

PCB Materials - Consumable Items



駿峰綫路有限公司

JF Circuits Limited

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10. 阳极片	Anode Strip



无尘纸

Dust-free Paper



- **用途:** 电子、半导体、LCD、PCB等行业无尘室作业清扫用，亦可用于无尘室外的清扫。
- **特点:** 极强的吸液性且成份纯净，极佳的动态擦拭效率（98.3%）和清漆微粒去除能力（每一万个微粒的99.3%），具有防静电功能及超强的抗溶解能力。
- **规格:** 基本规格：4"×4"、6"×6"、9"×9"、12"×12"，可特别定制。
- **Application:** Used in electronic, semiconductor, LCD, PCB industries for cleaning and operation in dust-free room as well as for cleaning outside dust-free room.
- **Features:** Clean paper of new generation used for dust-free room is made of special fibers. It has a pure composition and strong liquid absorption with a splendid dynamic wiping efficiency (98.3%) and static particles removal capability 99.3% of each 10 thousand particles. "Zhengye" dust-free paper has anti-static function and super strong anti-solubility.
- **Specification:** 4"×4"、6"×6"、9"×9"、12"×12"，Products with special sizes are available.

无尘布

Dust-free Cloth



- **用途:** 电子、半导体、LCD、PCB等行业无尘室作业清扫用。
- **特点:** 具有高吸水率、高柔软性，使用时不会造成表面的磨损及残留污渍、水痕、适合干湿两用，有防静电功能。
- **规格:** 基本规格：4"×4"、6"×6"、9"×9"、12"×12"，可特别定制。
- **Application:** Used in electronic, semiconductor, LCD, PCB industries for cleaning and operation in dust-free room as well as for cleaning outside dust-free room.
- **Features:** The wiping cloth of new generation used for dust-free room is normally made of special fiber (polyester). It has high water absorption with high flexibility, no wear is caused to and no besmirch or water marks remain on the surface when used. It is suitable for use in both wet and dry conditions and has the electrostatic prevention function. Its edges are tidy with little amount of dust as it is sealed around by laser, therefore, it can improve the fine rate of the products cleaned with it in course of use.
- **Specification:** 4"×4"、6"×6"、9"×9"、12"×12"，Products with special sizes are available.

粘尘滚筒

Dust-proof Clothing



- **用途:** 适用于电子、半导体、LCD、PCB等行业的产品表面异物清除。
- **特点:** 不产生尘埃、不掉胶、粘度可随客户要求制作。
- **规格:** 650/620mm×20m
- **Application:** Suitable for removal of foreign matters on the surface of products in electronic, semiconductor, LCD, PCB industries.
- **Features:** It does not incur any dust, no drop of gel and can be fabricated with the viscosity meeting by the client requirements.
- **Specification:** 650/620mm×20m.

粘尘纸卷

Sticky Paper Roll



- **用途:** 适用于电子、半导体、LCD、PCB等行业，去除产品表面、设备表面、地面及墙面的异物，使用过程中不掉胶。
- **特点:** 粘尘纸卷主要由PE基材及聚丙烯酸酯胶剂构成，此外，粘尘膜上设有预裁线，方便使用，不会产生异物。
- **规格:** 6"、12"。
- **Application:** Used in electronic, semiconductor, LCD, PCB industries for removal of foreign matters on the surface of product, equipment and wall.
- **Features:** A sticky paper roll consists mainly of a PE substrate with polyacrylate adhesive, and in addition, the sticky film is provided with a pre-cutting wire which is convenient for use and does not incur any foreign matters.
- **Specification:** 6"、12"



清洁布 Cleaning Cloth



- 用途: PCB 厂车间清扫异物用, 主要用于层压工序的叠层, 清洁铜板, 铜箔; 亦可用于无尘室内设备表面及台面清洁。
- 特点: 不产生尘埃, 不掉胶。能彻底的清洁印制板铜箔表面的尘埃物, 从而减少层压后的板面划痕, 凹坑等缺陷发生。

规格	特征	规格	特征
HY-881	手感较粗糙, 粘性较小	HY-301	手感较粗糙, 粘性较小
HY-882	手感较粗糙, 粘性适中	HY-302	手感较粗糙, 粘性适中
HY-883	手感较粗糙, 粘性较大	HY-303	手感较粗糙, 粘性较大
HY-884	手感较粗糙, 粘性较大	HY-304	手感较粗糙, 粘性较大
HY-885	手感较粗糙, 粘性大	HY-305	手感较粗糙, 粘性大

- Application: Used in workshop of PCB plant for clearing foreign matters. Its main function is for laminated layers of laminating process, steel plate and copper foil cleaning; It is also suitable for cleaning equipment surface and table top in dust-free rooms.

- Features: It does not incur any dust and no drop of gel and can thoroughly clean the dust on the surface of printed plate and copper foil to reduce the occurrence of defect like scratch marks and dent on the plate surface after laminating.

Type	Features	Type	Features
HY-881	Hand feel is rough and sticky, with low viscosity	HY-301	Hand feel is rough and sticky, with low viscosity
HY-882	Hand feel is rough with moderate viscosity	HY-302	Hand feel is rough with moderate viscosity
HY-883	Hand feel is rough with high viscosity	HY-303	Hand feel is rough with moderate viscosity
HY-884	Hand feel is rough with high viscosity	HY-304	Hand feel is rough with high viscosity
HY-885	Hand feel is rough with high viscosity	HY-305	Hand feel is rough with high viscosity

粘尘纸本 Dust-adhesive book



- 用途: 用于半导体业、PCB电路板行业、食品行业、钢板、玻璃加工业、LCD等行业。
- 特点: 表面光滑如镜, 颗粒度低于2um, 产品可有效粘附毛发, 皮屑, 尘等杂质, 并能轻易将异物清除, 矽胶轮上的杂质转印至粘尘纸本上, 从而可保证矽胶的自粘性长期有效, 使用过程中不掉胶。

- 规格: 330mm×240mm (纸制50层/本)
- Application: Widely used in semiconductor industry, PCB circuit board industry, food service industry, steel plate and glass working industry, LCD industry etc.

- Features: Its surface is mirror-like smooth with a granularity lower than 2um. The product can effectively stick hair, scurf, dust and any other impurities so as to easily remove the foreign matters. The impurities on the silica gel roller are transferred to the dust-adhesive book and this will guarantee a long term retention of the autohesion of the silica gel and no drop of gel will occur in course of use.

- Specification: 330 mm×240 mm (paper made 50 layers/book)

粘尘垫 Sticky Mat



- 用途: 半导体行业、医院和手术室、制药和生物工程业、医疗设备业、照相器材业的异物清除。

- 特点: 采用低密度聚乙烯, 裂度延伸系数250%以上, 粘贴度为100-1200g/25mm, 易折叠、无污染、易剥离、粘贴度强、经久耐用。

- 规格: 24"×36", 24"×26", 18"×36", 18"×45", 31"×35", 26"×45"(30层/片)

- Application: Widely used in semiconductor industry, hospital and operating room, pharmacy and bioengineering industry, medical equipment industry, photographic apparatus industry for removal of foreign matters.

- Features: Low density polyethylene is adopted with an intensity grade lengthening coefficient of above 250%, and a viscosity of 100-1200g/25 mm, easy to fold and free of pollution, easy to peel off, strong viscosity and durable in use.

- Specification: 24"×36", 24"×26", 18"×36", 18"×45", 31"×35", 26"×45"(30 layers/pieces)

除尘轮 Dust Removal Roller



- 用途: 用于PCB、FPC、LCD制程、导光片、软片精密印刷、玻璃清洗、SMT、无尘室、电子半导体制程的异物清除。

- 特点: 高、中、低不同粘度选择, 配方保证了产品高粘耐用、不易老化、不掉屑、防静电、防潮防湿耐摩擦、无毒、无锈、无污染、使用时手感舒适, 轱辘旋转自如。

- 规格: 6", 12"

- Application: Used for PCB, FPC, LCD manufacturing process, lead-ray films, software, precision printing, glass cleaning industry, SMT, clean rooms, electronic semiconductor manufacturing process foreign body removal.

- Features: It offers a range of high, moderate and low viscosity selection, and a composition that guarantees its product with high viscosity and durable in use, not easy to get aged, free of pollution, comfortable feel in use and free rotation of the running roller. It has excellent elasticity and anti-static performance that can prevent damage caused to products by static electricity generated by human bodies.

- Specification: 6", 12"



手指套

Finger Stall



- 用途: 适用于精密仪器的生产安装, 电子产品加工防污染及防腐蚀。
- 特点: 原材料采用100%浓缩天然乳胶, 无增塑剂, 不含硅油, 氯化物橡胶不产生异味。具有良好的ESD保护作用, 防止人体静电产生的火灾放电。
- 规格:
- | 型号 | L | M | S |
|---------|------|------|------|
| 长度 (mm) | 65 | 65 | 65 |
| 宽度 (mm) | 29 | 27 | 25 |
| 厚度 (mm) | 0.12 | 0.12 | 0.12 |

■ Application: Used in production and installation of precision instruments and processing of electronic products for pollution prevention and corrosion protection.

■ Features: The raw material adopted is 100 % concentrated natural emulsion, free of plasticizing agent and silicone oil, and not easy to incur any foreign matters when rubbed with amine. It has good ESD protection, functional prevents static discharge produced by human fraying.

■ Specification:

Type	L	M	S
Length (mm)	65	65	65
Width (mm)	29	27	25
Thickness (mm)	0.12	0.12	0.12

防尘服

Dust-proof Clothing



- 用途: 适用于电子、半导体、LCD、PCB等行业无尘车间环境。
- 特点: 防尘服分为连体防尘服和分体防尘服。除具有较好的防尘效果外, 还有优良的防静电功能。
- 规格: S, M, L, XL, XXL, XXXL
- Application: Suitable for dust prevention of dust-free workshop in electronic, semiconductor, LCD, PCB industries.
- Features: Dustproof clothing falls into two types, overall type and split type. It has fine anti-static function in addition to excellent dust prevention effect.
- Specification: S, M, L, XL, XXL, XXXL

洗网纸

Dust-adhesive Roller



- 用途: 擦拭印刷后网版上的残余油墨。
- 特点: 质地均匀, 无杂质, 无硬颗粒的存在, 耐溶剂, 与溶剂结合不会溶解。吸油墨量, 吸油墨速率快, 复盖量少。
- 规格:
- | 单位重量 (g/m ²) | 78 |
|--------------------------|---------|
| 尺寸 (mm) | 300~300 |
| 吸水速率 (S/mL) | ≤ 0.20 |
| 吸墨量 (%) | ≥ 300 |

■ Application: Used for cleaning the residual ink on a screen block after printing.

■ Features: It has even texture, free of impurity and without any hard particles. The paper is solvent-resistant and does not dissolve when combined with solvent, but has the capability of absorbing large amount of liquid with a quick absorption rate but very little amount of dust.

■ Specification:

Unit mass (g/m ²)	78
Size (mm)	300~300
Water absorption rate	≤ 0.20
Liquid absorption amount	≥ 300

防静电手套

Anti-static Glove



- 用途: 用于需用手直接操作的防静电环境如电子、仪器等行业; 防止由于静电所造成电子元件损坏、老化; 在石化行业防止由于静电所引起的摩擦、爆炸等危险。
- 特点: 具有较好的弹性和防静电性能, 避免人体产生的静电对产品造成破坏。
- 规格: S, M, L
- Application: Used in such an anti-static environment that gloves are required for operation. At electronic, instrument and meter industries. It can prevent electronic components from being damaged and aged due to static electricity. It can also be used in petrochemical industry to avoid any burning and explosion dangers caused by static electricity.
- Features: It has excellent elasticity and anti-static performance that can prevent damage caused to products by static electricity generated by human bodies.
- Specification: S, M, L



线绕滤芯

Filter Cartridge with Rank of Yarn



- 用途: 用于自来水、纯水、化学液、电镀液、饮料等的过滤。
- 特点: 本滤芯由PP熔喷纤维在多孔骨架上, 控制纤维堆积密度及滤芯形状而制成的不同过滤精度的滤芯, 该产品具有很高的过滤压力, 过滤孔径外大内小, 具有优良的深层过滤效果, 能有效除去液体中的悬浮物颗粒等。
- 规格: 精度范围: 5-100µm, 长度: 10", 20", 30", 40"。
- Application: Used in production and installation of precision instruments and processing of electronic products for pollution prevention and corrosion protection.
- Features: This filter was made of PP yarn by weaving around the multi-hole framework, which control the density of the filter layer, and shape of the filter hole so as to match different filter accuracy. This product possesses high filament density, with small internal hole diameter and large outside hole diameter, excellent deep filtering effect and the suspended substance in the liquid can be retained.
- Specification: Accuracy Range: 0.5-100 µm, Length 10", 20", 30", 40"。

PP 滤芯

PP filter



- 特点: 本滤芯由PP熔喷超细纤维制成, 具有很高的空滤率, 阻力少流量大, 过滤效果好, 纤维不易脱落, 适用于化学溶液、电镀液等多种酸碱性溶液的过滤。
- 规格: 10", 20", 30", 40", 精度范围: 5 µm, 10µm, 50µm。
- Features: This filter is made of PP fusion spray superfine fiber with the characteristics of high interspace rate, low impedance, high-efficiency, no strip separation/fine heat-resistance fiber of filter cartridge cannot easily separate from each other after polluted water passed out, be suitable of various acid and alkali chemicals plating liquid's filtering.
- Specification: 10", 20", 30", 40", Range of Accuracy: 5 µm, 10µm, 50µm。

碳纤维滤芯

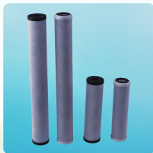
Carbon Filter



- 用途: 用于纯水、电镀液、石油化工、医疗制药、食品、饮料等行业过滤。
- 特点: 本产品由活性炭纤维添加载体制成, 具有良好的吸附性, 可吸附有机物、重金属离子、液体中带电离子的物质。
- 规格: 长度: 10", 20" 外径: 64mm±1mm 碳纤维滤芯精度: 5µm, 10µm
- Application: Used for pure water, electroplating liquid, medical and pharmaceutical, food, beverage and other industries filter.
- Features: This product is made of active carbon fiber combine with carrier with good absorb and can absorb organic substance & heavy metal ion and substance in the liquid with electronic ion.
- Specification: length: 10", 20" Od: 64mm±1mm Range of Accuracy: 5µm, 10µm

活性炭滤芯

Carbon Filter



- 用途: 饮用水的前置过滤处理; RO反渗透的前置过滤处理; 工业纯水、电子、电镀液等的过滤脱色处理; 空气净化处理。
- 特点: 本产品由活性炭颗粒加载体制成, 具有良好的吸附性, 可吸附有机物、重金属离子、液体中带电离子的物质。
- 规格: 长度10" 20" 30"
- Application: Pre-filtration of drinking water; RO infiltration of pre-filtration treatment; industrial water, electronics, electroplating liquid filtration/bleaching treatment; air purification treatment.
- Features: This product is made of active carbon fiber combine with carrier, with good absorb and can absorb organic substance & heavy metal ion and substance in the liquid with electronic ion.
- Specification: Length: 10", 20", 30"



过滤袋

Filtering Bag



- 用途: 常用于PCB电镀及五金电镀的粗级过滤, 防止阳泥外溢到废液中。
- 特点: 由丙纶、纶布制成, 强度高, 耐酸、耐碱, 耐磨损, 质地坚韧, 耐用无污染, 能有效防止阳极泥外溢, 丙纶耐温 $< 120^{\circ}\text{C}$ 。

■ Application: Commonly used in PCB plating and metal plating anodes filter to prevent leakage into the mud bath in the anodes.

■ Features: Made of polypropylene & silk cloth, high strength, acid proof and alkali resistance, abrasion resistance, and good quality, long life span and pollution-free, can prevent the mud in the positive pole from leaking out. Polypropylene heat resistance $< 120^{\circ}\text{C}$.

钛蓝

Titanium Blue



- 用途: 电镀行业
- 特点: 1. 能有效控制阳极与铜板的比例。
2. 阳极溶解性好, 产生阳极泥少。
3. 阳极材料的密度减轻更方便。
4. 阳极材料使用完全, 节省能源消耗。

■ Application: Electroplating Industry

■ Features: Can effectively control the ratio of anode and cathode. Anode solubility, resulting in a small anode mud. Anode materials, or supplementary to facilitate the loading. Anode material the use of a complete, saving energy consumption.

菲林保护膜

Film Protective Film



- 用途: 用以防止菲林使用时造成刮伤和化学损伤。
- 特点: 韧性不强, 防静电能力好, 抗粘附能力强, 耐穿耐刮能力, 耐氧化能力强, 使用寿命长。

■ 规格: 本产品有薄型, 超薄型, 防气泡, 防污, 防静电等多种可供客户选择。

规格	材料厚度 (mm)	宽度 (mm)	长度 (m)	重量 (kg)	备注
SP1000	0.100	1000	100	2.4	防静电型
SP1500	0.150	1500	100	3.6	防静电型
SP2000	0.200	2000	100	4.8	防静电型, 防污型
SP3000	0.300	3000	100	7.2	防静电型, 防污型

■ Application: To prevent the film caused by scratches and chemical damage when used.

■ Features: Good toughness, static electricity, good anti-adhesion ability, good anti-leaking capability and long service life.

■ Specification: The products are thin, ultra-thin, anti-static, pollution prevention, etc., variety of options is available to customers.

离型膜

Release Film



- 用途: 1. FPC内层分离用。
2. PCB内层分离用。
- 特点: 微细机械性能优良, 厚度公差小, 透明度高, 热收缩率低, 表面平整度好, 柔韧性良好等。

材料 规格	厚度 (mm)	宽度 (mm)	长度 (m)	重量 (kg)	备注
1000x1000	0.100	1000	100	2.4	防静电型

■ Application: Securing board when printing in one side.

■ Features: High precision, small deviation, usually used in test-printing and silk-screen in one side board.

材料 规格	厚度 (mm)	宽度 (mm)	长度 (m)	重量 (kg)	备注
1000x1000	0.100	1000	100	2.4	防静电型



黄菲林 Star Coating



- 用途:** 适用于印刷电路板干膜及喷锡工序。
特点: 透光率高UV密度。曝光区高透光。高度抗黄化。水及物理性能。高耐擦度。高对比度。尺寸稳定性。永久抗静电。

Application: Apply to printed circuit board dry and greenplating process.
Features: Shining areas of high UV intensity. Exposure area of high light transmission. A high degree of antioxidant, water and physical consumption. High-resolution. High contrast. Dimensional stability. Permanent anti-static.

镀金胶带 Gold belt



- 用途:** 防氧化保护。高压绝缘表面绝缘覆层；电容绝缘体材料。PCB合金手指高温喷锡涂覆保护。手机锂电池制造穿孔。

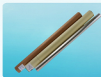
- 特点:** 本产品具有卓越的电气性能，高绝缘（ $\leq 8.5KV$ ），耐电压、低温、耐酸、碱、电绝缘、良好机械性能、耐磨损、抗撕裂、特殊粘附处理，粘着力强，剥离后被覆表面而不留残胶。

- 规格:** 不同厚度规格的规格系列。
Application: Solder protection, high temperature insulation transformer coil binding; capacitor insulation material, PCB finger temperature marking protection spray, cell phone lithium battery manufacturing binding.

- Features:** excellent electrical performance, high insulation, high temperature, low temperature, acid and alkali, low electrolysis, good mechanical properties, rubbing, tear-resistant, special viscosity treatment, adhesion strong, tear off the mask after the surface without leaving any adhesive residue.

- Specification:** Different shades of amber series of levels.

麦拉 Mylar



- 用途:** 内、外层曝光光，防焊曝光光。

- 特点:** UV光透射率高，SDI 麦拉膜透射率为90%左右，普通玻璃为85%，而一般麦拉只为60%左右。同时它也是类似玻璃的紫外线和可见光可见光。厚度厚度为4mil厚度10yards宽度可以定制。

- Application:** It is mainly used for inner or outer layer exposure and wiring prevention.

- Features:** High UV ray transmission degree. The transmission degree of the SDI layer is about 90%, compare to 85% of common glass and merely about 60% of usual Mylar. Besides, it can transmit similar ultraviolet and other visible light. The standard thickness is 4 mils and length is 10 yards, and the width can be provided as various of sizes to meet customer requirements.

层压铆钉 Standoff Rivet



- 用途:** 4-18层印刷板层压定位用。
特点: 基材为进口特殊钢板光亮洁净韧性经冲压厚度钢板含碳量67%-70%。
公差: $+0.01mm/-0.015mm$ 。
规格: 底座直径 $\Phi 5.5$
高度1.7 2.0 2.3 2.5 2.7 3.0 3.2 3.4 3.7 4.0等
盲孔 $\Phi 3.175$

- Application:** For standoff locating use in 4-18 layer printed circuit board (PCB).

- Features:** Base material are made of import special copper brightness & spoolless.

- Tolerance:** $\pm 0.005mm/-0.015mm$.

- Specification:** Base diameter $\Phi 5.5$
Height: 1.7 2.0 2.3 2.5 2.7 3.0 3.2 3.4 3.7 4.0 etc.
Bore hole $\Phi 3.175$

销钉 Pin Series for Positioning



- 用途:** 钻孔、铣板定位用。
特点: 光亮清洁。基材为特种钢。
公差: $+0/-0.01mm$ 。
钉头: 圆头或磨面。
规格:

- 针孔规格: 直径 $\Phi 0.1, \Phi 0.12, \Phi 0.15, \Phi 0.175$
长度: 13, 15, 15.8, 18, 20, 23, 25, 28
针头规格: 直径 $\Phi 4-5.0$ (间隔0.05)
长度: 13, 15, 15.8, 18, 20, 21, 8
直径 $\Phi 0.75-0.6$ (间隔0.05) 长度: 15.8

- Application:** Positioning when in hole drilling and panel milling

- Features:** Brightness and pureness in surface. Base material are made by special steel.

- Tolerance:** $\pm 0/-0.01mm$

- Nail head:** round head or chamfer end

- Specification:** Pin for drilling use: Diameter $\Phi 0.1, \Phi 0.12, \Phi 0.15, \Phi 0.175$
Length: 13, 15, 15.8, 18, 20
Pin for milling use: Diameter $\Phi 4-5.0$ (interval 0.05 each)
Length: 13, 15, 15.8, 18, 20
Diameter $\Phi 0.75-0.6$ (interval 0.05 each) Length: 15.8



曝光钉

Exposure Pin



■ 用途: 双面、多层印制板光成像图形转移曝光专用定位钉。

■ 公差: $\pm 0/-0.02\text{mm}$ 。

■ 钉头: 平头、尖头、圆头。

■ 规格: $\Phi 5.0 \times 1.2 \times \Phi 3.1$
 $\Phi 5.0 \times 1.5 \times \Phi 3.0$
 $\Phi 5.0 \times 1.5 \times \Phi 3.15$
 $\Phi 6.0 \times 1.4 \times \Phi 3.1$
 $\Phi 6.0 \times 1.45 \times \Phi 3.15$
 $\Phi 6.0 \times 1.45 \times \Phi 3.175$

■ Application: Special pilot pins use for videos image's divert & exposure in single/multi-layer printed circuit board.

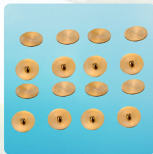
■ Tolerance: $\pm 0/-0.02\text{mm}$

■ Nail head: Flat head, peak head, round head

■ Specification: $\Phi 5.0 \times 1.2 \times \Phi 3.1$
 $\Phi 5.0 \times 1.5 \times \Phi 3.0$
 $\Phi 5.0 \times 1.5 \times \Phi 3.15$
 $\Phi 6.0 \times 1.4 \times \Phi 3.1$
 $\Phi 6.0 \times 1.45 \times \Phi 3.15$
 $\Phi 6.0 \times 1.45 \times \Phi 3.175$

丝印铜钉

Silk Screen Copper Pin



■ 用途: 制作钉床用, 板两面可同时印刷, 节约时间提高效率。

■ 特点: 特殊进口钢材, 经久耐用。

■ 公差: $\pm 0/-0.02\text{mm}$

■ 规格: $\Phi 15 \times 3.9 \times 3.0$ (尖头)
 $\Phi 15 \times 5.3 \times 3.1$ (平头)
 $\Phi 15 \times 5.1 \times 3.0$ (平头)
 $\Phi 15 \times 4.2 \times 3.1$ (尖头)

■ Application: Use for pin bed making, it can print on both side of the board, save times and improve efficiency.

■ Features: Import special steel.

■ Tolerance: $\pm 0/-0.02\text{mm}$

■ Specification: $\Phi 15 \times 3.9 \times 3.0$ (Peak head)
 $\Phi 15 \times 5.3 \times 3.1$ (Flat head)
 $\Phi 15 \times 5.1 \times 3.0$ (Flat head)
 $\Phi 15 \times 4.2 \times 3.1$ (Peak head)

刺穿PIN

Piercing Pin



■ 用途: 双面、多层印制板光成像图形转移曝光钉专用定位钉。

■ 公差: $\pm 0/-0.02\text{mm}$ 。

■ 钉头: 尖头。

■ 头部形状: 四边形。

■ 规格: $\Phi 5.0 \times 1.2 \times 3.1$
 $\Phi 5.0 \times 1.5 \times \Phi 3.0$
 $\Phi 5.0 \times 1.5 \times \Phi 3.15$
 $\Phi 6.0 \times 1.4 \times \Phi 3.1$
 $\Phi 6.0 \times 1.45 \times \Phi 3.15$
 $\Phi 6.0 \times 1.45 \times \Phi 3.175$

■ Application: special pilot pins use for videos image's divert & exposure in single/multi-layer printed circuit board.

■ Tolerance: $\pm 0/-0.02\text{mm}$

■ Nail head: Peak head

■ Shape of the head: Quadrangle

■ Specification: $\Phi 5.0 \times 1.2 \times 3.1$
 $\Phi 5.0 \times 1.5 \times \Phi 3.0$
 $\Phi 5.0 \times 1.5 \times \Phi 3.15$
 $\Phi 6.0 \times 1.4 \times \Phi 3.1$
 $\Phi 6.0 \times 1.45 \times \Phi 3.15$
 $\Phi 6.0 \times 1.45 \times \Phi 3.175$

单面/双面丝印钉

Single/Double-side Guide Pin



■ 用途: 单面丝印钉用于对板单面印刷时起固定作用。双面丝印钉作钉床用, 即完固得第一面后, 不必换板子, 利用钉床托起PCB即可印第二面, 节约时间提高效率。

■ 特点: 特殊不锈钢材质, 精度高, 偏差小, 经久耐用。

■ 公差: $\pm 0.005/-0.02\text{mm}$

■ 规格: 多种规格, 可定制。

■ Application: Securing board when printing in one side. Double side silk screen & locate use in pin bed making, no need to preset off the board after the first side of the retardant are finished printing, just make use of the pin bed to set off the PCB then the second side can be printed, save time and improve efficiency.

■ Features: Base materials are made by special steel. Special dimension can be produce by custom-made.

■ Tolerance: $\pm 0.005/-0.02\text{mm}$

■ Specification: Can order by specification



隔板胶片

Plastic Card



- 特点: 专为印制板而设计制作, 板与板之间用胶片间隔, 防止产品摩擦、划伤、损坏, 防止产生静电。

- 公差: $\pm 3\text{mm}/\pm 1\text{mm}$

- 规格: 可根据客户需求制作不同尺寸不同颜色的胶片。

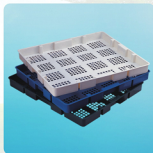
- Features: This plastic card is exclusively design for printed circuit board, it used to separate the board to as to avoid scratch/damage or quality went bad.

- Tolerance: $\pm 3\text{mm}/\pm 1\text{mm}$

- Specification: Different dimension & colors can be made according to customer's requirements.

周转胶筐

Plastic Container Box



- 特点: 专为印制板设计制作, 每座装30-40panel(拼板), 板与板之间用胶片间隔, 防止产品摩擦、划伤、损坏、变形。

- 规格: 小筐: $18'' \times 24''$ (457*610mm) 内尺寸
大筐: $22'' \times 26''$ (560*660mm) 内尺寸
筐高度: 70mm
筐颜色: 黄色、蓝色、绿色、白色、红色

- Features: This product is exclusively designed for PCB. Each box can contain 30-40 panels. Plastic cards are placed between panels to prevent them from abrasion, scratching, damage and deterioration.

- Specification: Small box: $18'' \times 24''$ (457*610mm)
Large box: $22'' \times 26''$ (560*660mm)
Height of the box: 70mm
Box color: Yellow, Blue, Green, White, Red.

钻咀胶粒

Drill colloidal



- 特点: 钻孔时套于钻咀上, 选用进口橡胶性塑胶, 弹性性能好, 多种颜色能满足区分不同规格钻咀需要。

- 规格: 内径(a): $7.6 \pm 0.05\text{mm}$
外径(b): $3.0 \pm 0.05\text{mm}$
高度(c): $4.6 \pm 0.05\text{mm}$

- Features: For drilling hole/hole stuffing in dry film process. Acid & alkali resistance, it will not dissolve or bulge in the acid plating copper liquid. Reusable.

- Specification: Internal diameter(a): $7.6 \pm 0.05\text{mm}$
External diameter(b): $3.0 \pm 0.05\text{mm}$
Height(c): $4.6 \pm 0.05\text{mm}$

塞孔胶粒

Plastic Pin for stuffing holes



- 特点: 干膜工序钻孔/塞孔用, 耐酸阻, 在酸性镀铜液中不会溶胀, 可反复使用。

- 规格: $\Phi 1.0 \times 2.5 \times 13$ $\Phi 1.7 \times 5.0 \times 14.8$
 $\Phi 2.0 \times 6.0 \times 23$ $\Phi 3.0 \times 8.0 \times 23$
 $\Phi 1.5 \times 3.5 \times 16$ $\Phi 1.5 \times 5.5 \times 30$ 等

- Features: For drilling hole/hole stuffing in dry film process. Acid & alkali resistance, it will not dissolve or bulge in the acid plating copper liquid. Reusable.

- Specification: $\Phi 1.0 \times 2.5 \times 13$ $\Phi 1.7 \times 5.0 \times 14.8$
 $\Phi 2.0 \times 6.0 \times 23$ $\Phi 3.0 \times 8.0 \times 23$
 $\Phi 1.5 \times 3.5 \times 16$ $\Phi 1.5 \times 5.5 \times 30$ 等



钻孔对位胶片

plastic card for use in hole-drilling positioning

- 特点: 用于钻孔时胶片的孔位作用, 具有一定的强度, 抗热性, 不易变形, 不易脱落等特点。

■ 规格: 24" x 48" x 0.25mm,

■ Features: This product is used to locate the hole position of the board while in hole-drilling, which has a characteristic of comparative crimp resistance, heat resistance, difficulty to be deformed of shape.

■ Specification: 24" x 48" x 0.25mm

设备辅料系列 Equipment Accessory Series

PU, PVA, PVC吸水棉

PU/PVA/PVC Absorbent Sponge

- 特点: 表面光滑无气孔, 弹性佳。吸水性能可达自身重量的8-10倍, 正常寿命为3-6个月。

■ 规格:

尺寸 (mm)	重量 (g)	厚度 (mm)
10	100	10
20	200	10
30	300	10
40	400	10
50	500	10
60	600	10
70	700	10
80	800	10
90	900	10
100	1000	10

- Features: Brightness & spotless surface without air vent, good flexibility, it can absorb as 8-10 times weight of water as themselves, usual life span is 3-6 months.

不织布磨刷
Non-Woven grinding Brush

- 用途: 钻孔后去除毛刺。
- 特点: 磨干磨前清洗
磨干磨前清洗
多量板压金样出附膜及表面氧化膜的清洗
磨孔板板及油墨去除
不锈钢板清洗
印刷基板清洗

■ Application: After the removal of drilling burr.

■ Features: cleaning before put dry film
Cleaning before gold-soldering coating
Cleaning resin and surface oxidation film
Wipe off resin and printing ink
Cleaning board of stainless steel
Cleaning Printing baseboard



尼龙磨刷

Nylon Brush

- 特点: 磨料磨粒粘附强度 > 7.44N/cm²
耐磨磨粒脱落率 < 0.5-0.7/2500cm²
< 0.7-1.0/2500cm²

■ 规格:

尺寸 (mm)	重量 (g)	厚度 (mm)
10	100	10
20	200	10
30	300	10
40	400	10
50	500	10
60	600	10
70	700	10
80	800	10
90	900	10
100	1000	10

- Features: Pull resistance strength of brush nylon materials > 7.44N/cm²
Density of brush silk on the stick: < 0.5-0.7/2500 cm²
< 0.7-1.0/2500 cm²





冷埋树脂

Acrylic Hardener Clear Resin



- 用途:** 用于制作微切片。
- 特点:** 由粉、液相含的室温快速固化胶，5-10分钟即可固化。

- Application:** Used for micro-cutter / micro slice making
- Features:** The acrylic hardener clear Resin is combined with liquid and powder in room temperature, it can fast cure within 5-10 minutes.

水晶胶

Polyester Resin



- 用途:** 用于制作微切片。
- 特点:** 水晶透明，无气泡，25-45分钟即可固化。固化时内部温度为85℃。

- Application:** Used for micro-cutter / micro slice making
- Features:** Crystal transparent, free of bubbles, it can cure within 25-45 minutes. The cure inner temperature is 85℃.

抛光粉

Abrasive Grain



- 用途:** 用于微切片抛光。与抛光绒布一起使用效果更佳。
- 特点:** 卓越的抛光效果，节省抛光时间。
- 规格:** 0.05um/0.3 um.
- Application:** Used for polishing micro-cutter / micro slice making, it can reach a better effect if used together with polishing cloth.
- Features:** Excellent polishing effect and time-saving.

Specification: 0.05um/0.3 um

反复性水晶胶模

Reusable Polyester Resin Holder



- 用途:** 用于制作微切片的模具
- 规格:** 32mm×27mm(直径×高)

Application: Used for micro-cutter / micro slice made making

Specification: 32mm×27mm(Diameter/Height).

样板夹

Panel Clamp



- 用途:** 主要用于微切片时将所做的小样板夹住固定，以便其能够平稳的立在切片槽内。
- 特点:** 弹性好且耐，平衡性好，使用方便。
- Application:** Mainly used for securing small samples when making cutting, so to make it stand in the cutting mold stably.
- Features:** Excellent polishing effect and time-saving.

一次性水晶胶模

Disposable Polyester Resin Holder



- 用途:** 用于制作微切片的模具。
- 特点:** 内有小框，方便样品固定；正反两面均可使用。
- 规格:** 20×20×28mm(方形)/30.3mm×18.2mm/30.7mm×12.5mm(圆形)

Application: Used for micro-cutter / micro slice made making

Features: With small grillwork frame, convenient for securing the samples, usable for both sides.

Specification: 20× 20× 28mm(square)/30.3mm×18.2mm/30.7mm×12.5mm(circular)



水砂纸

Waterproof Abrasive Paper



用途: 用于微切片的研磨

特点: 防水, 耐磨性好。

规格: $\phi 8"$, $\phi 10"$, $\phi 12"$

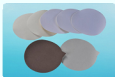
Application: Used for grinding of micro-slicer / micro-slice

Features: Waterproof, erosion resistant to electrolytic liquid, good abrasion resistance.

Specification: $\phi 8"$, $\phi 10"$, $\phi 12"$

抛光绒布

Polishing Cloth



用途: 用于微切片的抛光。

特点: 抛光效果好, 使用寿命长, 与抛光粉一起使用。

规格: $\phi 8"$

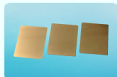
Application: Used for final polishing of micro-slicer / micro-slice making

Features: Good polishing effect and reusable, better result when used together with polishing powder.

Specification: $\phi 8"$

黄铜片

Latten-tin



用途: 用于电镀液分析, 作赫尔姆特试验。

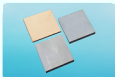
规格: $100 \times 65 \times 0.25\text{mm}$ (长 $\times$ 宽 $\times$ 厚)
 $100 \times 65 \times 0.15\text{mm}$
 $100 \times 65 \times 0.3\text{mm}$

Application: Used for analysis of chemical liquid, and Her trough cathode testing.

Specification: $100 \times 65 \times 0.25\text{mm}$ (长 $\times$ 宽 $\times$ 厚)
 $100 \times 65 \times 0.15\text{mm}$
 $100 \times 65 \times 0.3\text{mm}$

阳极片

Anode Strip



用途: 用于电镀液分析, 作赫尔姆特试验。

规格: $67 \times 63 \times 3\text{mm}$ (长 $\times$ 宽 $\times$ 厚) (铜阳极)
 $64 \times 61 \times 5\text{mm}$ (长 $\times$ 宽 $\times$ 厚) (铂阳极)
 $65 \times 63 \times 2\text{mm}$ (长 $\times$ 宽 $\times$ 厚) (铂阳极)

Application: Used for analysis of chemical liquid, and Her trough cathode testing.

Specification: $67 \times 63 \times 3\text{mm}$ (长 $\times$ 宽 $\times$ 厚) (Copper Anode)
 $64 \times 61 \times 5\text{mm}$ (长 $\times$ 宽 $\times$ 厚) (Platinum Anode)
 $65 \times 63 \times 2\text{mm}$ (长 $\times$ 宽 $\times$ 厚) (Platinum Anode)

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