

## Company Profile

We, Shenzhen Chuangxin Instruments Co., LTD, are specialized on our range of special, custom built, test and measuring equipment for product testing as per international norms, calibration services and related information. Our products and services are used by Research & Development establishments, Test Laboratories, Defense Establishments, Government Institutions & manufacturing industries to fulfill the clients' T&M requirements.

If you require equipment to test products such as Home Appliances, Electrical Accessories like Switches, Sockets, Connectors etc., Industrial & Road Lighting Luminaires, Automobile Lighting Systems or related categories. Shenzhen Chuangxin Instruments Co., LTD can provide the solutions you need.

Main Products include: Glow Wire Tester, Needle Flame Tester, Horizontal and Vertical Burning Tester, Tracking Index Tester, Textile Burning Tester, Protective Clothing Thermal Conductivity Tester, Automotive Interior Combustion Tester, Melt Dripping Tester, Building Materials Flammability Tester, Friction Tester, Accessibility Probes, Spring Impact Hammer, Electrical Safety Tester Series ,Environmental Tester, Universal Testing Machine, Lamp cap & holder go no go gauge, Socket-outlet Gauges Series and other testing instruments.

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### Test Probe A (CX-1A)

This probe is intended to verify the protection of persons against access to hazardous parts. It's also used to verify the protection against access with the back of the hand.



#### Specification:

- ◆ Handle length: 100mm
- ◆ Handle diameter: 10mm
- ◆ Guard thickness: 4mm
- ◆ Guard diameter: 45mm
- ◆ Ball diameter: 50mm

### Test Finger probe (CX-2B)

This probe is intended to verify the basic protection against access to hazardous parts. It's also used to verify the protection against access with a finger.

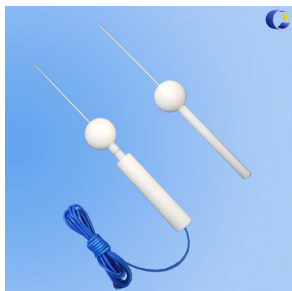


#### Specification:

- ◆ Knurled Finger diameter: 12mm
- ◆ Knurled finger length: 80mm
- ◆ Knurled finger parts length: 20/30/50
- ◆ Baffle plate length: 100mm
- ◆ Baffle plate diameter: 50mm
- ◆ Baffle thickness: 20mm

### Test Probe C (CX-3C)

This rod is intended to verify the protection of persons against access to hazardous parts. It's also used to verify the protection against access with a tool.

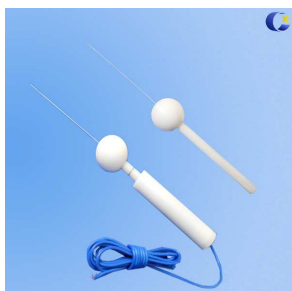


#### Specification:

- ◆ Handle length: 100mm
- ◆ Handle diameter: 10mm
- ◆ Dam-sphere diameter: 35mm
- ◆ Test probe length: 100mm
- ◆ Test probe diameter: 2.5mm

### Test Probe D (CX-4D)

This wire is intended to verify the protection of persons against access to hazardous parts. It's also used to verify the protection against access with a wire.



#### Specification:

- ◆ Handle length: 100mm
- ◆ Handle diameter: 10mm
- ◆ Dam-sphere diameter: 35mm
- ◆ Test probe length: 100mm
- ◆ Test probe diameter: 1.0mm

**IEC61032 Test Probe 11 Figure 11 (CX-11)**

This probe maybe used to verify the protection of persons against access to hazardous parts, and to verify the mechanical strength of openings in the enclosure or internal barriers.


**Specification:**

- ◆ Test finger length: 80mm
- ◆ Test finger diameter: 12mm
- ◆ Test finger top length: 20mm
- ◆ Guard diameter: 50mm
- ◆ Guard thickness: 5mm

**IEC61032 Test Probe 12 Figure 8 (CX-12)**

This pin is intended to be used on appliances for verifying the inaccessibility of hazardous live parts or hazardous mechanical parts which are liable to be touched accidentally by a tool, for example a screwdriver or similar pointed object in normal use.


**Specification:**

- ◆ Test pin diameter: 4mm
- ◆ Test pin length: 50mm
- ◆ Dam-board diameter: 25mm
- ◆ Dam-board thickness: 4mm
- ◆ Handle length: 20mm
- ◆ Handle diameter: 10mm

**IEC61032 Test probe 13 Figure 9 (CX-13)**

This pin is intended to verify the protection against access to hazardous live parts in class 0 equipment and class II equipment (see IEC60536).


**Specification:**

- ◆ Test probe diameter: Head 3mm, tail 4mm
- ◆ Test probe length: 15mm
- ◆ Dam-board diameter: 25mm
- ◆ Dam-board thickness: 4mm
- ◆ Handle length: 20mm
- ◆ Handle diameter: 10mm

**IEC61032 Test probe 18 Figure 12 (CX-18)**

This probe is intended to simulate access to hazardous parts by children of more than 36 months and less than 14 years.


**Specification:**

- ◆ Knurled finger diameter: 8.6mm
- ◆ Head radius: 4.3mm
- ◆ Knurled finger length: 57.9mm

**IEC61032 Test probe 19 Figure 13 (CX-19)**

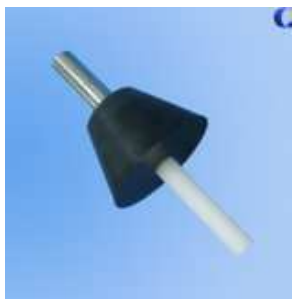
This probe is intended to simulate access to hazardous parts by children of 36 months or less.

**Specification:**

- ◆ Knurled finger diameter: 5.6mm
- ◆ Head radius: 2.8mm
- ◆ Knurled finger length: 44mm

**IEC61032 Test Probe 31 Figure 14 (CX-31)**

This probe is intended to verify the protection against access to hazardous mechanical parts of the grinding system of food waste disposal units.

**Specification:**

- ◆ Test rod diameter: 25mm
- ◆ Rigid finger length: 80mm
- ◆ Dam-board diameter: 60-100mm

**IEC61032 Test Probe 32 Figure15 (CX-32)**

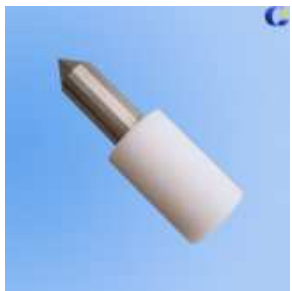
This rod is intended to verify the protection provide by fan guards against access to hazardous mechanical parts.

**Specification:**

- ◆ Test rod diameter: 25mm

**IEC61032 Test Probe 41 Figure 16 (CX-41)**

This probe is intended to verify the protection against to glowing heating elements.

**Specification:**

- ◆ Test rod diameter: 30mm
- ◆ Rigid finger length: 80mm
- ◆ Handle diameter: 50mm
- ◆ Handle length: 80mm
- ◆ Handle thickness: 50mm

### IEC61032 Test Probe 43 Figure 17 (CX-43)

This bar is intended to verify the protection of fixed and portable visibly glowing radiant heaters.



#### Specification:

- ◆ Bar diameter: 50mm
- ◆ Bar thickness: 5mm

### IEC60335 Finger Nail

The Finger Nail Probe is indicated to test IEC 60335 and UL requirements. It's used to check the security of parts that snap together. The spring gauge assembled in the handle can be calibrated to the necessary force for using the instrument. This probe is made of stainless steel with appropriated hardened tip and a handle in insulating material. Handle has a special adaptor M5 for use with 50N force gauges.



#### Specification:

- ◆ Force gauge: to be used with a 10N/20N/30N/40N/50N force gauge
- ◆ Material: handle is nylon and the tip is stainless steel
- ◆ Reference: IEC60335 figure 7, IEC60475 figure 7, UL1025 etc.

### IEC60884-1 Figure 9 and IEC60884-1 Figure 10 Test Probe

IEC60884-1 Figure 9 – Gauge for checking non-accessibility of live parts, through shutters with 1N force;

IEC60884 Figure 10 – Gauge for checking non-accessibility of live parts, through shutters, and of live parts of socket-outlets with increased protection with 20N force;



#### Specification:

- ◆ Gauge: 3mmX1mm
- ◆ Diameter:  $\phi$ 1.0mm
- ◆ Probe length: 80mm
- ◆ Force: 1N & 20N



### CX-04 IEC60065 Test Hook

The test hook is "hooked" into vents and seams in the enclosure then, pulled with a force (usually 20N). The hook has a hole at its long end, for use in conjunction with a PFI series Force Gauge. The hook is made of entirely stainless steel.



#### Specification:

- ◆ Length: 180mm
- ◆ Width: 5mm
- ◆ Thickness: 1mm
- ◆ Reference: IEC60065, IEC60601-1, UL, CSA etc.

### UL Test Finger

The UL Test Finger is researched and designed by UL507, UL508 etc. Palm simulator and restricted joint movement simulate human finger's movement.



#### Specification:

- ◆ Knurled length: 30/30/40mm
- ◆ Material: nylon and stainless steel
- ◆ Reference: UL507, UL982, UL1218, UL1062, UL1310, UL474, UL60065 etc.

### CX-PA130A UL Rigid Finger

The Moving Parts Probe is used in UL 507 to test for hazards from moving parts. It has two tapers from the one inch ending at the tip. The tip has a 0.125 inch (33.175 mm) radius. The handle end has a threaded hole that accepts a force gauge (dynamometer). The probe is made of stainless steel.



#### Specification:

- ◆ Rigid finger length: 101.6mm (4 inch)
- ◆ Rigid finger diameter:  $\phi$ 12.7mm (1/2 inch)
- ◆ Head length: 14.3mm (9/16 inch)
- ◆ Head radius: R4.8mm (3/16 inch)
- ◆ Tail Diameter: 19.1mm (3/4 inch)
- ◆ Reference: UL1278 Fig. 8.1 (PA130A), UL507 Fig. 9.1 (PA135A)

### CX-PA140A UL Rigid Finger



#### Specification:

- ◆ Rigid finger length: 101.6mm (4 inch)
- ◆ Rigid finger diameter:  $\phi$ 25.4mm (1 inch)
- ◆ Head radius: R12.7mm (1/2 inch)
- ◆ Tail diameter 31.75mm (1 1/4 inch)
- ◆ Reference: UL1278 Fig.8.2 (PA140A), UL398 Fig.8.2 (PA170B)

### CX-PA160B UL Rigid Finger



#### Specification:

- ◆ Rigid Finger length: 88.9mm (3.5 inch)
- ◆ Head length: 25.4mm (1 inch)
- ◆ Head Radius: R3.175mm (1/8 inch)
- ◆ Head former diameter: 12.7mm (1/2 inch)
- ◆ Tail diameter: 25.4mm (1 inch)
- ◆ Reference: UL1278 Fig.8 (PA130A), UL507 Fig.9.1 (PA135A), UL1206



### IEC60068-2-75 Spring Impact Hammer

It's used to test the mechanical integrity of product enclosures and check the durability of enclosures for electrical appliances of other electrical appliances and other electronic products. If damage occurs from the Impact Hammer test, accessibility probes can be used to measure the extent or severity of the damage. The Impact Hammer simulates the mechanical impact to which electrical equipment may be subjected.

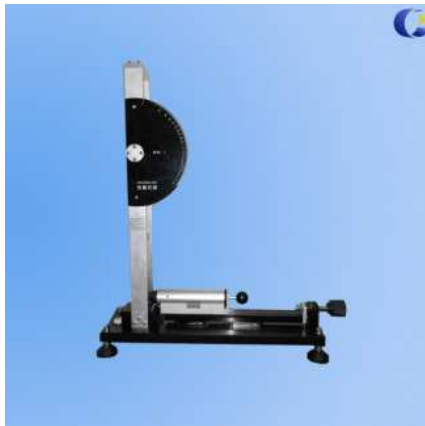


#### Specification:

- ◆ Length: 211mm
- ◆ Weight: 1250g
- ◆ Hammer weight: 60g
- ◆ Hammer radius: 10mm
- ◆ Outside diameter: 50mm
- ◆ Impact release force: <10N
- ◆ Reference: IEC60068-2-75, IEC884, UL1244, GB/T2423.55-2006, GB4706, GB8898, GB7000
- ◆ Single Spring Hammer: 0.14J, 0.20J, 0.35J, 0.50J, 0.70J, 1.0J, 2.0J, 5.0J, optional
- ◆ Unique Spring Hammer: 0.14J, 0.20J, 0.35J, 0.50J, 0.70J, 1.0J adjustable

### Spring Impact Hammer Calibration Test Device

It is mainly used for calibration of the spring hammer, which is based on IEC60068-2-75-1997 and GB2423.55-2006 standard designed and manufacturing, primarily for third-party testing organization, the National immigration department and appliance-related research institutes.



#### Specification:

- The actual accuracy: 0.01J
- Repeat accuracy:  $\pm 0.01J$
- Maximum range: 0 to 2J
- Guide groove diameter: 51mm
- Pendulum energy loss: less than 0.002j
- Trigger route: more than 30mm
- Weight: 1pcs

### IK Pendulum Impact Hammer



It's strictly designed according to IEC62262:2002-relates to IK ratings. It's applied to the mechanical impact strength test. And the impact angel is adjustable, and the device can be moved all around.

#### Specification:

Pendulum: length 1000mm, with 0.5KG, 1.7KG or 5KG hammer

Energy/J	2	5	10	20
Equivalent mass/kg	0.5	1.7	5	5
Drop height $\pm 1\%/mm$	400	300	200	400

**Ball Pressure Test Apparatus**

Ball pressure test device is used for testing parts of non-metallic materials for resistance to heat. It's applicable to electro technical equipment, its subassemblies and components, and to solid electrical insulating materials except ceramics.

**Specification:**

- ◆ Ball Diameter: 500mm, R2.5mm
- ◆ Total test pressure: 20N±0.2N
- ◆ Samples bearing: Diameter 50mm, length: 100mm, solid stainless steel cylinder
- ◆ Materials: Stainless steel


**IEC60065 figure 6 Dielectric Strength Test Instrument**

To improve the insulation board and creepage dielectric properties, surface brushed polished, bottom bracket the minimum distance from the edge of >35mm, the altitude of 2000 meters designed to meet the strength test requirements of 12KV

**Specification:**

- ◆ Main Parameter: Technical Index
- ◆ Metal Pole Diameter: 5±0.1mm
- ◆ Metal Club Weight: 100±2g
- ◆ Max. Measure Range: 20mm
- ◆ Max. Strength: <12KV (altitude below 2000m)
- ◆ Creepage Distances: >35mm
- ◆ Standard: IEC60065, GB8898, UL1310


**IEC61558/60065 Mandrel Test Device**

Mandrel tester device is designed and manufactured in accordance with the standard requirements of IEC61558 and IEC60065. It is used for the insulating thin layer of the power transformer and supply unit as well as the similar products to do the spindle test, mechanical strength test and abrasion test.

This test device will have a mechanical limit in the position of 10° and 230° to make sure the accuracy of the testing angle. Thus, the operation method is simpler. The weights are with suspension loop to prevent the sample from damage due to the large stress.

**Specification:**

- ◆ Mandrel: nickel plating triangle mandrel
- ◆ Weights: 150N\*1 (the weight of farmer ring is included)
- ◆ The tension of the two terminals of material foil: 1N
- ◆ The rotating angle of the mandrel: 230°
- ◆ The height of the bottom of the mandrel: 500mm


**IEC60335 Inclined Plane Device**

It's used to test the stability of electric apparatus (which are used on a table or on the floor) that requires a surface in order to work. The device consists of a surface and an angle adjusting device with 0- 15 °

**Specification:**

Types	CX-W600	CX-W800	CX-W1000
Surface Diameter	600mm	800mm	1000mm
Angle Range	0~45°	0~30°	0~30°
Bearing Capacity	50KG	80KG	125KG
Rotate Way	Hand-actuated	Hand-actuated/dynamoelectric	



### Creepage Distance Test Card

The gauge set measures creepage and clearance distances, distances through insulation and other spacings. It's used to determine the shortest path between two conductive parts, or between a conductive part and the bounding surface of the equipment, measured along of the insulation, with specifications made according to the requirements.

**CX-P10:** 1.0, 2.0, 2.5, 2.8, 3.2, 3.6, 4.0, 5.0, 5.6, 6.3 mm

**CX-P30:** 1.0, 1.05, 1.1, 1.2, 1.25, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.0, 2.1, 2.2, 2.4, 2.5, 2.8, 3.2, 3.6, 4.0, 4.2, 4.5, 5.0, 5.6, 6.3, 7.1, 8.0, 9.0, 10.0 mm



### IEC60061 Lamp Cap & Holder Go No Go Gauge

According to the requirements of IEC60061, we produce high accuracy and high quality lamp cap & holder "Go" and "Not Go" gauge, such as E10, E12, E14, E17, E27, E39, E40, B15, B22/B22d, B26, G5, G9, G12, G13, GU5.3, GU7, GU10, GR8, GX10q, GZ10 and so on.

#### Specification:

- ◆ CX-E14 is for E14 lamp cap gauge. It includes 7006-27F-1, 7006-28B-1, 7006-55-1, 7006-28B-1, 7006-27G-1, 7006-54-1;
- ◆ CX-E14H is for E14 lamp holder gauge. It includes 7006-25-7, 7006-26-4, 7006-30-2, 7006-30A-1, 7006-31-4;
- ◆ CX-E27 is for E27 lamp cap gauge. It includes 7006-27B-1, 7006-28A-1, 7006-27C-1, 7006-50-1, 7006-51A-2, 7006-51-2;
- ◆ CX-E27H is for E27 lamp holder gauge. It includes 7006-25A-2, 7006-26-4, 7006-22A-4, 7006-21-5, 7006-22D-1, 7006-22B-1, 7006-22C-1;



### Lamp Cap Holder Torsion Test Device

The lamp cap holder test device is strictly designed according to UL496. It's mainly used to the torsion test of protection accidental force of screw lamp holder.

#### Specification:

- ◆ Clamp range: Round holder 4-100mm
- ◆ Sample length: Max. 150mm
- ◆ Turnplate diameter: 101.6mm, 4inch
- ◆ Farmer weight: 10 pounds
- ◆ Clamp way: Circular manual self-tightening, other need to refit the clamp



### IEC60061 Digital LED Torsion Meter

LCX338 Digital Torsion Meter is mostly applied to measure torque of all kinds of illuminate illuminant lamp cap.

#### Specification:

- ◆ Range: 0-10N·m
- ◆ Accuracy:  $\leq 1\%$
- ◆ Repeatability:  $\leq 0.5\%FS$
- ◆ Linearity:  $\leq 0.5\%FS$
- ◆ Lag:  $\leq 0.5\%FS$
- ◆ Over loading capacity: 120%FS
- ◆ Temperature compensation range:  $-10^{\circ}C-60^{\circ}C$
- ◆ Requirements for environment: Working temperature:  $25\pm 5^{\circ}C$ ; Relative humidity:  $\leq 65\%R.H$ ; Power: AC  $220V\pm 10V, 50Hz\pm 1Hz$
- ◆ Limitation for environment: Working temperature:  $0\sim 40^{\circ}C$ ; Relative temperature:  $\leq 75\%R.H$ ; Power: AC  $220V\pm 10\%, 50/60Hz$
- ◆ Store condition: Temperature:  $-20\sim 50^{\circ}C$ ; Humidity:  $< 75\%R.H$
- ◆ Dimension: W330mm\*H110mm\*D335mm)
- ◆ Power: 15V

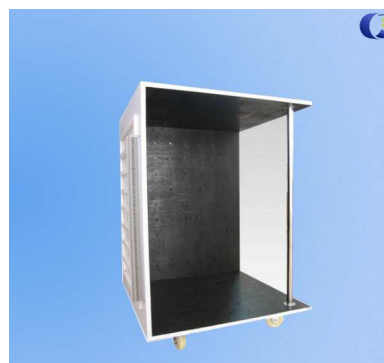


### Temperature Measuring Board

The Temp Measuring Board is strictly designed according to IEC60335. It's mainly used to the temperature test of all kinds electrotechnical products and electric appliance provided according to the standard requirements. We can custom the different distribution, temperature point and boundary dimension according to the specimen.

#### Specification:

- ◆ Dimension: 600\*600\*1000mm, or 800mm\*800mm\*1000mm
- ◆ Thermocouple: Diameter <0.3mm, K, T, J for optional
- ◆ Thermocouple Decoration: All leads on the connection line
- ◆ Test temperature sheet copper: Diameter 15mm, thickness 1mm, Brass
- ◆ Temperature point: 20
- ◆ Point Disposal: 100mm\*100mm or 76\*76mm Square
- ◆ Plywood: Thickness 20mm plywood, Front with black berlin, back with gray plywood
- ◆ Bottom: Install 4 wheels, total height 100mm
- ◆ Buyer prepare the temperature patrol system themselves



### Multiplex Temperature Meter

TP series of multiplex temperature meter is a kind of instrument which suits to real time monitor and trace multi-points temperature simultaneously. With the features of Simplified operation, high precision and reusable thermocouple, it is widely applied in electronic ballast, motor tools, lighting fixtures and household appliances. The application software records and save the temperature rising curve in real time for analyze purpose.

#### Specification:

- ◆ Input channels for temperature signal: 8, 16 or 64 channels; can be customized
- ◆ Sensor: T type (K type for special order) thermocouple available;
- ◆ Temperature range: -50—300℃
- ◆ Testing accuracy: class0.5;
- ◆ Capable of circle monitoring, single monitoring, printing and communication with PC;
- ◆ Display the channel sequences and temperatures value in mainframe respectively.
- ◆ The application software can record the temperature of 16 channels simultaneously, and the temperature change curve of selected channel can be recorded, printed and saved.



### Lamp Cap Temperature Test System

TMP-L is according to IEC60360-1998 and GB2512-2001(Standard method of measurement of lamp cap temperature rise). It is used to test the working and environmental temperature as well as temperature-rise of the burner and lamp. It meets the requirement of IEC and GB Standards

#### Specification:

- ◆ Channel sequence is displayed by 2 LED and temperature is displayed by 4 LED; Simultaneously display temperature rise curve
- ◆ Sensor: K type thermocouple and 8 channels for input temperature signal
- ◆ Temperature range: -40~300℃ and testing accuracy: Class 0.5
- ◆ Capable of circle monitoring, single monitoring, printing and RS-232-C communication with PC
- ◆ Freely set up for channel sequence when circle monitoring
- ◆ Application software in Windows can track the changing of the selected channel temperature and provide print and save operation
- ◆ Dimension of standard testing box: 90x90x90cm (inner box) and 130x130x115cm (outer box), or customized; Lamp holder: E14, E27, E40, B22d, G23, GX23, 2G7, 2GX7, 2G11 and other holders



### Glow Wire Tester

It's strictly designed according to IEC60695-2-1, IEC60695-2-10, IEC60695-2-13, (GB/T5169.10-2006~GB/T5169.13-2006) <basic testing methods of Glow wire, basic testing methods of Glow wire device> and UL746A, IEC829, DIN695, and VDE0471 etc. The glow wire Tester CX-Z17 is suitable for resistance to abnormal heat and fire test on lighting lamps, electronic products and household appliances. Adopting high-temperature coating spraying on steel structure and imported instrument display, with easy operation and stable performance. The equipment is applicable to flame resistance tests of all levels of QC departments and corresponding enterprises.

#### Specification

- ◆ Glow Wire temperature: Adjustable continuously within the range of 500~1000℃, the resolution of temperature is ±2℃
- ◆ Glowing time: 0.1~999.9s, ±0.1s (time range is adjustable)
- ◆ Burning time: 0.1~999.9s, auto record & manual pause
- ◆ Flame Chilling time: 0.1~999.9s, auto record & manual pause
- ◆ Glow wire pressure on test specimen: 1±0.2N. Limiting pressure depth is 7mm
- ◆ Glow wire: φ4mm nickel 80% chromium 20% which made in specific dimensions
- ◆ Thermocouple diameter: φ0.5 armored nickel & chromium/ nickel-chromium wire, K degree



### Needle Flame Tester

According to Standard IEC60695-2-2 and IEC60695-11-5, Needle Flame Tester is applied in the production and quality control department of lighting instrument, hyperpiesia electrical apparatus, domestic appliance, machine electric appliance, electrical machine, power tool, electronic instrument, electrician instrument and technical equipment. Also, it's fit for the industry of insulation material, engineering plastics and solid combustible material.

#### Specification

- ◆ Burner Angel: 0°, 20°, 45°
- ◆ Flame Height: 12±1mm
- ◆ Needle burner: Height above 35mm, Stainless steel needle Φ0.9mm-Φ0.5mm
- ◆ Standard Copper Block: 0.58±0.01g
- ◆ Check time: 23.5±1S
- ◆ Temperature Test: MAX1050℃ ±0.1%
- ◆ Thermocouple: RS (British), Type KΦ0.5, accuracy ±0.05%
- ◆ Gas variety: Butane or purity above 95% Propane



### Horizontal Flammability Tester

The Horizontal Flammability Tester is strictly designed according to IEC60695, UL94 and so on. Meanwhile it's a synthesis test equipment which can meet related standard requirements. It's mainly used to the flammability test of plastic and other nonmetallic material components.

#### Specification

	50W (HB/V)	500W (5V)
Flame Height	20±1mm	40±2mm
Conform to Standard	IEC60695-11-4	IEC60695-11-3
Temperature	Max. 1050°c, ±0.1%	Max. 1050°c, ±0.1%
Gas Flow	105±10ml/min	965±30ml/min
Water column height	<10mm	125±5mm
Test time	44±2S	54±2S
Flow accuracy	1.5%	1.5%
Copper Weight	1.76g±0.01g	10±0.05g
Gas supply	Methane	Methane
Dimension	>0.75CM	>0.75CM
Electric Parameter	220V AC 300W	220V AC 300W



## Tracking Index

### Specification:

- ◆ It applied with rectangle size of platinum electrode, each electrode can force to the sample is  $1.0 \pm 0.05N$
- ◆ Electrode Distance:  $4.0mm \pm 0.01mm$ , included angle:  $60^\circ \pm 5^\circ$
- ◆ Electrode Voltage: 100~600V, (48~60HZ) adjustable, when the short-circuit current at  $1.0 \pm 0.1A$ , the voltage goes down less than 10%
- ◆ The liquid drop device can make the liquid height from 30~40mm (adjustable), drops liquid size is 44~55 drops/1cm<sup>3</sup>. The interval drops of liquid is  $30s \pm 5s$  (adjustable)
- ◆ During the testing, the short-circuit current is more than 0.5A to keep 2 seconds, then shut off current, it show the sample not pass.
- ◆ Inside dimension: 0.5CBM and outside dimension: 630mm\*390mm\*750mm



## Interior Fabric Horizontal Flammability Tester

The Interior Fabric Horizontal Flammability Tester is strictly designed according to FMVSS571.302, DIN75200, ISO3795 and so on.

### Specification:

- ◆ Time range: 0~999.9s,  $\pm 0.1s$ , adjustable (normally 15s)
- ◆ Burning gas: LPG or Gas
- ◆ Temperature range: 0~99degree
- ◆ Temperature resolution: 1degree
- ◆ Ignition time: 15s
- ◆ Inner diameter of burner head:  $\varnothing 9.5mm$
- ◆ Ignition height (burner top to specimen center): 19mm
- ◆ Test angle:  $90^\circ$ , Vertical
- ◆ Flame height:  $38mm \pm 2$
- ◆ Temperature range: 0~400 $^\circ C$
- ◆ Dimensions: W550 \* D210 \* H550mm
- ◆ Studio volume: W385 \* D204 \* H360mm
- ◆ Power supply: AC220V, 50HZ,  $\leq 300W$
- ◆ Standards: ISO3795, FMVSS302, DIN75200...



## CX-D12 Single Wire & Cable Vertical Flame Testing Equipment

It's strictly designed according to IEC60332-1, GB/T18380.11-2008, GB/T18380.12-2008 etc. Stainless steel screen with a sliding burner handle support for approaching or moving back the flame from the sample under test according to the CEI standards for test on cables.

### Specification:

- ◆ Flame standard: IEC60695-11-2, 1kw nominal pre-mixed flame
- ◆ Burner Tube: IEC60695-11-2 Figure A
- ◆ Burning Angle:  $45^\circ$
- ◆ Thermocouple: Type K (Ni/Cr-Ni/Al), 200~1050 $^\circ$
- ◆ Thermocouple size O/D:  $\varnothing 0.5mm$
- ◆ Temperature Range: 0~1000 $^\circ C$
- ◆ Flame height:  $20mm \pm 2mm$  to  $190mm \pm 1mm$ , adjustable
- ◆ Inside dimension: 300\*450\*1200mm (0.16CBM)
- ◆ Outside dimension: 600mm\*450mm\*1450mm



**AC/DC Withstand Voltage Tester (2672A)**
**Specification:**

- ◆ Output voltage: AC/DC: 0~5KV
- ◆ Cutoff current range: AC: 0~2/20mA, DC: 0-2/10mA
- ◆ Test time: 0~99s
- ◆ Transformer capacity: 500VA


**Insulation Resistance Tester (2680)**
**Specification:**

- ◆ Test voltage: DC: 250V/500V/1000V
- ◆ Range: 1~9999MΩ
- ◆ Accuracy: ±10%
- ◆ Test time: 1-99s or manual control


**Leakage Current Tester**
**Specification**

- ◆ AC voltage: 250V
- ◆ AC current: 0.01mA-20mA
- ◆ Test Time: 0~99s
- ◆ Transformer capacity: 500VA, 1000VA, 2000VA, 3000VA, 5000VA optional


**Programmable Withstand voltage & Insulation tester (RK7112)**

The RK7112 is a high-performance testing device special for withstanding voltage and insulation resistance test, allowing setting the output voltage. The warning value, testing time and some other parameters can be set in the software. It's with a variety of automatic functions. The testing is quick and high accuracy which is not only applied in the production line but also in the lab developing research.

**Specification:**


<b>Withstanding Voltage</b>	Output voltage range	AC: 5KV
	Output voltage accuracy	±2%
	Breakdown current range	0.10~12mA
	Test time	0.2~999.9s
	Output frequency	50Hz/60Hz
<b>Insulation resistance</b>	Output voltage range	DC: 0.10~1.00KV
	Output voltage accuracy	±2%
	Insulation resistance range	1~1000MΩ
	Insulation resistance accuracy	±5%
	Test time	0.2~999.9s

### Sand & Dust Proof Test Chamber

The sand & dust proof test chamber is applied to the sand and dust proof test of various kinds of car's components and electronics. Car's components includes automotive lighting, lock, electric, instrument, dirt-proof boot, steering system and so on; the electronics is mobile phone, computer, household appliances etc.

#### Specification:

- ◆ Speed:  $\geq 7.5/s$
- ◆ Range of temperature: RT +5°C -60°C (adjustable)
- ◆ Standard diameter of Metal Net Mesh: 50 $\mu$ m
- ◆ Diameter between Metal Wires: 75-100 $\mu$ m
- ◆ Dosage of Talcum powder: 2Kg~4Kg/m<sup>2</sup>
- ◆ Purging cycle: Adjustable (Intermediate control)
- ◆ Test power source: DC12V, DC24V or AC220V
- ◆ Internal Dimensions: 800\*800\*800mm



### Programmable Temperature & Humidity Test Chamber

The Temperature Humidity Test Chamber can accurately simulate the complicated environment of low-temperature, high-temperature, high-humidity, low-temperature & low-humidity etc. It's applied to Quality Control test of the electron, electric appliance, battery, plastic, food, paper products, vehicle, metal, chemistry, building materials, Laboratory, CCIQ, school etc.

#### Specification:

Inner chamber size	W400*H500*D400mm
Exterior chamber size	W900*H900*D1500mm
Temp. Range	-70°C to +180°C
Temp. Fluctuation	$\leq \pm 0.5^\circ\text{C}$
Temp. Uniformity	$\leq 1^\circ\text{C}$
Temp. Deviation	$\leq \pm 1^\circ\text{C}$
Heating cooling rate	+RT~-60°C, about 80min +RT~+150°C, about 45min
Humidity range	20%—98%R.H (AT+25°C~+85°C)
Humidity Error	+2/-3%R.H (above 75%R.H), $\pm 5\%$ R.H (below 75%R.H)
Speed	1.7~2.5m/s
Power	about 3.5KW
Supply	220V $\pm 10\%$ V; 50Hz



### Salt Water Spray Test Chamber

The Salt Spray Test Chamber is applicable to the salt spray corrosive test for the protection layer of components, parts, electronic and electrical parts and metal materials and industrial products.

#### Specification:

- ◆ The salt spray test chamber is made of transparent materials so that the operator can see the tested sample in it and spraying situation of the tested sample.
- ◆ A waterproof structure is adopted between the chamber cover and chamber body, thus there is no salt spray overflow.
- ◆ It meets the following standards: IEC60068-2-11 (GB/T2324.17), GB/T10125, ISO9227, ASTM-B117, GB/T2324-18, IEC60068-2-52, ASTM-B368, MIL-STD-202, EIA-364-26, GJB150, DIN50021-75, ISO3768, 3769, 3770; CNS3627, 3885, 4159, 7669 etc.
- ◆ Dimension: 60L, 90L and 120L for selection





### IEC60529 IPX3/4 Handle-held Spray Nozzle

It's strictly designed according to IEC60529 figure 5 & GB4208 standard. It's to verify protection against spraying and splashing water; second characteristic numerals 3 and 4.

#### Specification:

- ◆ Pressure gauge: 0~0.25MPa
- ◆ Pressure gauge range: 0~0.4MPa
- ◆ 121 holes with  $\Phi 0.5\text{mm}$
- ◆ 1 hole at the centre
- ◆ 1 inner circles of 12 holes at  $30^\circ$ pitch
- ◆ 4 outer circles of 24 holes at  $15^\circ$ pitch
- ◆ Water discharge: 10L/min,  $\pm 5\%$ , adjustable
- ◆ Material: Moving shield: Aluminium, Spray nozzle: brass



### IEC60529 IPX5/6 Hose Nozzle

It's strictly designed according to IPX5 and IPX6 Figure 6 of IEC60529 and GB4208. It's used to verify protection against water jets.

#### Specification:

Item	IPX5	IPX6
Nozzle diameter	$\Phi 6.3\text{mm}$	$\Phi 12.5\text{mm}$
Pressure Gauge	0~0.25MPa	0~0.25MPa
Water discharge	$12.5 \pm 0.625\text{L/min}$	$100 \pm 5\text{L/min}$
Distance between nozzle and the enclosure	2.5~3m	
Test time	More than $1\text{min/m}^2$ and 3mins	
Conforms to	IEC60529	



### IEC0529 IPX3/4 Oscillation Rain Test System

The rain test system is strictly designed according to IEC60529. It's applied to the electrical equipment of the waterproof of IPX3 and IPX4.

#### Specification:

- ◆ Power Supply: Single phase: AC220V, 50Hz
- ◆ Swing Pipe diameter: 19mm, thickness 2mm
- ◆ Swing Pipe radius: R800 (304 stainless steel)
- ◆ Orifice:  $\Phi 0.4\text{mm}$
- ◆ Orifice angle: IPX3:  $120^\circ$ ; IP4X:  $180^\circ$
- ◆ Pendulum Angle: IPX3:  $120^\circ (\pm 60^\circ)$ ; IPX4:  $360^\circ (\pm 180^\circ)$
- ◆ Swing Pipe Speed: EPX3: 4s/time ( $2 \times 120^\circ$ ); IP4X: 12s/time ( $2 \times 180^\circ$ )
- ◆ Water discharge: 1-10L/min, adjustable
- ◆ Test time: 0-999mins, can preset
- ◆ Swivel table diameter:  $\Phi 700\text{mm}$
- ◆ Swivel table speed: (1-5) rpm
- ◆ Tilttable Angle:  $15^\circ$
- ◆ Swivel table rotation angle:  $900^\circ$ , continuous rotation
- ◆ Pressure Gage: 0~0.25MP



**Plug & Socket Gauges:**

We provide different kinds of Plug & Socket Gauges, such as BS1363-2, VDE0620-1, CEE7, AS/NZS3112 etc.

**BS1363 Plug & Socket Gauge**
**Specification:**

BS1363-2 Figure No.	Description	Qty (Piece)
Fig 1	Test Pin	1
Fig 2a.2b	Elastic shell mechanical strength test device	1
Fig 5	Plug Gauges	1
Fig 11	Plug Gauges	2
Fig 12	Contact test gauge	1
Fig 14	Non contact test	1
Fig 15	Insert transverse stress gauge	1
Fig 16	Insert pull-out force gauge	2
Fig 17a/b	Temperature rise test device and the simulation panel	1
Fig 19	Stainless steel solid fuse	1
Fig 23	Pressure test device	1
Fig. 29	Correction clamp	1
Fig 30	Gauges	1


**VDE0620-1 Plugs and Socket-outlets Gauges**
**Specification:**

- ◆ Category: Lehre1, Lehre2, Lehre3, Lehre4, Lehre5, Lehre6, Lehre7, Lehre8, Lehre9, Lehre10-A, Lehre10-B, Lehre11, Lehre12, Lehre14, Fig15, Lehre16a, Lehre16b, Lehre17, Lehre18, EN50075, 49440-L1, 49440-L2, 49440-L1-L2, Bild15, Bild14, Bild13, Bild16a, Bild16d, 1-16e, 1-19a.


**CEE7 Plug Pin Measuring & Gauging Tool**
**Specification:**

- ◆ Follow country use CEE7 Gauges: Albania, Austria, Bosnia and Herzegovina, Bulgaria, Chile, Croatia, Denmark, Estonia, Finland, Germany, Greece, Hungary, Iceland, Indonesia, Iran, Italy, Latvia, Lithuania, Luxembourg, Republic of Macedonia, the Netherlands, Norway, Pakistan, Portugal, Romania, Russia,[19] Serbia, Slovenia, South Korea, Spain, Sweden, Turkey, Ukraine, and Uruguay.



### Electrical Socket Torque Balance Tester

Plug and Socket Torque Tester/Device is for compliance is checked by engaging the device, as during intended use, with the socket-outlet of a test apparatus. Plug Torque Tester/Equipment is a device provided with pins intended to be introduced into fixed socket-outlets shall not impose undue strain on these socket-outlets. The balancing arm of the test apparatus pivots about a horizontal axis through the centre lines of the contact tubes of the socket-outlet at a distance of 8 mm behind the engagement face of the socket-outlet.

#### Specification:

- ◆ Plug: UL plug \*1, Australia plug \*1, all-purpose plug \*1
- ◆ Load: 0.5N\*2/1.25N\*1/0.25N\*1
- ◆ Reference: IEC60884, IEC60598, IEC60065, BS1363.3, VDE0620



### Electrostatic Discharge Simulator ESD Gun

ESD simulator (Electrostatic Discharge Generator or Electrostatic Gun) is in full compliance with IEC 61000-4-2, EN61000-4-2, ISO10605, GB/T17626.2, GB/T17215.301 and GB/T17215.322. The ESD generator is designed for the assessment of electrical and electronic equipment to withstand ESD performance. ESD-5020BX/ESD-4020AX has LCD display in both English and Chinese, they equipped with an infrared remote control which can allow you do the test in some special place.

#### Specifications:

Product Model	ESD-4020BX	ESD-4020AX
Output Voltage	0.5~20kV±5%	0.54~30kV±5%
Polarity	Positive/Negative	
Energy Storage Capacitance	150pF±10% (Replaceable)	
Discharge Resistor	330Ω±5% (Replaceable)	
Current Rise Time	0.6~1ns	
Testing Functions	Single, Count, 20pps, Air, Contact, IEC level	
Trigger Mode	MANUAL/AUTO	
Numbers of Discharge	1~9999	
Repetition	0.05s~99.99s	
Working Power	AC220V(Option 110V)±10%, 50/60Hz	



## Integrating Sphere

- ◆ Diameter: IS-0.3M (φ0.3m), IS-0.5M (φ0.5m), IS-1.0M (φ1.0m), IS-1.5M (φ1.5m), IS-1.75M (φ1.75m), IS-2.0M (φ2.0m). Other sizes can be designed according to the customer's request.
- ◆ The painting of integrating spheres is according to CIE Pub.No.84(1989)
- ◆ Material: Pure barium sulfate (BaSO<sub>4</sub>)
- ◆ BaSO<sub>4</sub> coating:  $\rho(\lambda) \geq 0.96(450\text{nm} \sim 800\text{nm})$  and  $\rho(\lambda) \geq 0.92(380\text{nm} \sim 450\text{nm})$
- ◆ Fine diffuse reflection: Reflectance  $\rho = 0.8$  and accuracy of  $\rho(\lambda) < 1.5\%$
- ◆ Build-in lighting holder position: The vertical is for E40, E27 and so on. The horizontal is for T5/T8/T12 tubes. The side assistant opening is for lighting fixtures
- ◆ Auxiliary lamp position has been built-in. Auxiliary lamp and Auxiliary lamp device are optional
- ◆ Power cable and socket has been build-in, it is convenient to power the testing lamp
- ◆ Two photo detector ports, one optical fiber port and temperature sensor hole are built-in
- ◆ The traditional integrating sphere is assembled by several pieces, Chuangxin Instrument developed A Molding Technology to produce the integrating sphere. A molding integrating sphere will be more round and the test results will be more accurate than the traditional integrating sphere



## Luminous Intensity Distribution LED Lamp & Led Tester

Forward voltage (VF), Reverse Current (IR), Luminous Intensity (IV), Intensity Angle ( $2\theta_{1/2}$ ), Misalignment Angle ( $\Delta\theta$ ), Equivalent Luminous Flux ( $\Phi_V$ )

### Specifications:

- ◆ Automatic mapping the spatial distribution of light intensity curve (at right angles and polar coordinates)
- ◆ Automatic determination of the beam angle: the common-angle and the intensity of 1/4 angle and intensity of 3/4 intensity angle
- ◆ Testing Angel range:  $-90^\circ \sim +90^\circ$ , Accuracy of angel:  $\pm 0.2^\circ$
- ◆ Spread Angle of light beam:  $\theta(50\%) \theta(25\%) \theta(75\%)$
- ◆ Intensity range: 0mcd~30,000cd, Accuracy: 0.5%. Radiated power range: 1uw/cm<sup>2</sup>~999.9kuw/cm<sup>2</sup>,
- ◆ Built-in adjustable DC constant current power supply, output current up to 800mA
- ◆ Forward voltage (VF): 0.1V -- 20.00V Forward current (IF): 0.1mA -- 800.00mA
- ◆ Reversed current (IR): 0.01μA -- 200.0μA Reversed voltage (VR): 0.1V -- 20.0V

