

A.S.T

www.a-s-t.net

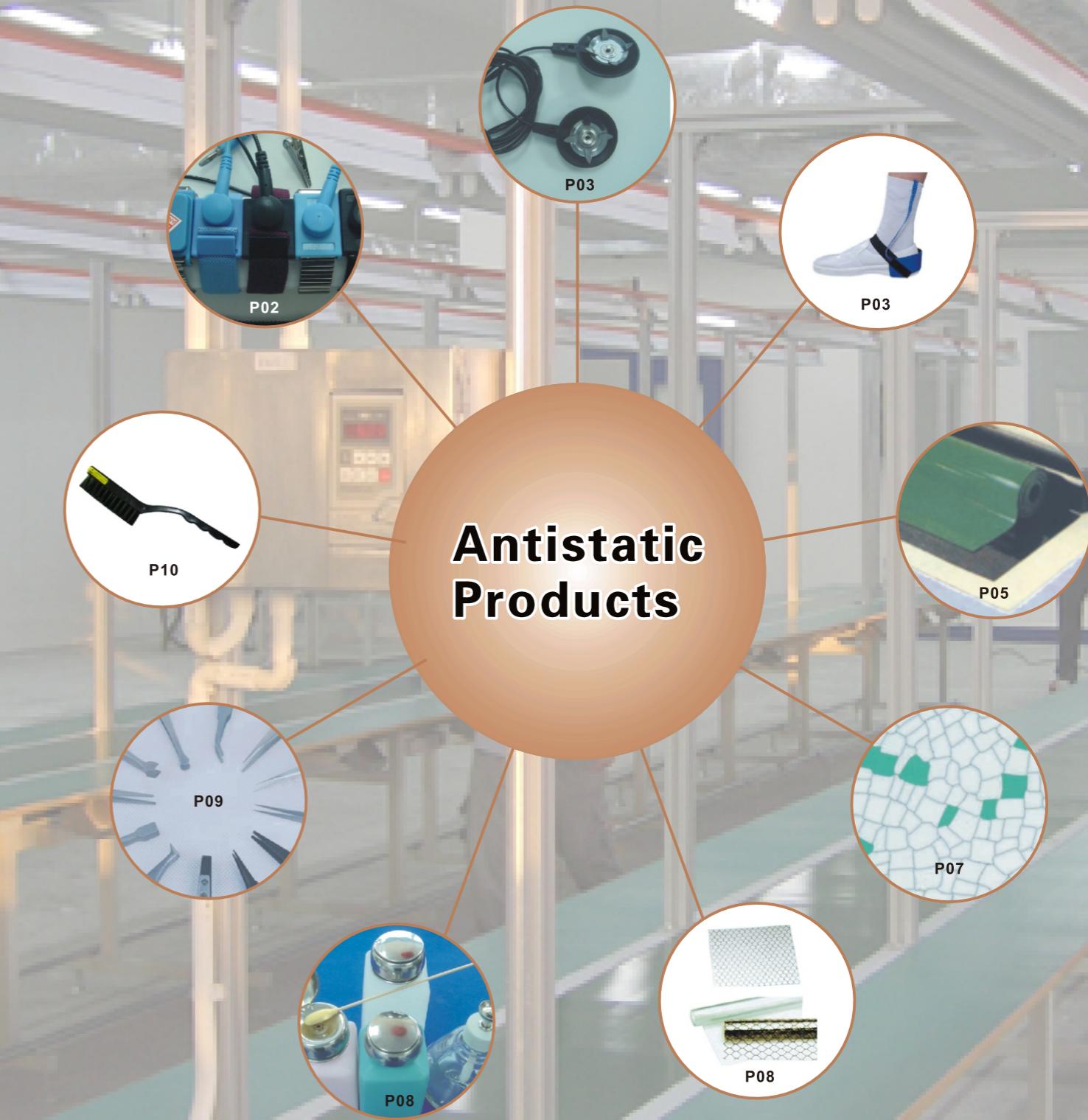
Anti Static / ESD & Cleanroom Products

A.S.T Anti Static / ESD & Cleanroom Products

Distributor



Antistatic Products



Wrist Strap

WS01-EC-0406



WS01-NM-0406



WS04-FLC



WS03-NM



WS04-FL



WS07-VE



Φ 4mm



Φ 7mm



Φ 10mm



NOTE:Please browse the wrist strap catalogue for more information

Ground Lead Kit**Ground Lead Cord**

Different endpoints are available, Convenient and effective grounding, ensures safety and efficiency of leaking static. Applied to wriststrap, ESD rubber mat, floormat and desk, etc.



GC02-SK-06TR



GC03-04-06TR



GC07-06-TR

Foot/Heel Grounder

Consisting of conductive rubber, velcro and conductive weaving strap. Electricity will be discharged to conductive floor through conductive rubber. It is the best way to discharge the electro-static from human body. Earthing resistance: $10^6 \Omega$

NOTE:Please browse the foot&heel grounder catalogue for more information.

Rubber Mat/ Belt

Anti-static rubbermat or ground mat should be laid out in the workshops and advanced laboratories for microelectronic industries such as electronic semi-conduct devices, electronic computers, electronic communication equipment and integrated circuits etc. To eliminate damages caused by static electricity. When anti-static rubber mat (ground mat) are laid out and grounded, the working surface will discharge the static electricity of human bodies so that a near-equipotential can be maintained for ESD tweezers, tools, utensils and instruments, through which human bodies contact the working table and static sensitive devices(SSD) are free from broadband interference produced by static discharging such as triboelectrification etc. In this way, electrostatic protection is realized.



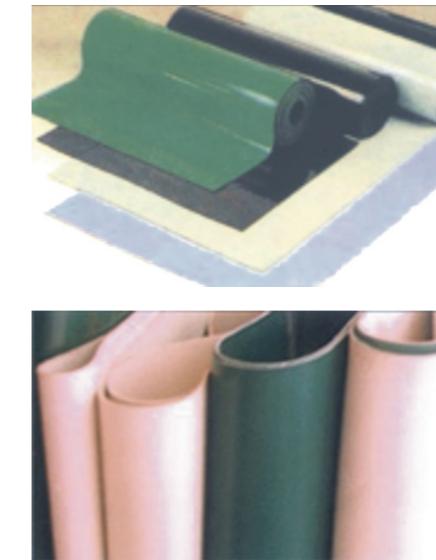
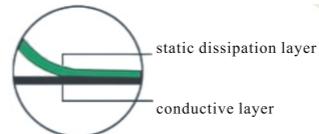
Parameter of rubbermat/ground mat(2mm thickness)		
Static Dissipation layer	Surface resistance	$10^7\text{-}10^9\Omega$
	Friction static voltage	<100V
Conductive layer	Surface resistance	$\leq 10^6\Omega$
	Friction static voltage	<50V
Static decay time	5000V—500V	<1.9s
Volume resistivity	$10^7\text{-}10^{10}\Omega$	

Test Item	Test Result
Tension Strength	3.6Mpa
Breakage coefficient of elongation	188%
Tear strength(right angle)	20.6KN/M
Resilience (6pcs sheets lapping over)	14%
Temperature of impact embrittlement(not cut)	No damage -25°C
Permanent variation under 70°C*22h,25% compression	17.9%
Aging in hotair (70°C*22h)	Variation of tension strength +8.0% Variation of breakage coefficient of elongation -3.8%
Heat loss	1.08%
Test Standard : GB1040, GB/T529, GB1681, GB5470, GB10654, GB/T7141	

Rubber Mat/ Belt

D04

Rubber Mat/ Belt



Anti-static conveyer belts are mainly used in the assembly line of electronic components. The bearing carrier of this product is made of polyester fiber after dipping treatment. The surface is of rubber-plastic composite. The surface layer is made of quality static-dissipative material and the bottom layer is made of quality conductive material. The product featured stable anti-static performance, high tensile strength, small extensibility, satisfactory flexural strength, low power consumption, low noise and reliable operation.

- Resistivity of surface layer: $10^7\text{-}10^9\Omega$
- Volume resistivity: $10^4\text{-}10^8\Omega$
- Length, width, thickness and colors are all selectable.

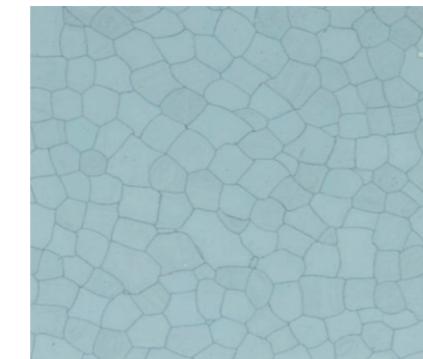
Thickness (mm)	Tensile strength (N/mm)	1% Extension load (N/mm)	Minimum diameter of belt wheel (mm)	Suitable temperature (°C)
1.5	120	32	40	-10-100
2.0	120	32	50	-10-100
2.5	180	48	60	-10-100
3.0	180	48	80	-10-100
3.5	180	64	100	-10-100
4.0	240	64	120	-10-100

P.N.	Name	Description
D0401	ESD Rubber Mat(Rubber)	Anti-distortion, long life quality
D0402	ESD Rubber Mat(Anti-ultraviolet, Rubber)	Anti-ultraviolet, anti-distortion, long life quality
D0403	ESD Table Mat(PVC)	Not contain S、Hg、NH3+、Pb any harmful substances
D0404	ESD Ground Mat	Rubber material, anti-slip
D0405	ESD Conveyer Belt	For rotation production line, Nylon Fabric inside
Surface Shine: Glossy or Dull Size: T(2,3mm) x W(0.6,0.9,1.0,1.2M) x L(0~50M). Other size is Available.		

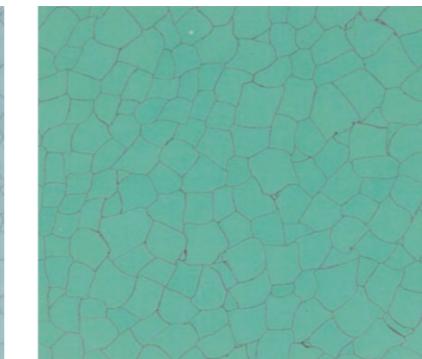
ESD Floor



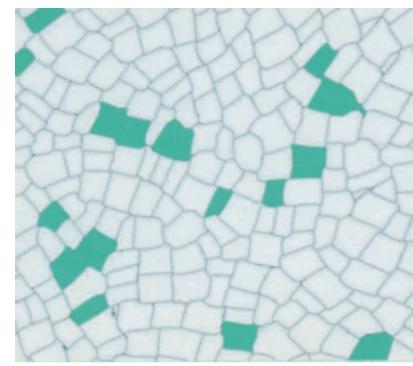
D0501



D0502



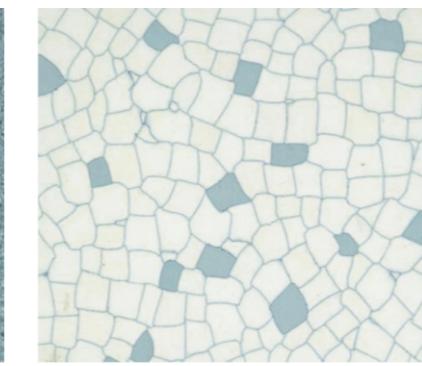
D0503



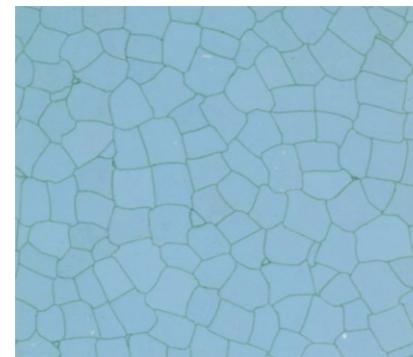
D0504



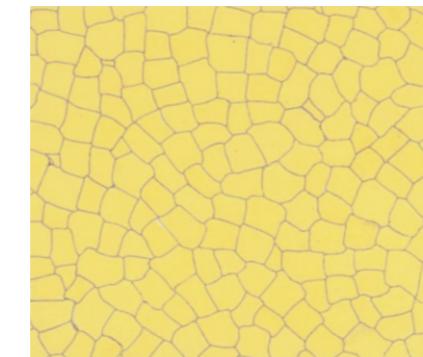
D0505



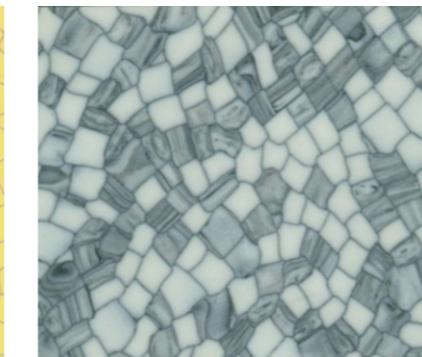
D0506



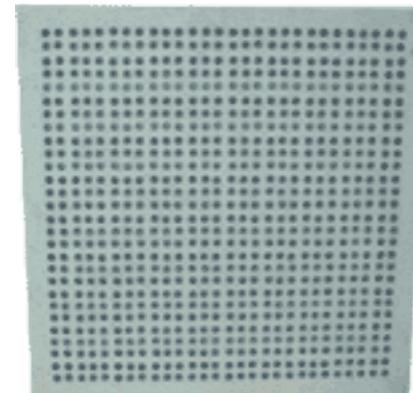
D0507



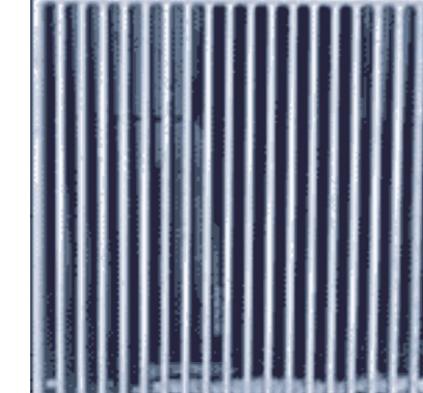
D0508



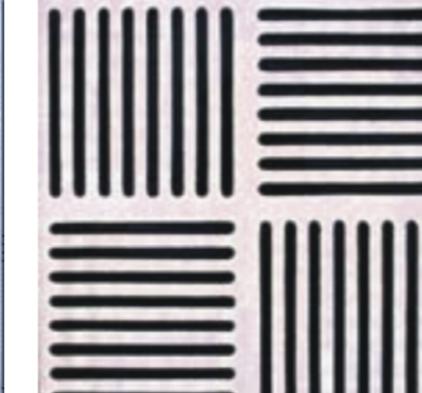
D0509



D0521



D0522

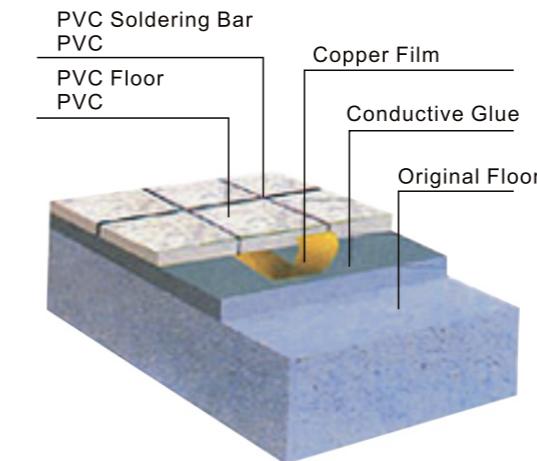


D0523

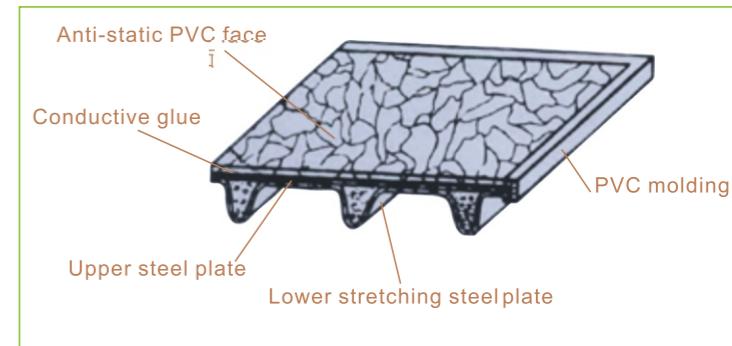
ESD Floor

D05

ESD Floor



This product has permanent antistatic function because it uses conductive static network formed at the interface of plastic. So it has good decoration effect and is widely used in electronic computer rooms , purifying rooms , programmer control switchboard rooms and all the places where purification and antistatic are demanded , including bacterium-free rooms and central control rooms . It also has a wide application in bank post telecommunications , micro electronics , electronic instrument industry , railway transportation, medicine and so on.
Product specs: L600×W600×T(2.0-3.0)mm

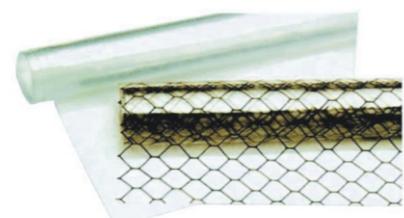


Name	Standard	lang="EN-US">Inder
Physical volume electric resistance	SJ/T11236-2001	Lead the static electricity type
Surface electric resistance		The static electricity consumes to spread the type:
Life	GJB2605—1996	±5000—±500V<2S
Wear consumption	SJ/T11236-2001	≤0.02g/cm ²
Combustion property	SJ/T11236-2001	FV-0(<10S)
Starting Voltage	SJ/T10694-1996	v <100v
Corrosion		Bear weak sour, weak alkali

ESD Clean Curtain/Dispenser

ESD Clear Curtain

D06



- Anti-static PVC curtain can be utilized as a barrier wall or protective curtain material in the ESD sensitive environment
- Made of anti-static PVC curtain, continuous honeycomb black carbon lines are printed on one side of PVC sheet.
- Carbon lines are printed on anti-static PVC curtain, excellent draping property
- Surface resistive: inside 10^{10} - 10^{12} Ω, outside $<10^7$ Ω
- Application: barrier wall, curtain or cover for ESD sensitive area

ESD Dispenser

D07



Volume : 90ml, 120ml, 180ml, 250ml

- ESD dispensers are the perfect way to dispense alcohol, acetone, isopropanol, ethanol, methanol, terpene, thinner or any other liquid applied with swabs or wipes.
- Leak-proof precision pump valve prevents content vaporization and backflow. Also stainless steel hinged cap lid keeps out impurities when not in use.
- Body is made of HDPE or glass with ESD material, it's ideal for use in EPA and cleanroom environments.

Tweezers

D08

Tweezers



ESD Plastic tweezers



Super Fine High Precision Tweezers



Bamboo Tweezers

Surface resistance: 10^3 ~ 10^8 Ω
Made of conductive plastic. Elastic and durable. Dust-free. Resistant to acid, alkaline and heat resistance. Ideal for production and package of precision electronic components and other special applications

ESD Brush**ESD Brush****D09**

D0901



D0902



D0903



D0904



D0905



D0906



D0907



D0908



D0909



D0910



D0911



D0912

ESD Brush/Conductive Ribbon

Material: conductive plastic,

Surface resistance: Handshank: 10^3 - $10^5 \Omega$;Hair: 10^7 - $10^9 \Omega$

Type: Many types for election.

Application: Clearing PCB, surface of the electronic products and the workshop of the SMT.

P.N.	Size/Lengh(mm)	Hairs surface(mm)	Lenght of hairs(mm)
D0901	177	40	16
D0902	172	60	16
D0903	225	90	20
D0904	7*61*145		26
D0905	7*47*143		26
D0906	7*37*141		25
D0907	115	40*92	21
D0908	92	30*65	21
D0909	ϕ 11*122		17
D0910	ϕ 10*148		17
D0911	390	240	50
D0912	250		35

D12**Conductive Ribbon**

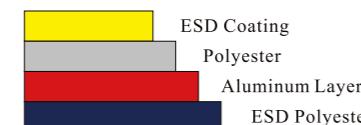
Use for conductive shoe cover, esd heel strap, esd toe strap and so on.

Surface resistance: $<10^4 \Omega$



ESD Shielding Bag

A0101



Description :

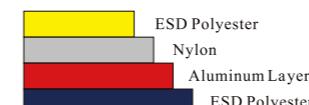
- It is suitable for packing of PCB, IC and other static sensitive components. This bag can keep static-sensitive components away from the potential static danger to the largest extent.
- Its special four-layer structure can create such effect like an inductive cover to separate the item inside from the static field.
- The inner layer is made from ethane which can remove the static and avoid static generation inside the bag.
- This kind of hot seal bag is half transparent, so the item inside can be easily recognized from outside.
- Surface resistance: $10^8 \sim 10^{11} \Omega$
- Physical property meets international standards ASTMD257, ELA541 and MIL-B-81705
- All sizes are available in open flat, ziplock, and tridimensional styles, any bag for large machines can be customized.



Thickness	3.1mils	Outer layer resistance	$<10^{11} \Omega/\text{sq}$
Tensile strength	5800psi	Metal layer resistance	$<10^3 \Omega/\text{sq}$
Static shielding	$<30V$	Inner layer resistance	$<10^{11} \Omega/\text{sq}$
Static discharging time	$<0.03S$	Attenuation of EMI	$>10\text{dbv}$

A0102

ESD Moisture Barrier Bag

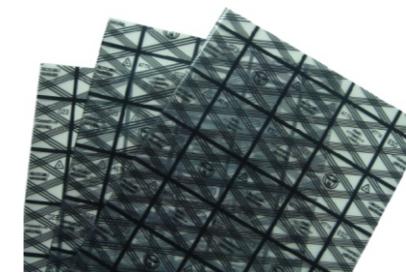


Its normal structure is ESD Polyester/Nylon / Aluminum / ESD Polyester. It has four main resistant function of static, electromagnetic interference and moisture proof. The product has superior puncture resistance and anti-static inner and outer layers with a surface resistance of $10^8 - 10^{11} \Omega$.

All sizes are available in open flat, ziplock, and kinds of tridimensional Styles, can Customize big bag for large machines.

A0103

Conductive Grid Bag



Conductive grid bag is made from ESD transparent PE membrane coupled with conductive black printing ink by special machineries. After special processing it can resist outer static and becomes the resistor on the surface. It is usually used to package PC boards, mother boards, communication electrical appliances, etc. The surface resistance is below $10^6 \Omega$.

A0104

Black Conductive PE Bag



Homogeneous conductive material provides EMI/RFI shielding and ESD control

Excellent grounding properties is good for handling explosive powders, PCB assemblies and components

Surface Resistance $<10^6 \text{ ohms/sq}$

Static Decay Rate <0.01 seconds

Available in bags, sheets and roll form

A0105

ESD PE Bag



- Low density polyethylene with ESD property
- Prevent build-up of static charge and protect components from ESD damages
- Surface Resistivity $10^{10} \sim 10^{11} \text{ ohms/sq}$
- Static Decay Rate <2 seconds
- Available in roll tubing, cut sheets, bags, zip lock bags

ESD Foam Sponge

Black Conductive EVA Foams A0401



Typical Value Test Method

Density	3.1 lbs	ASTM D3575-84
Surface Resistivity	L10 ⁴	ASTM D991-85
Volume Resistivity	1.1 x 10 ³	ASTM D991-85
H.C.F.C.	Chemically Insert	Fed STD 101°C Method 3005
Static Decay	0.01 Sec.	ASTM D991-85
Tribo Charge	Pass	Modified Incline Plane

- Conductive property is good for grounding IC leads against ESD damage
- Suitable for store and transportation of semiconductors
- Non-corrosive and good cushioning effect
- Available in high density, semi-hard and low density foam
- Surface resistance <10⁶ ohms/sq

ESD PE Foams A0402



Physical Properties

Compressive Deflection at (Vertical Direction)	10%	1.5	psi
	25%	4.4	psi
	50%	14.5	psi
Tensile Strength		72.2	psi
Elongation at Break		100	%
Tear Resistance		18.7	lb / in
Density Range		1.7 -3.1	Pcf
Thermal Conductivity		0.45	(BTU -In/hr. Ft ² at 75°F)

Maximum Length : Currently 2m. Can be increased to requirement.
Maximum Width : 1m Thickness : 75mm

ESD Economic Box

- Surface resistance: 10⁴~10⁶ Ω, conductive plastic all-purpose injection clapboard, cover available, foldable boxes as well.
- Anti-static Foldable Circulation Box: The empty case can be folded, it saves 3/4 of storage space, very economical for storage and transport.

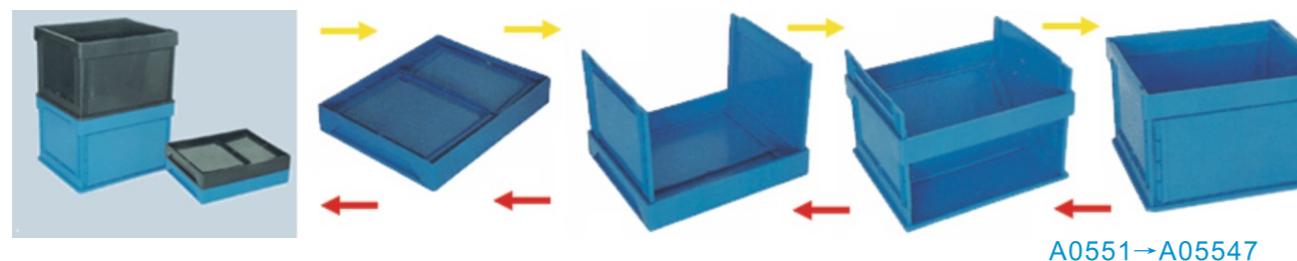
P.N.	Exterior size L x W x H (mm)	Interior size L x W x H (mm)	Innner Remark
			Extended Layer Size
A0311	155*105*55	135*85*50	
A0312	205*135*65	180*120*60	
A0313	265*175*75	220*160*70	
A0314	300*205*90	270*185*80	
A0315	360*270*135	320*240*125	
A0316	420*310*155	380*280*145	
A0317	500*360*175	470*330*165	Cover Available 484*357*14
A0317A	530*370*205	490*330*200	
A0317B	510*345*185	464*300*175	
A0318	565*420*240	510*390*235	Cover Available 566*427*15
A0319	565*420*300	510*390*290	Cover Available 566*427*15
A0319A	565*420*380	510*390*375	Cover Available 566*427*15
A0319B	620*425*320	580*395*310	Cover Available 630*437*16
A0319C	610*415*245	580*380*240	
A0319D	560*430*145	515*350*140	
A0319E	585*405*175	538*360*170	
A0320	600*500*360	560*460*355	Cover Available 610*505*15
A0320A	610*500*400	560*455*395	
A0320B	720*560*380	675*515*370	
A0321	380*240*105	340*220*90	
A0323	600*500*150	560*455*140	Cover Available 610*505*15
A0324	600*500*300	560*455*290	Cover Available 610*505*15
A0325	660*400*160	620*360*150	
A0325A	720*450*180	680*420*170	
A0326A	600*500*160	560*460*155	
A0326B	580*368*200	535*345*195	
A0326C	580*368*165	535*345*155	
A0326D	620*430*200	580*395*195	Cover Available 630*437*16
A0326E	620*430*250	580*395*245	Cover Available 630*437*16
A0331	615*425*155	580*385*145	
A0332	615*430*120	555*373*118	
A3100	541*366*190	496*331*170	Foldable
A3101	541*366*250	496*331*230	Foldable
A3102	541*366*295	496*331*275	Foldable
A3103	541*366*325	496*331*305	Foldable
A3104	541*366*375	496*331*355	Foldable
A3105	540*423*303	495*395*280	Foldable
A3106	540*423*412	495*395*392	Foldable
A3107	607*495*303	558*458*280	Foldable
A3108	607*495*404	558*458*383	Foldable
A3109	647*443*280	602*408*260	Foldable
A3110	540*423*250	495*395*240	Foldable
A3111	647*443*345	602*408*335	Foldable



ESD Circulation Box

- Surface resistance: $10^4 \sim 10^6 \Omega$, conductive plastic all-purpose injection clapboard, cover available, foldable boxes as well.
- Anti-static Foldable Circulation Box: The empty case can be folded, it saves 3/4 of storage space, very economical for storage and transport.

P.N.	Exterior size L x W x H (mm)	Interior size L x W x H (mm)	Innner Remark
			Extended Layer Size 390*285*45
A0501	390*285*270	360*250*250	
A0503	305*205*90	275*190*80	
A0504	500*340*130	465*305*120	
A0505	540*415*255	500*380*250	
A0506	445*330*195	385*300*190	
A0507	410*290*245	375*255*240	
A0509	565*455*290	535*420*275	Built-in slot
A0510	640*440*160	600*400*150	
A0511	660*455*230	625*420*220	
A0513	565*385*140	530*350*135	
A0514	565*380*280	505*340*275	
A0515	610*375*135	565*330*125	Built-in slot
A0516	585*480*350	555*450*345	
A0517	510*355*165	455*320*155	
A0518	530*370*230	460*350*220	
A0532	390*285*275	360*250*255	Cover Available
A0533	520*462*415	495*425*400	Cover Available
A0534	595*395*210	545*345*200	Cover Available
A0535	600*400*150	563*365*135	Cover Available
A0536	600*400*220	563*365*185	Cover Available
A0537	600*400*255	563*365*235	Cover Available
A0551	400*275*355	380*250*345	Foldable
A0552	545*365*250	496*330*230	Foldable
A0553	650*445*340	595*405*320	Foldable
A0554	770*570*610	730*530*600	Foldable



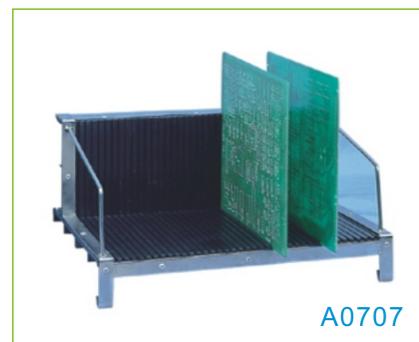
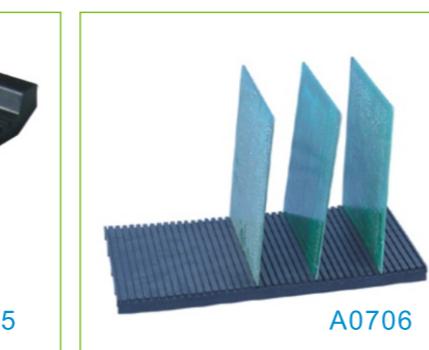
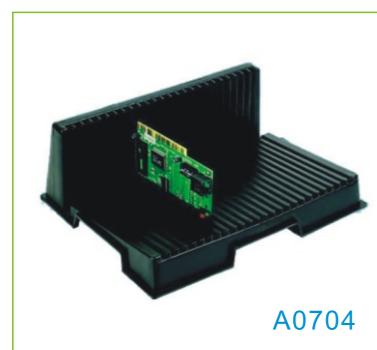
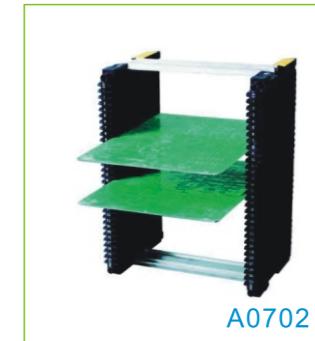
ESD Component Box



- Surface resistance: $10^4 \sim 10^8 \Omega$ Shape: wall-mounted or combination drawer type

P.N.	Exterior size(mm)	Interior size (mm)	Shape
A0601	235*157*122	215*142*120	Wall-mounted
A0602	160*100*70	148*85*65	Wall-mounted
A0603	200*130*90	180*113*85	Wall-mounted
A0604	130*110*85	115*105*80	Wall-mounted
A0605	138*96*48	120*82*36	Combination drawer
A0606	56*32*21	40*26*16	Sectional
A0607	100*100*12		Chip box
A0608	235*157*122	215*142*120	Box type
A0609	120*45 (Φ×H)	115*40 (Φ×H)	Round
A0610	202*123*50	193*114*41	Box with cover

ESD Circulation Rack



P.N.	Size LxWxH (mm)	Remark
A0701	457*(10-190)*546	Adjustable for sideplate
A0702	(50-350)*175*355	Adjustable for sideplate
A0703	437*160*30	For 25 pieces of
A0704	265*205*95	For 25 pieces of
A0705	484*172*50	For 25 pieces of
A0706	411*280*22	For 42 pieces of
A0707	380*280*165	For 35 pieces of
A0708	320*345*36	For 35 pieces of
A0709	480*140*35	For 25 pieces of

ESD Tray



A0801



A0812→A0813



A0815



A0817



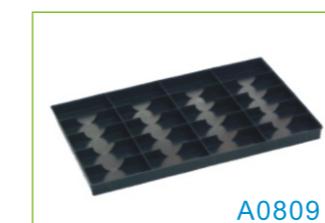
A0821



A0822



A0808



A0809



A0810→A0811

- Material is conductive plastic, Surface resistance: $10^4 \sim 10^6 \Omega$.
- A0810,A0811 Uses ESD PC alloy material, high strength, bears the friction, applies in the LCD production line.

P.N.	Exterior size L x W x H (mm)	Interior size L x W x H (mm)	Innner Remark
A0801	225*165*45	215*153*40	
A0802	225*165*37	215*153*34	
A0803	320*230*42	300*215*37	
A0804	435*335*67	420*320*60	
A0805	565*375*78	535*340*70	
A0806	322*295*26	310*283*23	Ten built-in 10 lattices
A0807	320*290*45	310*280*40	Ten built-in 10 lattices
A0808	315*315*15	300*300*10	Built-in 9 lattices
A0809	515*320*25	505*310*15	Built-in 20 lattices
A0810	440*380*25	410*350*18	LCD Tray LCD
A0811	500*460*27	470*430*20	LCD Tray LCD
A0812	316*203*14	36*17 grid	80 grids
A0813	358*283*20	41*25 grid	80 grids
A0814	315*175*35		With holes
A0815	460*313*40	420*293*29	70 grids
	In-plant Boards Con Be Moved Wholly		
A0816	340*123*50	295*113*46	hanging-style
A0817	490*381*35	425*315*25	Surface resistance/ : $10^8 \sim 10^{11} \Omega$
A0821	400*327*29	65*65*25	
A0822	100*15*14		
A0823	320*245*36	310*235*20	

Warning Tape

Warning Tape

警示标签

A11



A1101

There are warning tape, ESD tape,clean label and heat-resistant tape available.



A1102

Conductive velcro

A12



Use in binding PCB or electronical products

SMT Products

SMT

A13

P.N.	Name	Specification
A1301	Tape with Guide	
A1302	Universial Splice Tape	2pcs/card,yellow,8mm 500pcs/box,with 8 holes
A1303	New tape with clip	new style,connecting more reliable
A1304	Blace doulbe tape	for Panasonic machine special
A1305	Splice Clip	4000pcs/box
A1306	SMD Cutting Tool	1 pc/set,tool/scissors



A1306



A1301



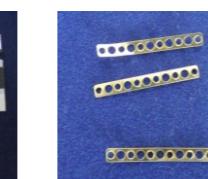
A1302



A1303



A1304



A1305



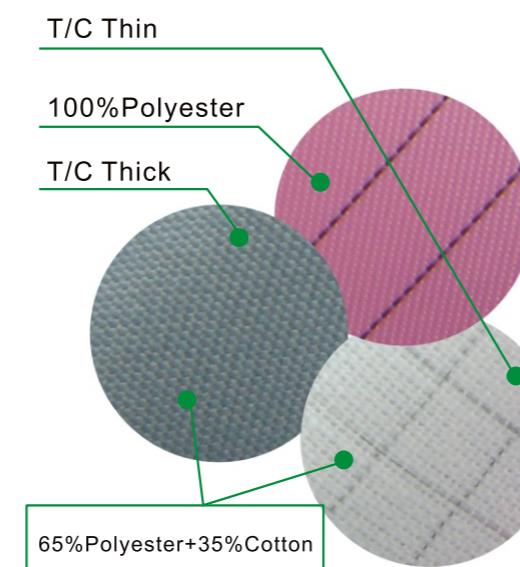
Cleanroom Garment/Fabric

Cleanroom & ESD Fabric

C01-F



- Anti-static garments are made of high quality long fiber polyester material which is excellent in cleanliness, filtration, comfort, durability, hard-adhesive and easy-dressing.
- Imported conductive fiber assure the excellent anti-static performance of the products.
- Special polyester long fiber thread with unique sewing technique.
- Advanced imported laundry equipment, laundered in class 10~100 cleanroom provides the best service for the most strict clients.
- Advanced test instruments and methods with strict quality control system to ensure the high quality of each finished product.
- Applied to electronics, micro-electronics, semi-conductor, LCD, pharmaceutical, biotech, constructions, optoelectronic, aerospace, and etc.



NOTE:Please browse the fabric & garment catalogue for more information.

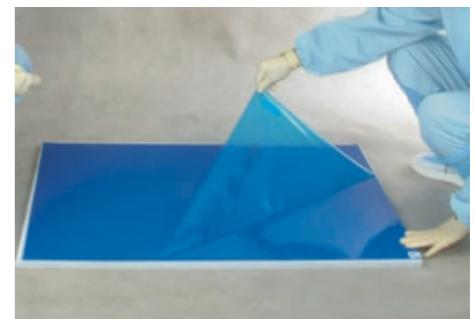
Sticky Mat/Roller

Sticky Mat

C0201

- Adhesive layered, straight edged mats can quickly and effectively remove traffic dirt from wheels and dust from the soles of shoes, to keep the clean environment
- Each sticky mat is composed of multiple layers of polyethylene film laminated together into a stack
- Each layer is coated with a unique high or low adhesive, and the working surface is smooth
- Easy to use. When the surface layer is contaminated, simply peel off the top layer and throw it away
- Mainly used for electronics, computer, instrumentation, medical-device, pharmaceutical, aerospace and nuclear industries

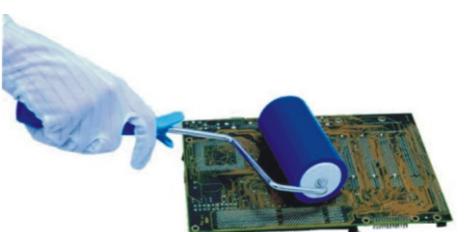
Base Material	Polyethylene film	Size: 18"×36" 24"×36" 24"×45" 26"×45"
Tab Size	1"×1" Yellow	
Sticky Strength	200~800g/25mm	
Adhesive	Solvent-based acrylic	
Heat resistance	70 °C (24 hours)	
Thickness	1.8 mm (mat)	
Color	Blue, White	
Packaging	10 mats/case, 30 layers/mat	Other sizes available



Sticky Roller

C0202

Convenient to use, the roll mop is quick and effective at removing various contaminating particles from floors, ceilings, walls, tabletops, and other surfaces. The roll mop is similar to common paint roller which is composed of a roller with cover and a handle. The cover in this case is called sticky roll, which is a roll of adhesive, coated substrate that has removable sheets similar to a sticky mat. Roll mops are very easy to use, just roll the area to be cleaned as if you were painting the wall, when the roll becomes too soiled to pick up any more contaminants, simply peel off the soiled layer and tear off at the perforations to expose a new sheet of adhesive film.



Roller	Handle
120 sheet/roll	4", 6", 8"
Width:4", 6", 8", 10"	10", 12"
Length:20m	

Sticky Mat/Roller



C0203

Sticky Silicon Roller



Product Description:

Silicon Roller is made from silicon and special materials. It is a self-adhesive removing product. Its surface is smooth like a mirror, with particle size below $2\mu\text{m}$. It is effective on adhering to hair, scurf, atom and other impurities, and easy to transfer impurities to the sticky paper, hence it ensures silicon's self-adhesive use for a long period. For printing machine setting or with handle use.

Construction and Size:

ABS plastic handle, proprietary elastic roller, unique stainless steel bearing system.

Middle, high, low adhesive force.
1.2 to 12 inch, and penstyle.



C0204

Sticky Pad



Product Description

It can remove dust separately and the atom of silicon roller, and ensure using silicon roller circulately. High-density of its surface glue helps suck tiny granules.

Features

The glue can't be peeled off, under heavy attrition, product is equally distributed and the glue is environmental protection, and has no peculiar smell. It's made of paper or PE/PP.

Composition

120g bottom paper + 100g surface paper + powerful glue
0.05-0.07mm PE/PP + powerful glue + releasing layer

Size / Packing

Size: ① 330mm x 240mm x 50 Sheet(paper)
② 330mm x 240mm x 100 sheet(PE/PP)

Packing: ① 50 sheet x 5 bag (paper)
② 100 sheet x 10 bag (PE/PP)

Sticky Mat/Roller



C0205

Machine Sticky Roller



Product Description:

Machine drum machine be used with clean, except for cleaning the surface of dust workshop Shaw, (widely used in semiconductor factories remove PCB board dust) effect is remarkable easy to use, the substrate PP film synthetic paper, binder, polyacrylate viscosity, hardening agent, different oxygen acid (or acid) decomposition of solvent, easy to cut, easy to fold, the substrate side coated adhesive, high viscosity, non-degumming, no pollution, no Charles hole, side-off coating layer, easy peel, no residue, durable.



Item	Date
color	white
width(mm)	according to customer demand
length(m)	according to customer demand
thickness(um)	70-100
diameter(mm)	76.2 ± 0.5
crack extension factor(%)	300 or more
tension(kg/cm ²)	500 or more
paste strength(g/25mm)	60-720 (low viscosity, medium viscosity, viscous and special high viscosity 60-720)

Polyester Wipe

C0301

Polyester wipe is constructed from continuous-filament polyester in a double knit, no-run interlock pattern; cleanroom laundered and packaged; Polyester wipe exhibits the highest absorbency function; the lowest particle generation and ion content of all singleplayer, sealed-border wipes.



Classification:Class100-10000;Material:Polyester;Descriptions:Laser Cut,Cleanroom Laundered and Packaged

P.N.	Performance			Contamination		Size (inch)
	Basis Weight	Sorptive Capacity	Sorptive Rate	Particle(count/m ²)	Fibers(fibers/m ²)	
C0301-4x4						4" x4"
C0301-6x6	140g/m ²	360ml/m ²	0.5 sec	1.38E+07(>0.5um)	5120(>10um)	6" x6"
C0301-9x9						9" x9"



The product is made from micro-fibre material which is dust-free, little particles out, designed in roll style. It has good tensile property and help you cost down.

The product is effective on absorbing water and dust.

P.N.	Roller heart				Wight (g/m ²)	Length (m)	Package
	Outer D	Inner D	Width	Materials			
C0321	φ 25mm	φ 32mm	10mm	PVC	85	50	1pcs/bag
C0322	φ 25mm	φ 32mm	20mm	PVC	85	50	1pcs/bag

Microfiber Wipe

C0311

Microfiber wipe is constructed from continuous-filament microfiber in a double knit, no-run interlock pattern; cleanroom laundered and packaged; Microfiber wipe exhibits higher absorbency function; lower particle generation and ion content.



Classification :Class10-100;Material:microfiber;
Descriptions:Laser Cut,Cleanroom Laundered and Packaged

P.N.	Performance			Contamination		Size (inch)
	Basis Weight	Sorptive Capacity	Sorptive Rate	Particle(count/m ²)	Fibers(fibers/m ²)	
C0311-4x4						4" x4"
C0311-6x6	210g/m ²	615 mL/m ²	0.5 sec	20 x 10 ⁶ (>0.5 um)	14580(>10.0 um)	6" x6"
C0311-9x9						9" x9"



Machine model	Cleaning cloth			Internal paper (plastic) roll		
	Width (mm)	Length (m)	External diameter (mm)	Width (mm)	Internal DIA (mm)	External DIA (mm)
MPM	445	10	56	455	19	24
DEK	520	10	56	530	19.5	22
SANYO	275	30	100	275	38	44
EKRA	400	8	46	390	12	16
MINAMI	270	7	46	270	12	16
PANASENT	358	12	66	360	38	44

ESD & Cleanroom Shoes

C04

Wearing the anti-static shoes is the most efficient and safest method to discharge the body static. It also can prevent dust generation. Mostly suit for the cleanroom, electronic and semi-conductor industries.

Safety shoes:Comfortable,light,wearable,oil-resistance,anti-slip,antistatic,and its lining is Steel toe cap,anti- impact, performance,anti-puncture and pressure-proof.Insulation(optional).



C0401 & C0403



C0402 & C0404



C0411 & C0412



C0421 & C0422



C0431 & C0432



C0441



C0442



C0451



C0452



C0461



C0462



C0471

C04

ESD & Cleanroom Shoes



Upper Cover (PVC/PU/Leather/Canvas/ESD Fabric/ T/C)

Middle Sole
1.ESD Sole
2.ESD & Deodorization Sole

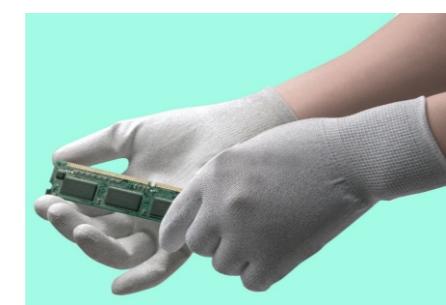
ESD Sole

Vamp Material :	Sole :	Volume Resistance:	Size :	Class :	Washed Times :
PVC/PU/Canvas PVC/PU/	PVC/PU	10 ⁷ Ω -10 ¹⁰ Ω	34#-50# 220mm-270mm	10~1000	>100

P.N.	Holes & Net,Type	Leather or Fabric	Slipper/Boot/Normal Shoes
C0401	Four-holes	Leather	Normal
C0402		Leather	Slipper
C0403		Canvas	Normal
C0404		Canvas	Slipper
C0411	Twin-net-bores	Leather	Normal
C0412		Canvas	
C0421	Single-net-bore	Leather	Normal
C0422		Canvas	
C0431	Non-bore	Leather	Normal
C0432		Canvas	
C0441	Dust-free cotton	Leather & Fabric	Short Boot
C0442			Top Boot
C0451	Dust-free Shoes	Leather & Fabric	Short Boot
C0452			Top Boot
C0461	Slipper EVA	EVA Injection	Slipper
C0462		EVA Foam	
C0471	Safety Shoes	Leather	Normal

Gloves/Finger Cots

ESD & Cleanroom Gloves

C05


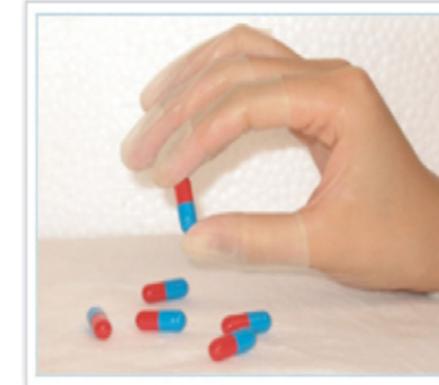
Size (cm)	S	M	L	XL	XXL
Ordinary length	21	22	23	24	25
Longer pattern	23.5	24.5	25.5	26.5	27.5



P.N.	Name	Class	Surface Resistance
C0501	ESD Fabric Glove	100	$10^6\text{-}10^{10}\Omega$
C0502	ESD Spot Gluing Gloves	100	$10^6\text{-}10^{10}\Omega$
C0503	PU Palm Glove	100	$10^6\text{-}10^{10}\Omega$
C0504	ESD Nylon Fingertip Coating Glove	10000	$10^6\text{-}10^{10}\Omega$
C0504-01	ESD Nylon Palm Coating Glove	10000	$10^6\text{-}10^{10}\Omega$
C0505	Nylon Finger Coating Glove	1000	
C0506	PU Palm Coating Glove	1000	
C0507	Cotton Glove		
C0508	Nitril Gloves	100	
C0509	Latex gloves	100	
C0510	PVC Gloves	100	



Gloves/Finger Cots

C05
Finger Cots

C0511

C0512

C0513

C0514

C0517

P.N.	Name	Class	Surface Resistance
C0511	Anti-skid cut-off finger cots (low powder)	10000	
C0512	Clean Powder free finger cots (white)	10	
C0513	Anti-static pink finger cots (powder free)	10	$\leq 10^{10}$
C0514	Conductive black finger cots	10	$\leq 10^5$
C0517	Antistatic Beige finger cots (Powder free)	10	$\leq 10^5$

Package

C0511, C0512, C0513, C0514, C0517: 1440pcs/bag

Face Mask

Class 100 Cleanroom Face Mask C06

Description:

Manufactured and packed in cleanroom environment

Ultra-low lint and contaminations level

Manufactured in ISO factories with in-house laboratory

Application

Processes in critical cleanroom (class 10 / 100) environment

Medical / pharmaceutical industries / food processing

Configuration Material:

Spun Bond Polypropylene / Paper / Ultra Low-Lint Material(ULL)

Material: ES nonwoven, 60g/m²

Body : length:210mm, width : 90mm

Head loop : PU, length : 245mm

Nose clamp : position - fixed in center of the top

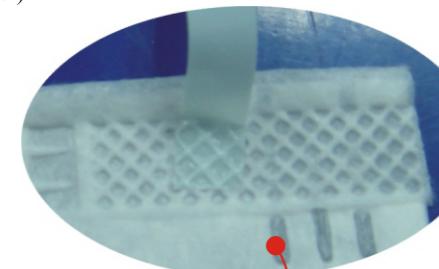
Bacteria filtration efficiency (BFE) : min. 99%

Skin irritation : almost negative

Particles(>0.3 micron) : less than 100ea (dry flex test)



C0601



Types:

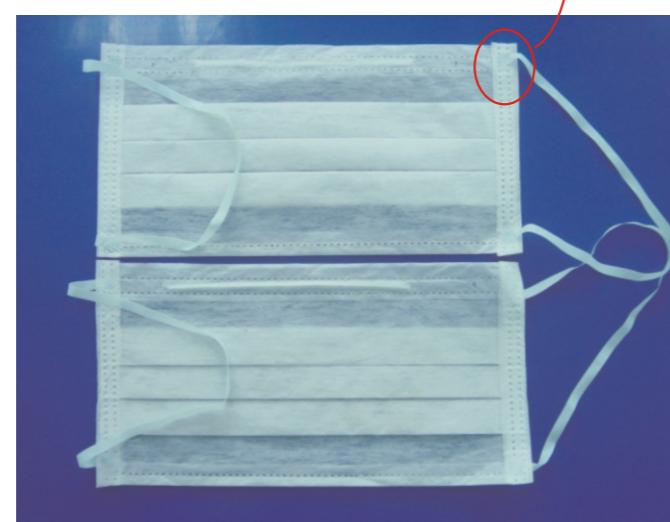
Ear loop / head loop / tie on

Size:

18cm x 9.5cm / 21cm x 9.5cm

Remark:

Customized sizes / configurations are possible.



Face Mask

C06 Class 100 Cleanroom Face Mask



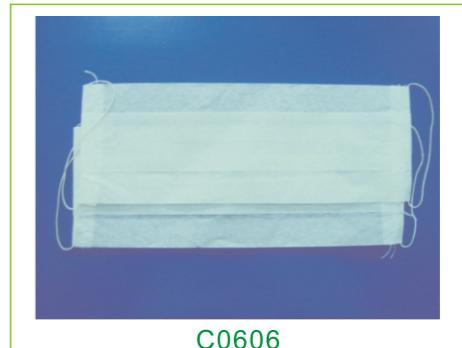
C0603



C0604



C0605



C0606



C0810&C0811



C0812

P. N.	Name	Class	Size (cm)	Layers	Application Environment
C0601	Class100 Face Mask	10~100	18*9.5	3	100Class Cleanroom
C0603	Common Face Mask	10000	18*9.5	3	Cleanroom,Medical
C0604	Tie on Face Mask	10000	18*9.5	3	Cleanroom,Medical
C0605	Active Carbon Face Mask	10000	18*9.5	4	Air of strong odor
C0606	Paper Face Mask	10000	19.5*7	1,2	Food Industry
C0810	Duck bill mask	10000	16*12*9	3	Medical
C0812	Cup stape mask	10000	13*12	3	Medical

Clean Swab

Clean Swab

C07

- Swab top are made from clean cloth which includes micro-fibre and polyester fibre;
- Almost no dust out
- Swab top fixed on PP pole by hot ;
- Vacuum packaging in C10 clean room(Sponge head or Fabric head);
- Suitable to all kinds of reagent and solution .
- Wiping after dipping into IPA and acetone eagent;
- Applied to lubricant and other liquid.
- Field on medicine,cosmetics, cleanroom, electronics and optoelectronic, and other industries.



P.N.	Picture	Stick (mm)			Head (mm)		
		L	Φ	Material	L	Φ	Material
C0701		125	6	Plastic	25	12.5	Sponge
C0702		66	2.5	Plastic	9.8	3.5	Clean Fabric
C0703		66	2.5	Plastic	9.8	3.5	Sponge
C0704		70	2.5	Plastic	9.8	3.5	Sponge
C0705		70	2.5	Wood	9.8	3.5	Cotton
C0706		160	4.5	Plastic	20	8	Sponge
C0707		150	2.5	Wood	20	5	Cotton
C0708		160	4.5	Plastic	15	8	Clean Fabric
C0709		125	6	Plastic	25	15	Clean Fabric

Shoe /Sleeve Cover

C08
Shoe /Sleeve Cover

C0801

C0802

C0803

C0805

C0806

P.N.	Name	Size (mm)	Basic Weight g/m ²
C0801	Non-woven shoe-cover	150*360,150*380 170*410	35
C0802	CPE shoe-cover	150*380,150*410 170*410	2.5, 2.6, 2.8
C0803	Anti-skid non-woven shoe-cover	150*360,150*380 170*410	35
C0804	ESD non-woven shoe-cover	150*360,150*380 170*410	35
C0805	CPE Sleeve cover	As sample	2.5, 2.6, 2.8
C0806	Non-woven Apron	As sample	35

Exposure Suit/Cap

Non-woven Bouffant Cap/Mushroom cap C0901/C0901-01

- Description: Disposable nonwoven bouffant cap.
- Application: Suited to electronic manufactures, restaurants, food processing, school, hospital, drug makers, factory, cleaning, etc.
- Material: Polypropylene(P.P) Spunbond
- Size: 18", 21", 24"
- Weight: 12~20g/m²
- Color: White, Blue
- Packing: 100pcs/bag, 1000pcs/ctn



C0901-01



C0901

Exposure Suit C0902



Size (mm)	Basic Weight g/m ²
S, M, L, XL	40

Stationery

C10

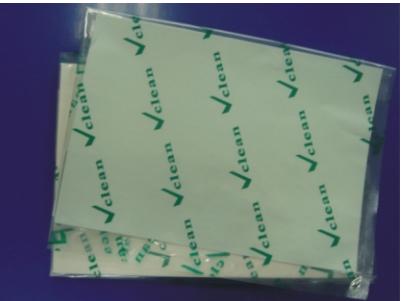
Stationery



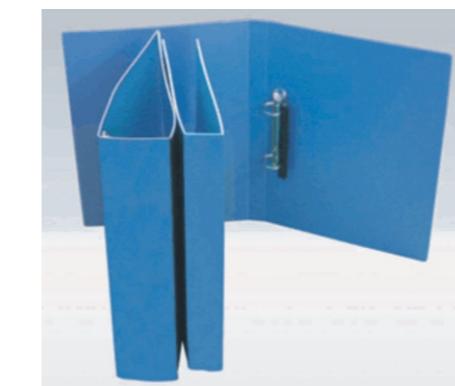
C1001



C1002



C1003



C1004



C1005



C1007

P.N.	Name	Class	Surface Resistance	Size
C1001	ESD&Cleanroom pen	100	10 ⁶ –10 ¹⁰ Ω	
C1002	ESD&Cleanroom notebook	100	10 ⁶ –10 ¹⁰ Ω	A4, A5
C1003	ESD&Cleanroom print paper	100	10 ⁸ –10 ¹¹ Ω	A4
C1004	ESD&Cleanroom folder	100	10 ⁸ –10 ¹¹ Ω	A4
C1005	ESD&Cleanroom folder	100	10 ⁶ –10 ¹⁰ Ω	A3
C1007	ESD & Cleanroom marker	100	10 ⁶ –10 ¹⁰ Ω	

C1001&C1002 IC Test

Ion	F ⁻	CL ⁻	NO ₂ ⁻	Br ⁻	NO ₃ ⁻	PO ₄ ⁻	SO ₄ ⁻	Anion total
Spec	0.1	0.3	0.1	0.1	0.3	0.1	0.3	1.0
Result	ND	0.03	0.001	ND	<0.01	ND	0.01	0.05

Cleanroom Mop

Cleanroom Mop

C11

- Relieve labour time, quick cleaning and multi-usage.
- Absorbing vapour and particle without attainting surface.
- Excellent absorbability, strong stickiness, abrasion resistance, long usage;
- Vacuum packing head;
- For Class 100 cleanroom.



C1101



C1103

Ionizing Air Blower

www.a-s-t.net

A.S.T

Anti Static / ESD & Cleanroom Products

Instrument



Ionizing Air Blower

E0101

E0101 TABLE MODEL IONIZING AIRBLOWER, It is designed as the theory of alternating current electrostatic eliminator, belongs to electrical category. Apply to eliminate electrostatic in a limited distance, convenient to remove and install. The ionizing air volume can be adjusted, including high voltage generator.



Specification

Operating Voltage	110V/60HZ ,220V/50HZ
Current Consumption	0.25A ,0.12A
Operating Temperature	-10~50°C
Size(mm)	90(L)×170(W)×260(H)
Weight	3.3Kg
Air Volume	45~110CFM
Ion Balance	0V±10V
Air Coverage	40cm×60cm

Decay Test Results

Distance		300mm	600mm	900mm
Decay time	Positive	1.2s	2.5s	3.9s
	Negative	1.3s	2.6s	4.1s
Offset voltage	Positive	8V	5V	4V
	Negative	-7V	-6V	-3V

Ionizing Air Blower

E0102

E0102 SUSPENDED IONIZING AIR BLOWER, It is designed as the theory of alternating current electrostatic eliminator, belongs to electrical category. Apply to eliminate electrostatic in a space. The double header ionizing air volume can be adjusted, including high voltage generator.



Specification

Operating Voltage	110V/60HZ ,220V/50HZ
Current Consumption	0.9A ,0.4A
Operating Temperature	-10~50°C
Size(mm)	600(L)×90(W)×170(H)
Weight	7.8Kg
Air Volume	80~220CFM
Ion Balance	0V±10V
Air Coverage	40cm×90cm

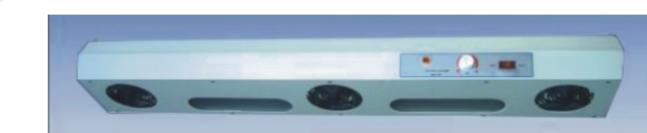
Decay Test Results

Distance	300mm	600mm	900mm	1200mm
Left 300mm	1.3s	2.4s	2.8s	4.9s
Center	2.8s	1.7s	3.2s	3.6s
Right 300mm	1.2s	2.1s	3.0s	4.5s

Ionizing Air Blower

E0103

E0103 SUSPENDED IONIZING AIR BLOWER, It is designed as the theory of alternating current electrostatic eliminator, belongs to electrical category. Apply to eliminate electrostatic in a space. The triple header ionizing air volume can be adjusted, including high voltage generator.



Specification

Operating Voltage	110V/60HZ ,220V/50HZ
Current Consumption	1.25A ,0.62A
Operating Temperature	-10~50°C
Size (mm)	1100(L)×184(W)×110(H)
Weight	12.8Kg
Air Volume	120~330CFM
Ion Balance	0V±10V
Air Coverage	40cm×120cm

Decay Test Results

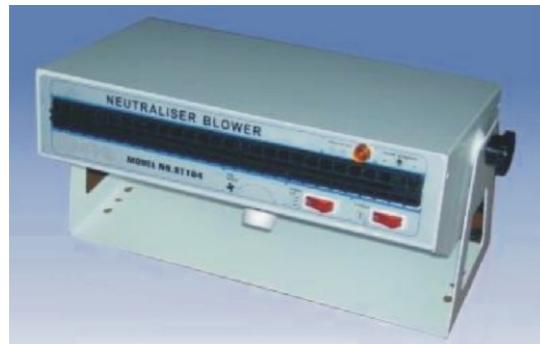
Distance	300mm	600mm	900mm	1200mm
Left 300mm	1.9s	2.5s	5.1s	8.6s
Center	1.3s	2.3s	4.3s	8.3s
Right 300mm	1.8s	2.6s	4.8s	8.5s

Ionizing Air Blower

Ionizing Air Gun

E0104

Ionizing Air Blower



E0104 HORIZONTAL IONIZING AIR BLOWER, On the base of design of E0105 horizontal ionizing airblower, it is smaller and more portable. Can install ionizing equilibrium measurement realtime supervising and alarming system as request. The ionizing air volume can be adjusted, including high voltage generator.

Specification

Operating Voltage	110V/60HZ ,220V/50HZ
Current Consumption	3.0A ,1.5A
Operating Temperature	-10~50°C
Size(mm)	400(L)×220(W)×190(H)
Weight	5.8Kg
Air Volume	70~120CFM
Ion Balance	0V±10V
Air Coverage	60cm×120cm

Decay Test Results

Distance	300mm	600mm	900mm	1200mm
Left 300mm	1.3s	2.5s	3.9s	6.6s
Center	1.1s	2.2s	3.6s	6.5s
Right 300mm	1.2s	2.3s	3.8	6.3s

E0105

Ionizing Air Blower



E0105 HORIZONTAL IONIZING AIR BLOWER, It is designed as the theory of alternating current electrostatic eliminator, belongs to electrical category. Flat- wide big air volume design apply to eliminate electrostatic in a wide space. The ionizing air volume can be adjusted, including high voltage generator.

Specification

Operating Voltage	110V/60HZ ,220V/50HZ
Current Consumption	3.0A ,1.5A
Operating Temperature	-10~50°C
Size(mm)	570(L)×220(W)×190(H)
Weight	8.5Kg
Air Volume	70~120CFM
Ion Balance	0V±10V
Air Coverage	80cm×120cm

Decay Test Results

Distance	300mm	600mm	900mm	1200mm
Left 300mm	1.8s	2.5s	5.2s	8.6s
Center	1.3s	2.2s	4.3s	7.5s
Right 300mm	1.7s	2.3s	4.8s	8.3s

Ionizing Air Nozzle
E0203

E0203 IONIZING AIR NOZZLE, It uses strong ionizing air to clean the electrostatic, nonself and dust on the surface of objects, belongs to industrial category. Apply to automatic de-electrostatic and de-dust device. Should assemble with E0401 high voltage generator.

Specification

Operating Voltage	4.6KV
Current Consumption	200uA
Operating Temperature	-10~50°C
Weight	0.42Kg
HV Cable length	2 Meters
Air pressure	5~7Kgf/cm ²
Air velocity	10m/sec

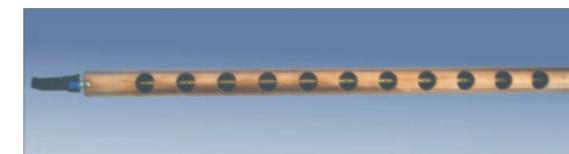
Decay Test Results

Distance	30mm	90mm	150mm
Decay time	Positive	0.1s	0.4s
	Negative	0.1s	0.3s



Ionizing Air Bar

E0301 IONIZING COPPERBAR, It can eliminate electrostatic from the surface of object in the area of plane distance 100 meter, belongs to industrial category.External form design is suitable for the electrostatic elimination of the plane object in conveyor belt, slitting line and loping channel, etc.Should assemble with E0402 high voltage generator.



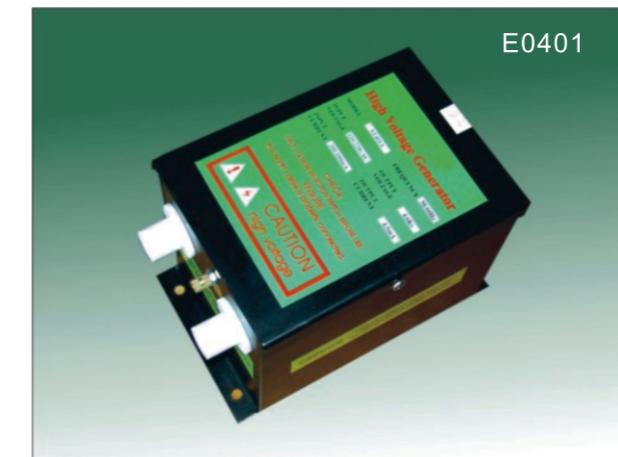
Operating Voltage	5.6KV
Current Consumption	230uA/M
Operating Temperature	-10~50°C
Weight	1.9Kg/M
HV Cable length	2 Mertres
Max.Length	2 Mertres

**E0302****Specification**

Operating Voltage	5.6KV
Current Consumption	230uA/M
Operating Temperature	-10~50°C
Weight	3.68Kg/M
Air pressure	5~7Kgf/cm ²
Air Velocity	10m/sec

**E0303****Specification**

Operating Voltage	7.0KV
Current Consumption	0.36mA/M
Operating Temperature	-10~50°C
Weight	1.68Kg/M
Air pressure	5~7Kgf/cm ²
Air Velocity	10m/sec

High Voltage Generator**E04****High Voltage Generator**

E0401 HIGH VOLTAGE GENERATOR,assemble with air gun, air nozzle and air hose electrostatic eliminator

Specification

P.N.	Operating Voltage	Current Consumption	Operating Temperature	Weight	Output Voltage	Output Current
E0401	110V/60HZ ,220V/50HZ	0.23A , 0.12A	-10~50°C	3.3Kg	4.6Kv×2	Max 4.5mA

Wrist Strap Tester**Wrist Strap Tester/Online Monitor
E0801/E0803****E0801**518-1
E0803**Features**

- Can be used anywhere to quickly and easily check a variety of grounding systems
- Ensures employee safety
- Eliminates product defects caused by static electricity
- **Quickly and Simply Checks**
- Wrist Strap & Grounding Wires
- The contact resistance between the wrist strap and skin

Surface Resistance Tester

Surface Resistance Tester E0501/E0502

E0501 is an ultra wide-range, battery operated and portable instrument for measuring Surface Resistivity of virtually any flat surface conforming to ASTM D-257 standard by using recommended parallel bar sensing probe. The surface resistivity is conveniently indicated by a row of LEDs covering a total of 10 decades from 10^3 to 10^{12} ohms per square.



E0501



E0502

Specification

Operating Temperature	0 °C ~50 °C
Relative Humidity	0%~90%RH
Test Voltage	9V
Dimension	137mm(L)× 76mm(W)× 30mm(D)
Weight	120g
Accuracy	± 1/2 decade
Repeatability	± 5%

Static Voltage Tester

E0601 Static Field Testing Instrument



Reliable, highly accurate and low drift instrument for the measurement of magnitude static charges in terms of DC voltages. Easy to know whether any;

1. Static is present and on what surfaces, materials or people?
2. How much static?
3. What is the polarity of the charge in terms of DC voltage?

The instrument is ideal for use in such static sensitive environment such as electronic component production and assembly areas, clean rooms, computer, medical and R&D laboratories, surgical rooms, medical device manufacturing, printing press, packing and production lines, etc.

Specification

Measurement Range	+/- 10kV at 1 Inch
Measurement Accuracy	+/- 10%
Indications	3mm LCD Display
Test actuation	Press To Read
Power supply	9 Volt Battery
Low Battery	Warning at 7.0 Volts
Dimensions	135 x 70 x 30mm
Weight	180 Gms

Hammer Type surface Resistance Tester E0503

Low battery indicator lights on when battery voltage <5V
Digital display
Multi-functional tester measure environment:
Temperature/Humidity/Surface Resistance.



Specification

Power Voltage	DC 9V
Validity of battery	40 H
Measurement accuracy	±1/2 decade
Measurement range	103~1012 Ω 40~60°C 0~100%RH
Weight of instrument	425g
Weight of hammer	2.5±0.2kg/pc



(Electrostatic field testing instrument) Simco FMX-003
Test range:

- Static electricity tests: 0~20Kv, -20~0Kv
- Test distance: 25MM+1MM (Between testing target and the instrument)
- Precision: +10%
- Power source: 9V, 6F22manganese battery, The battery lifetime exceeds 30 hours

Wrist/Foot Strap Tester

Wrist/Foot Strap Tester

E09

Simple operation with dual test circuits, tests both wrist straps and foot grounders. Auto-ranging circuit automatically selects proper test range, pad uses for touch by user and LED displays test results. Red light and audible indicator mean circuit resistance is too high or too low. It is complied with standard 6.1.3.2 in ANSI ESD S20.20. It is recommended to calibrate E0901 Checker once a year.



Specification

Operating Temperature	0~31°C
Relative Humidity	0~90%
Size	82.5mm(L) × 39mm(H) × 142.5mm(W)
Weight	235g

Decay Test Results

Wrist test margin : 750KΩ - 10.5MΩ		Shoe cover test margin : 750KΩ - 100MΩ	
Resistance tolerance (±20%)	Test output	Resistance tolerance (±20%)	Test output
≤ 740KΩ	Red (FAIL LO)	≤ 740KΩ	Red (FAIL LO)
750KΩ	Green (PASS [Normal])	750KΩ	Green (PASS [Normal])
10.5MΩ	Green (PASS [Normal])	100MΩ	Green (PASS [Normal])
≥ 11.5MΩ	Red (FAIL HI [Fail Hi])	≥ 40MΩ	Red (FAIL HI [Fail Hi])

Smoke Absorber/Soldering Machine

E1001

Smoke Absorber

Soldering work involves both metallic and organic compounds, these compounds release noxious fumes when heated, which can lead to both short and long term operator irritations and illness. The E1001 is designed to remove these noxious fumes quickly, safely, and efficiently.

Feature:

- Remove noxious fumes quickly, safely, and efficiently.
- Angle may be adjusted at will and easy to place and move, low noise and long service life fan.
- The replaceable filter is made by joining a specific urethane foam with refined, activated high absorption carbon.
- Regular and anti-electrostatic type.
- Table clamping fixed for saving more work space and more convenient adjustment

Specifications

Power Consumption	14W(60Hz) / 16W(50Hz)
Absorption Capacity	0.93/1.07m ³ /min
Outer Dimension	167 X 101 X 182mm
Weight	1.5kg



E1101/E1102

Soldering Machine

- Dapper design to save space specially.
- The handle is particularly light and handy, you would never feel fatigue after long-time use.
- Bolt for temperature fixation to ensure temperature adjustment won't be abused by staff.
- ESD or normal is optional for different work requirement



E1101
Power Consumed 60W



E1102
Power Consumed 60W

WELDING MACHINE

Output Voltage	AC 24V
Temp Control	200 ~ 480°C
Exterior Size (Wire Exclusive)	
Weight (Wire Exclusive)	~ 1.3kg

- Advanced minisize computer and digital adjusting / display system are configured inside.
- Temperature of welding torch could be detected and adjusted through inserting card, once setup, the temperature can not be changed unless the card is reinserted. The operation is simple.
- The handle is particularly light and handy, you would never feel fatigue after long-time use.
- Stannum melted on welding torch would flow to the hob and never splash on table.
- ESD, reliability, safety, and good function
- When setting temperature, Fahrenheit or Centigrade is optional as your will.

SOLDERING IRON

P.N.	ESD	Organ Heated	Standard Torch	Ground Touch	Impedance	Creepage Voltage	Length (wire Exclusive)	Weight (wire Exclusive)
E1101	NO YES	chinaware	900S-T-I	< 2 ohm	< 2mV	176mm	25g	
E1102	NO YES	AC 24V/50W	900M-T-I	< 2 ohm	< 2mV	190mm	44g	

Magnifier

magnifier**E12****E1202****E1203**

Magnifiers comfortable usage, easy operation and reliable performance.. It can be used extensively for medical and hygienic work, agriculture, electron and precision machinery. It is particularly suitable for the test of LC maked film, LCD printing paste, LED production, PCB board, pressing and plating and electron components.

Magnifying Lamp

- Lens material:glass
- Lens size:5"
- Diopter:3diopter/5diopter/8diopter
- Zoom ratio: 1.75X, 2.25X ,3X
- Light source:110V-120V/220V-240V 22W circular fluorescent lamp
- Standard mount:table bracket
- Optional mount:table base, floorstand
- Colour available:white, black, light grey