standards: ASTM F1115, GB T10792	
CLRT-01 CO2 Volume Tester	CLRT-02 CO2 Volume Tester
	
Automated	Manual
Resolution: 0.01KPa	Resolution: 0.0001 MPa
Shaking Speed: Adjustable	Manual
Test Range: 0~1 MPa	
Power 110~220V 50/60HZ	N/A

Medical and Pharmaceutical / Ampoule Breaking Tester

Ampoule Breaking Tester is used for the quantitative test of ampoule breaking strength.

Standards: ISO 9187, GB 2637	
BST-01 Ampoule Breaking Tester	
	
Test Range: 0~200 N	
Test Speed: 1~500mm/min	
Resolution: 0.1 N	
Accuracy: 0.5% F.S.	
Power 110~220V 50/60HZ	

Medical and Pharmaceutical / Tablet Compression Tester

Tablet Compression Tester is used for the hardness or compression force and displacement measurement of materials.

Standards: ISO 438
MPT-02 Tablet Tester

Test Range: 200N
Speed: 1~500mm/min
Resolution: 0.5% F.S.
Power 110~220V 50/60HZ

Medical and Pharmaceutical / Ampoule Breaking Tester

Ampoule Breaking Tester is used for the quantitative test of ampoule breaking strength.

Standards: ISO 9187, GB 2637
BST-01 Ampoule Breaking Tester

Test Range: 0~200 N
Test Speed: 1~500mm/min
Resolution: 0.1 N
Accuracy: 0.5% F.S.
Power 110~220V 50/60HZ

Medical and Pharmaceutical / Drawing Volume Tester

Drawing Volume Tester is used to creates a high-altitude environment to check the performance of blood collection tubes.

Standards: BS EN 14820, ISO 6710
RDVT-01 Drawing Volume Tester

Test Range: 0~-40KPa
Power 110~220V 50/60HZ

Medical and Pharmaceutical / Medical Packaging Tester

Medical Packaging Tester is designed for the measurement of force properties of a variety of medical packaging materials, such as tensile, compression, strength, tear, opening, penetration, breaking and pull test of polymers, bags, ampoule, rubber stopper, syringe, needle etc.

MPT-01 Medical Packaging Tester			
			
Test Range: 0~500 N			
Test Speed: 1~500mm/min			
Resolution: 0.1 N			
Accuracy: 0.5% F.S.			
Power 110~220V 50/60HZ			
			
			

Medical and Pharmaceutical / Glass Grain Sampler

Glass Grain Sampler is also called glass grain hydrolytic resistance tester and it is used in the preparation of glass grain and particle water resistance test samples.

Standards: ISO 719, ISO 720	
GHR-01A Glass Grain Hydrolytic Resistance Tester	
	
Mortar/Pestle Dimension: $\Phi 50/\Phi 48$ mm	
Sieve A Aperture: 425 μ m	
Sieve B Aperture: 300 μ m	
Sieve O Aperture: 600~1000 μ m	
Power 110~220V 50/60HZ	

Color and Optical/ Haze Meter

ASTM D1003/D1044		ASTM D1003/1044, ISO 13468/14782	
Haze-09	Haze-100	Haze-111	Color Haze-700
			
CIE-A, CIE-C, CIE-D65			CIE-A, CIE-C, CIE-D65&24 Chromaticity index
Aperture: 21mm		Aperture: 21mm, 7mm	
ASTM (HAZE), Transmittance (T)	ASTM and ISO (HAZE), Transmittance (T)		ASTM and ISO (HAZE), Transmittance (T), Color
5" Full Color Screen		Android, 7" Full Color Screen	
Haze Resolution: 0.01 unit; Transmittance Resolution: 0.01 unit			
400~700nm full spectrum LED light source			

Color and Optical/ Colorimeter

Standards: CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724-1, ASTM E1164, DIN5033 Teil7		
Color-200	Color-210	Color-220
		
D/8, SCI		
$\Delta E^*ab \leq 0.03$		
Aperture: $\Phi 6mm$	Aperture: $\Phi 11mm$, $\Phi 6mm$	Aperture: $\Phi 11mm$, $\Phi 6mm$, $\Phi 3mm$
A,B,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12,CWF,U30,U35,DLF,NBF,TL83, TL84,ID50,ID65,LED-B1,LED-B2,LED-B3,LED-B4,LED-B5,LED-BH1,LED-RGB1,LED-V1,LED-V2		
Observation: Eye	Observation: Camera	
Light Source: LED	Light Source: LED+UV	

Color and Optical/ Spectrophotometer

SP-520	SP-700 Series(multiple available)
	
Reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE Luv, XYZ, Yxy, RGB, Color difference(ΔE^*ab , ΔE^*cmc , ΔE^*94 , ΔE^*00), WI(ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger Stensby), YI(ASTM D1925, ASTM E313-00, ASTM E313-73), Blackness(My,dM), Color Fastness, Tint, (ASTM E313-00), Color Density CMYK(A,T,E,M), Milm, Munsell, Opacity, Color strength	Spectral reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE-Luv, XYZ, Yxy, RGB, chromatic aberration(ΔE^*ab , ΔE^*cmc , ΔE^*94 , ΔE^*00), whiteness(ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger Stensby), Yellowness(ASTM D1925, ASTM E313-00, ASTM E313-73), Blackness(My,dM), Color fastness, Staining fastness, Tint(ASTM E313-00), Color density CMYK(A,T,E,M), Metamerism index Milm, Munsell, covering power, Force share(Color Strength)
A,B,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12,CWF, U30,U35,DLF,NBF,TL83,TL84	A,B,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12,CWF,U30,U35,D LF,NBF,TL83,TL84,ID50,ID65,LED-B1,LED-B2,LED-B3,LED-B4,LED-B5,LED-BH1,LED-RGB1,LED-V1,LED-V2
Repeatability: Max. : $\Delta E^*ab < 0.04$; Average : $\Delta E^*ab < 0.03$	Repeatability: $\Delta E^*ab \leq 0.025$
Illumination Area/Aperture: MAV: $\Phi 8mm/\Phi 11mm$; MAV: $\Phi 4mm/\Phi 6mm$; MINI: $1 \times 3mm$	Measuring aperture: 4 stable and smart: $\Phi 11mm$, $\Phi 6mm$, $\nabla 11mm$, $\nabla 6mm$
Geometry: D/8,SCI+SCE	

Color and Optical/ Gloss Meter

Standards: DIN 67530, ISO 2813, ASTM D 523, JIS Z8741, BS 3900 Part D5, JJG696	
Gloss-300	Gloss-380
	
60°	20°, 60°, 85°
Light Spot: 60°:9*15 mm	Light Spot (mm): 20°: 10*10; 60°: 9*15; 85°: 5*38
Test Range: 60°:0-1000GU	Test Range (GU):20°: 0~2000; 60°: 0~1000; 85°: 0~160
Repeatability: 0-100GU:0.2GU; 100-2000GU:0.2%GU	

Adhesiveness / Ball Tack Tester

Ball Tack Tester is used for the measurement of initial adhesion property of adhesive tapes.

Standards: ASTM D3121, PSTC 6
LAT-02 Ball Tack Tester

Adjust Angle: 0-60°
Panel Width: 120mm

Adhesiveness / Holding Power Tester

Holding Power Tester is for the test of lasting adhesive/holding power of pressure sensitive adhesive tapes, labels and other interrelated products.

Standards: ASTM D3654	
LAT-05 Five Station	LAT-10 Tension Station
	
Test Time: 0~100H	
Standard Roller: 2000 g ±50 g	
Test Load: 1000±10g	
Test Plate: 60(L) mm×40(B) mm×1.5(D) mm	
Power 220V 50/60HZ	

Adhesiveness / Loop Tack Tester

Loop Tack Tester is used for adhesive, tape and label in the measurement of their sticking force, adhesiveness and tack, etc.

Standards: PSTC 16 FINAT 9, ASTM D6195
LTT-01 Loop Tack Tester

Test Range: 200N
Speed Range: 1~500mm/min
Sample Size: 125*25mm
Power 110~220V 50/60HZ

Adhesiveness / High Speed Unwinding Tester

High Speed Unwinding Tester is used for adhesive, tape and label in the measurement of their sticking force, adhesiveness and tack, etc.

Standards: PSTC-13, ASTM D1000
HSU-01 High Speed Unwind Force Tester

Test Range: 10kg, 20kg, or 50kg
Reel Diameter: 75mm (or others)
Power 110~220V 50/60HZ

Adhesiveness / Peeling and Slow Speed Unwinding Tester

Peeling and Slow Speed Unwinding Tester is realized on our vertical or horizontal type force measurement device, such as a tensile tester.

Plastics/ Melt Flow Rate Tester

Melt Flow Rate Tester is suitable to measure melt flow character of PP, PE, POM, ABS plastics, PC etc.

Standards: ISO 1133, ASTM D1238		
RZ-A Mass Method	RZ-W Mass &Volume	RZ-H Mass &Volume&PC
		
0.1-400.00g/10min (MFR)	Test Range 0.1-800.00g/10min (MFR) 0.1-800.00 cm³/10min (MVR)	Test Range 0.1-3000.00g/10min (MFR) 0.1-3000.00 cm³/10min (MVR)
Cutting mode: manual, time control	Cutting mode: manual, time control, auto control	
Ambient~450°C		
Weights: 0.325kg, 1.200kg, 2.160kg, 3.800kg, 5.000kg, 10.000kg, 21.600kg		
Cylinder internal diameter:9.550mm ± 0.025mm		
Die: Tungsten carbide, L8.000mm±0.025mm, Internal diameter2.095mm ±0.005mm		
Power 220V 50/60HZ		

Plastics/ Izod Impact Tester

Izod Impact Tester is used for the determination of impact toughness of non-metallic materials such as rigid plastics, reinforced nylon, FRP, ceramics, cast stone, and electrical insulating materials.

Standards: ISO 180, ASTM D256, GB/T 1843, GB/T 2611	
XB-D Digital Touch Screen	XB-M Manual Mechanical
	
Impact velocity: 3.5m / s	
Impact Energy: 1J, 2.75J, 5.5J, 11J, 22J (one equipped)	
Tilt angle: 160°	
Blade Fillet Radius: R=0.8±0.2mm	
Blade Inclined Angle: 75°	
Power 110~220V 50/60HZ	

Plastics/ Charpy Impact Tester

Charpy Impact Tester is for toughness test of hard plastics, fiber-reinforced composite material, nylon, fiberglass, ceramics, cast stone, asbestos sheets, insulation materials and other non-metallic materials, including machining and injection molding samples.

Standards: ISO179, GB/T1043	
CH-D Digital Touch Screen	CH-M Manual Mechanical
	
Impact velocity: 3.8m / s	
Impact Energy: 7.5J, 15J, 25J, 50J(one equipped)	
Tilt angle: 160°	
Blade Fillet Radius: R=2±0.5mm	
Blade Inclined Angle: 30±1°	
Power 110~220V 50/60HZ	

Textile/ Yarn Shrink Rate and Force Tester

Yarn Shrink Rate Tester is used for the shrink rate and force test of yarn and cord at controlled temperature.

Standards: ASTM D4974, ASTM D5591
HAST-01 Hot Air Thermal Shrinkage Tester

Temp. Range: Ambient~250°C
Test Time: 0~9999S
Accuracy: 0.1°C
Force Range: 0~50N (Customization Available)
Force Resolution: 0.01N
Power 220V 50/60HZ

Textile/ Cleaning Efficacy Tester

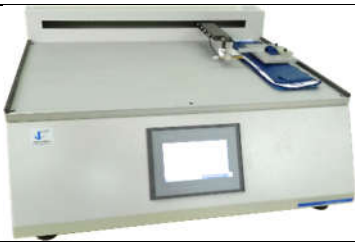
Cleaning Efficacy Tester provides an easy way to simulate the use of cleaning material and is a great labor-saving tool for quality and production personal to evaluate the product and produce and develop better quality.

CLEAN-EFF01 Cleaning Efficacy Tester

Speed Range: 1~27000mm/min adjustable
Speed Accuracy: 1mm/min
Test Cycles: 1~20000
Moving Distance: 600mm
Power 110~220V 50/60HZ

Textile/ Mop Cloth Coefficient of Friction Tester

Mop Cloth Coefficient of Friction Tester is used for mop and cleaning materials, such as mop pad, microfiber, sponge mop constructed with a cellulosic, rubber or plastic foam block. The mop friendliness in friction force will be different when it's used for liquid, dust, dry surface, etc.

COF-S1 Mop Cloth Coefficient of Friction Tester

Force Range: 0~100N
Resolution: 0.5% F.S
Speed Adjustable: 0~1000mm/min
Speed Accuracy: 0.1mm/min
Sled Size and Weight: 100mm*100mm, 225±1g
Moving Distance: 500mm
Power 110~220V 50/60HZ

Texture Analysis/ Gel Strength Tester

Gel Strength Tester has a punch probe of a specific diameter and length is used to compress the surface of a gel specimen at a constant deformation rate, until puncture occurs. Normally the speed used is 60mm/min and probe $\phi 5\text{mm}$.

GST-01 Gel Strength Tester

Test Range: 0~50N
Stroke: 110mm (without probe)
Test Speed: 1~100mm/min
Accuracy: 0.5% F.S.
Power 110~220V 50/60HZ

Customized Projects/ Stylus Pen Sliding and COF Tester

TSTP-01 Stylus Pen Sliding and COF Tester is specially designed for the durability and friction testing. It has two test modes of linear back and forth sliding test and coefficient of friction test.

TSTP-01 Stylus Pen Sliding and COF Tester

Test Range: 0~5N; 350mm
Speed Adjustable: 1~12000mm/min
Speed Accuracy: 0.1mm/min
Accuracy: 0.5% F.S.
Power 110~220V 50/60HZ

Customized Projects/ IEC 60068 Pendulum Hammer Striking Tester

IEC 60068 Pendulum Hammer Striking Tester determines the ability of a specimen to withstand rigorous and stringent impacts and is used primarily to establish an acceptable level of robustness when assessing the safety of a product.

PHS-01 Pendulum Hammer Striking Tester

Impact Energy: 0.14J, 0.2J, 0.35J, 0.5J, 0.7J, 1J, 2J, 5J
Equivalent Mass: 0.25, 0.25, 0.25, 0.25, 0.25, 0.25, 0.5, 1.7
Height of Fall: 56, 80, 140, 200, 280, 400, 400, 300mm
Plywood: 175*175mm, 8mm thickness by user
Power 110~220V 50/60HZ

Various projects based on customization.



Contact us to get a method/solution/free testing, etc.

Cell Instruments Co., Ltd.

Jinan Cell Electromechanical Co., Ltd.

Headquarters: No. 5577, Gongyebei Rd, Licheng District,
250109, Jinan, Shandong Province, China

www.celtec.cn

www.polytester.com

www.packqc.com

www.qualitester.com

info@celtec.cn

Whatsapp/Wechat: +86 18560013985