



材料及加工综合服务商

3D Printing Materials and Processing  
Integrated Service Provider

银禧科技 智造梦想  
Creat & Print

广东银禧科技股份有限公司  
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**Silver** 银禧科技







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# 01 公司简介

## COMPANY PROFILE

广东银禧科技股份有限公司（股票简称：银禧科技，代码：300221）创立于1997年，是一家集高性能高分子新材料研发、生产和销售于一体的国家级高新技术企业。目前公司已在东莞虎门、道滘、中山、苏州、深圳建立了七大研发与制造基地，形成年产30万吨改性高分子材料的生产能力，产品被广泛应用于3D打印、LED灯具、IT电子、家用电器、汽车、玩具、电线电缆、道路材料等领域。目前，公司成为了国内集3D打印耗材研发、生产、加工服务和销售于一体的领军企业。

作为中国3D打印产业联盟副理事长单位以及东莞市3D打印技术产业联盟的牵头企业，银禧科技将持续联合行业的各项资源，积极推动3D打印的普及，促进应用市场的推广。

Guangdong silver Age Sci. & Tech. Co., Ltd. (Stock No. 300221), established in 1997, is a national advanced technology enterprise manufacturing high performance polymer materials. With a strong R&D team, mature production technology and expanding sales network, the company has built up five R&D and production bases in Guangdong (Humen, Daojiao, Zhongshan) and Suzhou (Wuzhong), with an annual production capacity of 300 million tons.

Products are widely applied in the fields of 3D printing, LED, electronic components, household appliances, automobile parts, electric tools, toys, wires & cables, construction materials, etc. After years of development, Silver Age has become the Chinese leading enterprise in the business of 3D printing (materials R&D, production, printing services and sales).

As the vice president of China 3D Printing Technology Industry Alliance and the leading enterprise of Dongguan 3D Printing Industry Alliance, Silver Age will continue promoting 3D printing applications by uniting resources of the industry.



# CORE COMPETENCE



## 02 核心竞争力 CORE COMPETENCE

### 1 研发创新 R&D INNOVATION

2013年，银禧成功引进了以华中科技大学史玉升教授为带头人的“3D打印高分子复合材料研发及产业化创新团队”，并入选了广东省第四批引进科技创新科研团队，也是唯一一家3D打印领域的创新团队。

以史玉升主导的5名核心成员均为国内外一流大学博士或博士后，其中教授1人、副教授4人、博士生导师1人，平均年龄为41岁。在3D打印领域平均拥有10年以上的研究经验，先后主持国家及省部级项目7项，支持金额794万元，历年来主持及参与国家、国际合作及省部级项目20余项，支持金额约8000万元。研发新产品12项、新工艺5项、新技术3项，其中5项已产业化，累计销售额36000万元。团队核心成员获国家级奖励1项、省部级奖励5项。

In 2013, Silver Age cooperated with "3D printing polymer composites R&D and industrialization of innovation team", leaded by Prof. Shi Yusheng from Huazhong University of Science and Technology ( HUST ), which was selected the 4th batch Introduced Scientific and Technological Innovation Team of Guangdong Province as the only team in the field of 3Dprinting.

Five main members of Prof. Shi's team are doctoral and postdoctoral researchers from international first-class universities ( including 1 professor, 4 associate professors, and 1 doctoral supervisor) with average of 10-years research experience in the field of 3D printing. They had successively presided over 7 national and provincial projects ( 7.94 million Yuan supporting amount ), and more than 20 of national or international cooperation and provincial-level projects ( 80 million Yuan supporting amount ) over the years. This team had developed 12 new products, 5 new processing technics and 3 new technologies. Five of these developments had accomplished industrialization, racked up more than 360 million Yuan in sales. The core members of the team won 1 national award and 5 provincial awards.



#### 人员配备

由博士、硕士构成的技术人员近百人，占员工人数10%以上，公司本科以上学历占比30%，并有17位国内重点高校（四川大学、上海交通大学、中山大学、华南理工大学、华中科技大学等）专家参与高分子新材料的研究开发。

#### Staffing

Nearly a hundred technical researchers with doctor's or master's degree compose over 10% of the employees, and staffs with bachelor's degree or higher compose over 30% of the employees. Experts from 17 domestic key universities (Sichuan University, Shanghai Jiaotong University, Sun Yat-Sen University, South China University of Technology, Huazhong University of Science and Technology, etc.) were involved in the research and development of company's new polymer materials.



#### 实验室规格

占地500平方米，通过CNAS国家级认证的实验室。

#### Laboratories

A 500 m<sup>2</sup> laboratory, with CNAS national certification.



#### 技术支持与服务

银禧科技拥有资深的技术服务人员，为客户提供产品售前、售后技术支持，提供现场工艺支持及品质问题分析。银禧科技的技术服务团队凭借丰富的技术经验，为您提供365天24小时的最优解决方案。

#### Technical support & Service

Silver Age has experienced technical professionals providing customers with 24/7 sales technical consulting, on-site technology support and quality defect analysis. Technical service team in Silver Age will offer you the optimum solution with their significant technical experience.



## 2 制造体系

### MANUFACTURING SYSTEM

### 四大生产基地

Four major production bases

银禧科技立足于高分子新材料方向，基于搭建开放式价值链的合作模式，根据市场战略发展布局，相继在东莞虎门、道滘、中山和苏州吴中建立了五大研发与制造基地。形成年产30万吨改性高分子材料的生产能力，成为中国重要的高分子新材料生产企业之一。

According to the marketing strategy and industrial lay out, Silver Age has built up five R&D and production bases in Guangdong (Humen, Daojiao, Zhongshan) and Suzhou (Wuzhong), with an annual polymer production capacity of 300 million tons. Silver Age is one of China's leading polymer manufacturers.



## 3 认证

### CERTIFICATION

### 公司体系认证

Certification of company management

英国BSI ISO9001质量管理体系认证（2003）  
英国BSI ISO14001环境管理体系认证（2007）  
英国BSI ISO/TS16949汽车质量管理体系认证（2008）

British BSI ISO9001 Quality Management System Certification (2003) .  
British BSI ISO14001 Environmental Management System Certification (2007) .  
British BSI ISO/TS16949 Automobile Quality Management System Certification (2008) .



### 产品认证

Product certification

公司产品通过了欧盟CE认证，所有牌号产品均有SGS出具的ROHS、卤素、REACH等检测报告，为产品的质量提供了强有力的保障。

Our products are fully CE & RoHS compliant. All products come with test reports issued by SGS, providing a powerful warranty of quality.



## 4 品质管理

### QUALITY MANAGEMENT

在顶级进口品质原材料的基础上，公司不仅对产品进行多次人工检测确认，在原材料、生产流程、包装工艺上实施二次质检方案，还从德国、日本等引进了各种先进设备，毕竟过硬的品质离不开先进基础硬件的支撑，如用于线材直径检测的激光测径仪，线材配色的分光仪，粉末粒度分布的激光粒度仪，观察粉末颗粒外观形貌的金相显微镜等，以确保向客户提供高质量的产品。

Silver Age not only has multiple manual inspections in storage, production and packaging processes, but also introduces advanced equipment (German & Japanese) for quality controls. Laser diameter gauge, spectrometer, laser particle size analyzer, metalloscope, etc, help us to deliver stable and reliable products to our customers.

### 检测设备

Testing equipment

#### 激光测径仪

Laser diameter gauge

用途：线材直径检测，将线径误差控制在±0.02毫米以内，达到A级品质。  
Application: Filament diameter control, diameter error within± 0.02 mm, achieving grade A quality.



#### 分光仪

Spectrometer

用途：可精准配出各种定制需求颜色。  
Application: Accurately customize filament color.



#### 激光粒度仪

Laser particle size analyzer

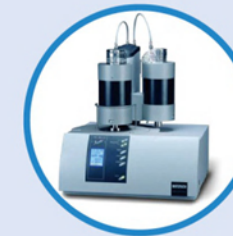
用途：精确检测控制物料粒度分布，达到合格范围。  
Application: Particle size distribution control.



#### 差示扫描量热仪

Differential scanning calorimeter

用途：用于监控每批次物料的熔点、结晶温度等热焓变化。  
Application: Monitors the melting point, crystallization temperature of every batch.



#### 热失重分析仪

Thermo gravimetric analyzer

用途：测定粉末的挥发物质含量。  
Application: Measures content of volatile substances.



#### 金相显微镜

Metalloscope

用途：用于观察粉末颗粒外观形貌。  
Application: Observes appearance of powder particles.



#### 粉末综合性能分析

Powder comprehensive performance analyzer

用途：测定粉末堆积密度，安息角等性能。  
Application: Measures powder performance, including bulk density and angle of repose, etc.



#### 粉末含湿率测定仪

Powder moisture content tester

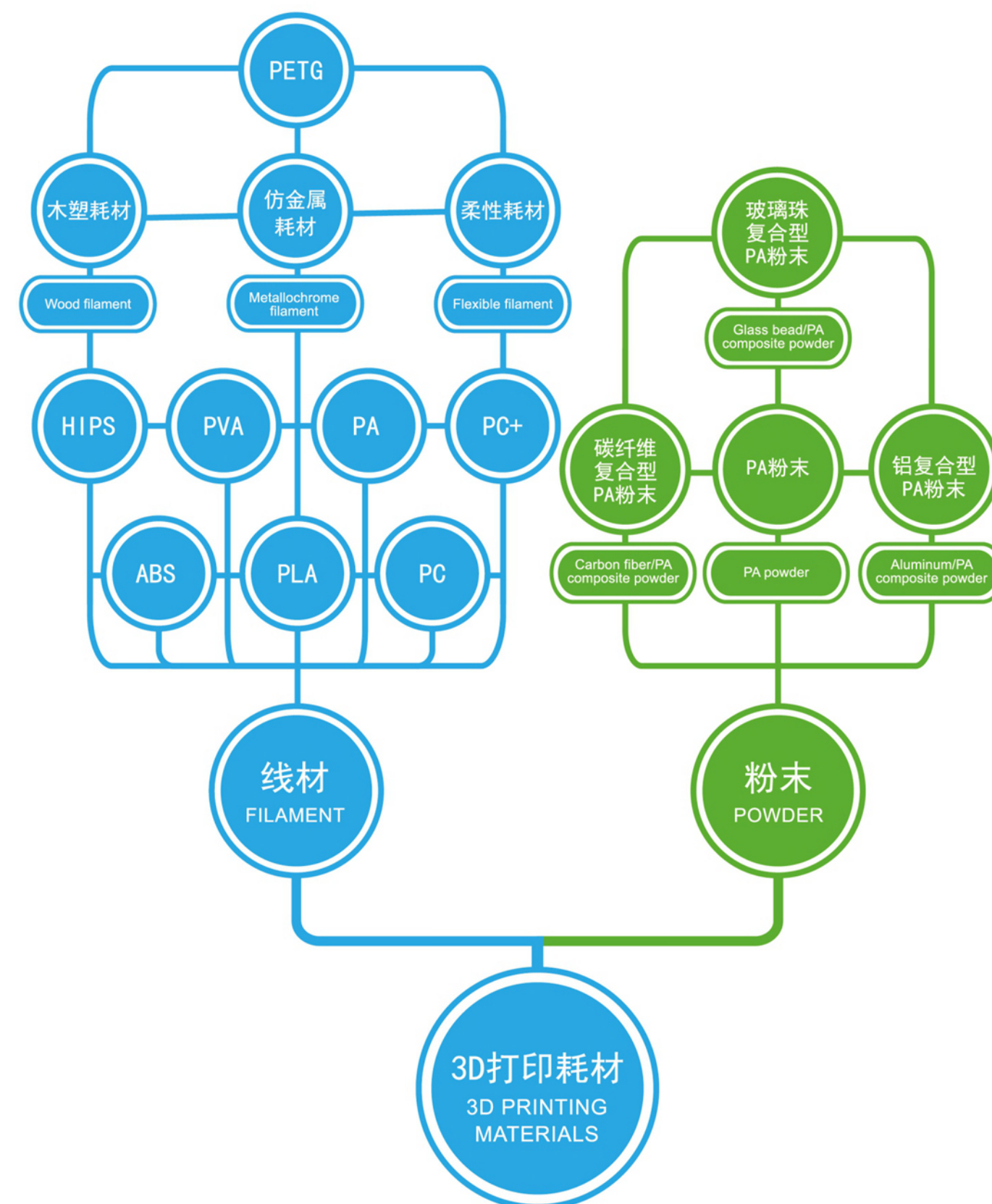
用途：测定粉末的出厂含湿率。  
Application: Measures moisture content of powder.







# OUR PRODUCTS



03

我们的产品  
OUR PRODUCTS

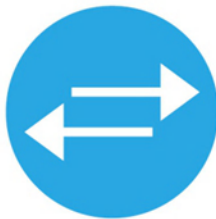


线材产品的优势

THE ADVANTAGE OF FILAMENT

银禧3D打印线材不仅经过  
多次内部材料稳定性测试，更通过国内外  
众多知名品牌3D打印机的反复测试，  
其优势如下：

The performance of Silver Age 3D printing filament was  
proven not only by internal material stability tests, but  
also by numerous well-known 3D printers.  
Its advantages are as follows:



不堵头：流动性好，送料顺畅，  
输出稳定。

No jamming: Excellent fluidity,  
feeding smoothly, stable output.



不拉丝：制件更易塑形，表面  
光泽性优异。

No drawing: Shaping easily,  
excellent surface glossiness.



无气泡：决定耗材品质的重要  
指标。

No bubbles: Critical factor of the  
filament quality.

- 线径误差小（±0.02）：银禧3D打印耗材可控制在±0.02。
- 颜色多样可定制，制件成品效果佳。

· Small diameter error: Diameter error of Silver Age 3D printing filament can be controlled within ±0.02.

· Various color options, customization available.

11款线材参数对比表格

Eleven wire parameters comparison table

| 材料种类<br>Materials name                                            | 尺寸<br>Size   | 标准公差<br>Tolerance<br>roundness | 底板温度<br>Baseplate<br>temperature | 打印温度<br>Print<br>temperature     | 颜色<br>Colors  | 净重<br>Filament<br>Net Weight |
|-------------------------------------------------------------------|--------------|--------------------------------|----------------------------------|----------------------------------|---------------|------------------------------|
| 低温PLA、PLA、高强度PLA<br>Low temperature PLA、PLA、<br>High strength PLA | 1.75mm/3.0mm | ±0.02mm                        | 不加热/50-60℃                       | 195-210℃或<br>175-195℃<br>(低温PLA) | 多色<br>(可定制颜色) | 1kg/卷                        |
| 经典ABS、高强度ABS<br>Classic ABS、<br>High strength ABS                 | 1.75mm/3.0mm | ±0.02mm                        | 100-110℃                         | 220-260℃                         | 多色<br>(可定制颜色) | 1kg/卷                        |
| PVA耗材<br>PVA Filament                                             | 1.75mm/3.0mm | ±0.02mm                        | 不加热/60-80℃                       | 190-210℃                         | 本色            | 500g/卷                       |
| 木塑耗材<br>Wood Filament                                             | 1.75mm/3.0mm | ±0.02mm                        | 不加热/50-60℃                       | 190-220℃                         | 本色            | 500g/卷                       |
| 柔性耗材<br>Flexible Filament                                         | 1.75mm/3.0mm | ±0.02mm                        | 不加热                              | 210-230℃                         | 白、红、绿         | 1kg/卷                        |
| PA耗材<br>PA Filament                                               | 1.75mm/3.0mm | ±0.02mm                        | 100-110℃                         | 240-260℃                         | 本色、白、黑        | 500g/卷                       |
| PC耗材<br>PC Filament                                               | 1.75mm/3.0mm | ±0.02mm                        | 100-110℃                         | 240-260℃                         | 本色、白、黑        | 500g/卷                       |
| PC+耗材<br>PC+ Filament                                             | 1.75mm/3.0mm | ±0.02mm                        | 90-110℃                          | 220-260℃                         | 本色            | 1kg/卷                        |
| HIPS耗材<br>HIPS Filament                                           | 1.75mm/3.0mm | ±0.02mm                        | 100-110℃                         | 220-260℃                         | 多色<br>(可定制颜色) | 1kg/卷                        |
| 仿金属色耗材<br>Metallic color<br>Filament                              | 1.75mm/3.0mm | ±0.02mm                        | 不加热/50-60℃                       | 185-210℃                         | 金、银、红铜、<br>青铜 | 1kg/卷                        |
| PETG耗材<br>PETG Filament                                           | 1.75mm/3.0mm | ±0.02mm                        | 100-110℃                         | 230-260℃                         | 本色            | 1kg/卷                        |





【PLA耗材】 【PLA Filament】

性能特点

- 专业改性，强度高
- 韧性好，制件不拉丝，不翘曲
- 可生物降解，安全环保

Features

- Professional modification, high strength.
- Good toughness, no drawing, no warping.
- Biodegradable materials, safe, environmental friendly.

应用：文化创意、玩具礼品

Application: Cultural& creative products, toys, gifts.



低温PLA/PLA/高强度PLA材料对比表  
Low temperature PLA/PLA/high strength PLA comparison table

| 材料<br>Material  | 低温PLA<br>Low temperature PLA                                                                                                                                                                                                                                                                                                                                                                                                                        | PLA耗材<br>PLA filament                                                                                                                                                                                                     | 高强度PLA<br>High strength PLA                                                                                                                                                                                                                                                                                      |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 优势<br>Advantage | <div><ul style="list-style-type: none"><li>· 能实现低温打印，对打印机喷嘴的要求低，从而延长打印机使用寿命；</li><li>· 低温打印同时具有高效节能的特点；</li><li>· 韧性更好，品质有保障。</li></ul></div> <div><ul style="list-style-type: none"><li>· Can achieve low temperature printing, lower requirement of the printer nozzle, therefore longer service life of the printer;</li><li>· Printing at low temperature, high efficiency and great energy saving;</li><li>· Better toughness.</li></ul></div> | <div><ul style="list-style-type: none"><li>· 通用性强，适用范围广，韧性和强度适中。</li></ul></div> <div><ul style="list-style-type: none"><li>· Great versatility, wide range of applications, good toughness and strength.</li></ul></div> | <div><ul style="list-style-type: none"><li>· 强度更高，力学性能更好，可满足工业用途。与SLA打印的手板模型比，高强度PLA成本低。</li></ul></div> <div><ul style="list-style-type: none"><li>· Higher strength, better mechanical properties, meets industrial application requirements. Lower cost than regular PLA in printing a model.</li></ul></div> |

【ABS耗材】 【ABS Filament】

高强度ABS制件

性能特点

- 专用原料，精准工艺
- 制件强度高，气味低
- 加工温度宽，打印翘曲低

Features

- Special raw materials, precise processing
- High strength, low odor.
- Wide range of processing temperature, low warping.

应用：工业手板、机械零件。

Application: Industry models, mechanical parts.

经典ABS/高强度ABS材料对比表  
Classic ABS/high strength ABS comparison table

| 材料<br>Material  | 经典ABS<br>Classic ABS                                                                                                                                                                      | 高强度ABS<br>High strength ABS                                                                                                                                                                                                                                                     |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 优势<br>Advantage | <div><ul style="list-style-type: none"><li>· 通用性强，适合绝大多数打印机。</li></ul></div> <div><ul style="list-style-type: none"><li>· Great versatility, applicable to most printers.</li></ul></div> | <div><ul style="list-style-type: none"><li>· 强度更高，制件力学性能好，制件层间粘接力高，适合工业手板模型打印。</li></ul></div> <div><ul style="list-style-type: none"><li>· Higher strength, good mechanical properties, great adhesion between layers. Suitable for industrial model printing.</li></ul></div> |





### 【PVA水溶性支撑耗材】

### 【PVA filament】

#### 性能特点:

- 专业改性, 硬度高
- 打印过程中低气味
- 水溶速率快, 与成型件的粘接性好

应用: 双喷头打印机

#### Feature:

- Professional modification, high hardness.
- Low odor in printing process.
- Excellent water solubility and good adhesion with parts.

Application: Twin nozzle printer.



### 【柔性耗材】

### 【Flexible Filament】

#### 性能特点:

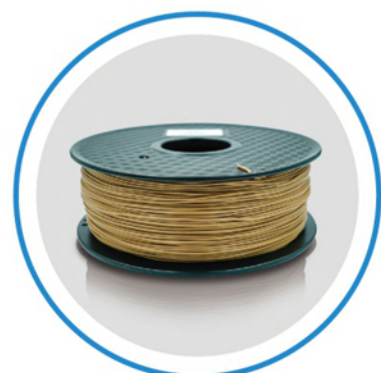
- 易进料, 流动性良好
- 高柔韧性, 高回弹性
- 打印气味低, 高粘接力

应用: 玩具、工艺品、鞋材等模型打印

#### Feature:

- Feeding easily, good fluidity.
- High flexibility, high resilience.
- Low odor, good adhesion.

Application: models, toys, crafts, shoe materials, etc.



### 【木塑耗材】

### 【Wood Plastic Composite Filament】

#### 性能特点:

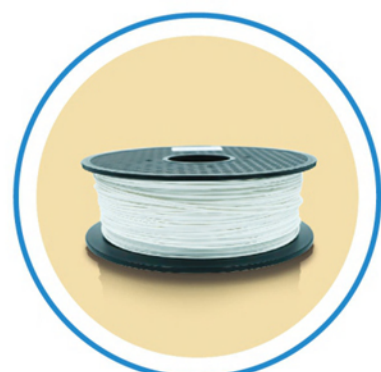
- 高韧性
- 可打磨可抛光, 适合后期处理打印件木质感强烈

应用: 景观设计模型的打印

#### Feature:

- High toughness.
- Suitable for polishing and other post-processing wood texture.

Application: Landscape design model.



### 【HIPS耗材】

### 【HIPS filament】

#### 性能特点:

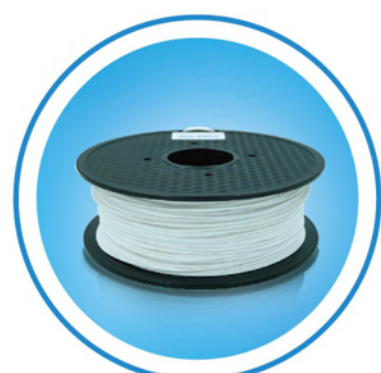
- 性能稳定
- 易加工成型

应用: 玩具、机械零件的打印

#### Feature:

- Stable and reliable performance
- Excellent processability.

Application: Toys and machine parts.



### 【PETG耗材】

### 【PETG filament】

#### 性能特点:

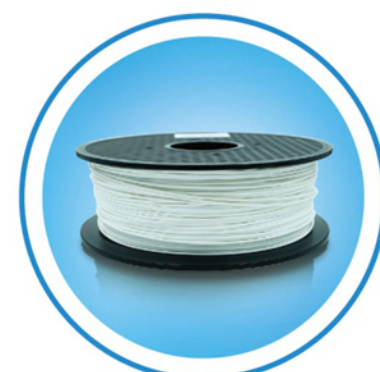
- 高硬度
- 收缩率低
- 可耐酸碱

应用: 玩具、工艺品等模型的打印

#### Feature:

- High hardness.
- Low shrinkage rate.
- Resistant to acid and alkali.

Application: Toys, crafts and other models.



### 【PC耗材】

### 【PC filament】

#### 性能特点:

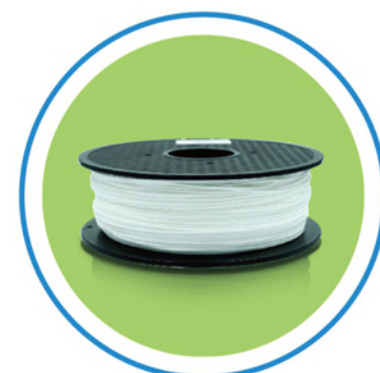
- 耐冲击良好
- 易加工成型
- 流动性好, 易进料

应用: 工艺用品、机械零件的打印

#### Feature:

- Great impact strength.
- Excellent processability.
- Easy feeding, good fluidity.

Application: Crafts, machine parts.



### 【PA耗材】

### 【PA Filament】

#### 性能特点:

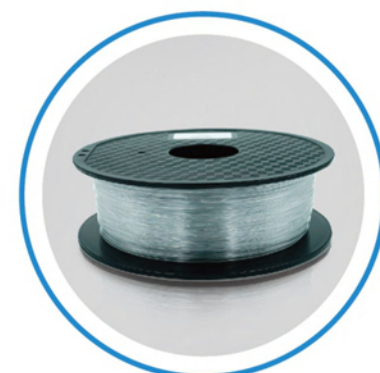
- 易进料, 流动性好
- 强度高韧性高
- 打印制件层间粘接性好

应用: 工艺用品、机械零件的打印

#### Feature:

- Easy feeding, good fluidity.
- Good strength and high toughness.
- Great adhesion between layers.

Application: Crafts, machine parts.



### 【PC+耗材】

### 【PC+ filament】

#### 性能特点:

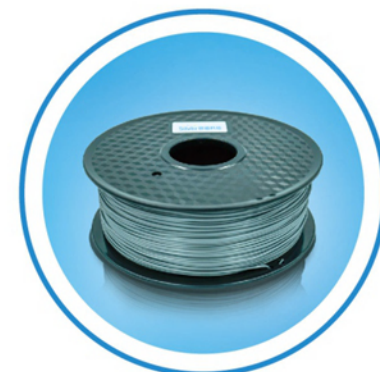
- 收缩率低
- 易加工成型
- 环保无毒

应用: 玩具、工艺品等模型的打印

#### Feature:

- Low shrinkage rate.
- Excellent processability.
- Non-toxic and environmental friendly.

Application: Toys, crafts and other models.



### 【仿金属耗材】

### 【Metallic color Filament】

#### 性能特点:

- 光泽度高
- 金属质感

应用: 玩具、工艺品等模型的打印

#### Feature:

- High glossiness.
- Metallic color.

Application: Toys, crafts and other models.

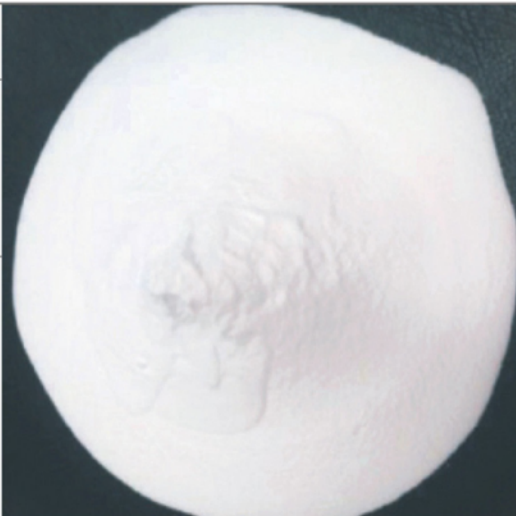


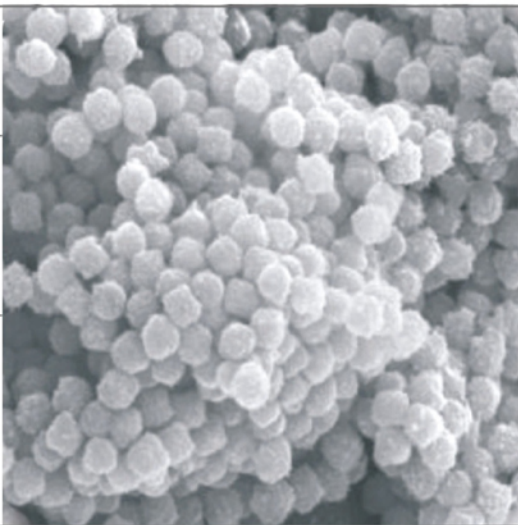
2

粉末/产品参数

POWDER / PRODUCT PARAMETERS

|                                             | 测试方法<br>Test     | 单位<br>Unit | 典型值<br>Value |         |         |         |
|---------------------------------------------|------------------|------------|--------------|---------|---------|---------|
| 一般物性/General Properties                     |                  |            | SP301        | SP304GF | SP305CF | SP307AI |
| 制件密度（激光烧结）<br>Density                       | Silverage method | g/cm³      | 0.98         | 1.13    | 1.09    | 1.36    |
| 热性能/Thermal Properties                      |                  |            |              |         |         |         |
| 熔点<br>Melting Point                         | ISO 3146         | °C         | 184          | 184     | 184     | 184     |
| 热变形温度<br>Thermal Properties                 | ISO 75 (1.8MPa)  | °C         | 55           | 96      | 121     | 144     |
| 力学性能/Mechanical Properties                  |                  |            |              |         |         |         |
| 拉伸强度<br>Tensile Strength                    | ISO 527          | MPa        | 43           | 40      | 65      | 42      |
| 弹性模量<br>Elastic Modulus                     | ISO 527          | MPa        | 1600         | 3200    | 5800    | 3500    |
| 断裂伸长率<br>Elongation At Break                | ISO 527          | %          | 15           | 5       | 4       | 4       |
| 弯曲强度<br>Flexural Strength                   | ISO 178          | MPa        | 57           | 71      | 85      | 70      |
| 弯曲模量<br>Flexural Modulus                    | ISO 178          | MPa        | 1432         | 2600    | 2800    | 3200    |
| 无缺口冲击强度（23℃）<br>Non Notched Impact Strength | ISO 180          | KJ/m²      | 21           | 20      | 18      | 29      |
| 缺口冲击强度（23℃）<br>IZOD IMPact Strength         | ISO 180          | KJ/m²      | 3.5          | 3.2     | 4       | 3.6     |
| 备注                                          |                  |            | 白色           | 玻璃珠复合型  | 碳纤维复合型  | 铝复合型    |

|                                                                     |                                                                                                                                                                                                                                                |                                                                                      |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| PA粉末（SP301）                                                         | PA powder (SP301)                                                                                                                                                                                                                              |  |
| 性能特点：<br>· 高强度<br>· 优异的耐热性<br>· 良好的重复利用率                            | Feature:<br>·High strength.<br>·Excellent heat resistance.<br>·Great repeated utilization factor.                                                                                                                                              |                                                                                      |
| 应用：<br>· 航天航空、汽车和消费品等领域<br>· 传统工艺无法加工的结构件<br>· 中小批量快速制造<br>· 复杂镂空结构 | Application:<br>·Aviation and aerospace industries, automobile, consumer goods, etc.<br>·Structural component that the traditional methods failed to process.<br>·Rapid manufacturing of medium and small batch.<br>·Complex hollow structure. |                                                                                      |

|                                                            |                                                                                                                                                         |                                                                                     |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 玻璃珠复合型PA粉末<br>(SP304GF)                                    | Glass bead<br>PA composite powder<br>(SP304GF)                                                                                                          |  |
| 性能特点：<br>· 易于加工<br>· 良好的耐磨性<br>· 热变形温度高<br>· 优异的尺寸稳定性      | Feature:<br>·Easy processing.<br>·Good wear resistance.<br>·High thermal deformation temperature.<br>·Excellent dimensional stability.                  |                                                                                     |
| 应用：<br>· 高强度产品<br>· 复杂模型件<br>· 电动工具、电器控制盒<br>· 汽车引擎盖、进气歧管等 | Application:<br>·High strength products.<br>·Complex model parts.<br>·Electric tool, Electrical control box.<br>·Automobile hood, intake manifold, etc. |                                                                                     |

|                                                              |                                                                                                                                                             |                                                                                      |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 碳纤维复合PA粉末<br>(SP305CF) )                                     | Carbon fiber<br>PA composite powder<br>(SP305CF)                                                                                                            |  |
| 性能特点：<br>· 刚性大，密度低<br>· 热变形温度高<br>· 优异的力学性能                  | Feature:<br>·High rigidity, low density.<br>·High thermal deformation temperature.<br>·Excellent mechanical properties.                                     |                                                                                      |
| 应用：<br>· 强度要求高的产品<br>· 轻量化零部件<br>· 航天航空零件<br>· 汽车运动应用中的气动零部件 | Application:<br>·Products with high strength requirement.<br>·Lightweight components.<br>·Aerospace parts.<br>·Pneumatic components in automobile industry. |                                                                                      |

|                                                        |                                                                                                                                 |                                                                                       |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 铝复合型PA粉末<br>(SP307AI)                                  | Aluminum/PA composite powder<br>(SP307AI)                                                                                       |  |
| 性能特点：<br>· 高强度<br>· 耐高温<br>· 良好的导热性<br>· 优异的尺寸稳定性      | Feature:<br>·High strength.<br>·High temperature resistance.<br>·Good heat conductivity.<br>·Excellent dimensional stability.   |                                                                                       |
| 应用：<br>· 金属外观制件<br>· 热负荷零件<br>· 在汽车制造中的应用<br>· 夹具和工具制造 | Application:<br>·Metal appearance parts.<br>·Heat load parts.<br>·Automobile manufacturing.<br>·Fixture and tool manufacturing. |                                                                                       |



# PROCESSING AND SERVICE

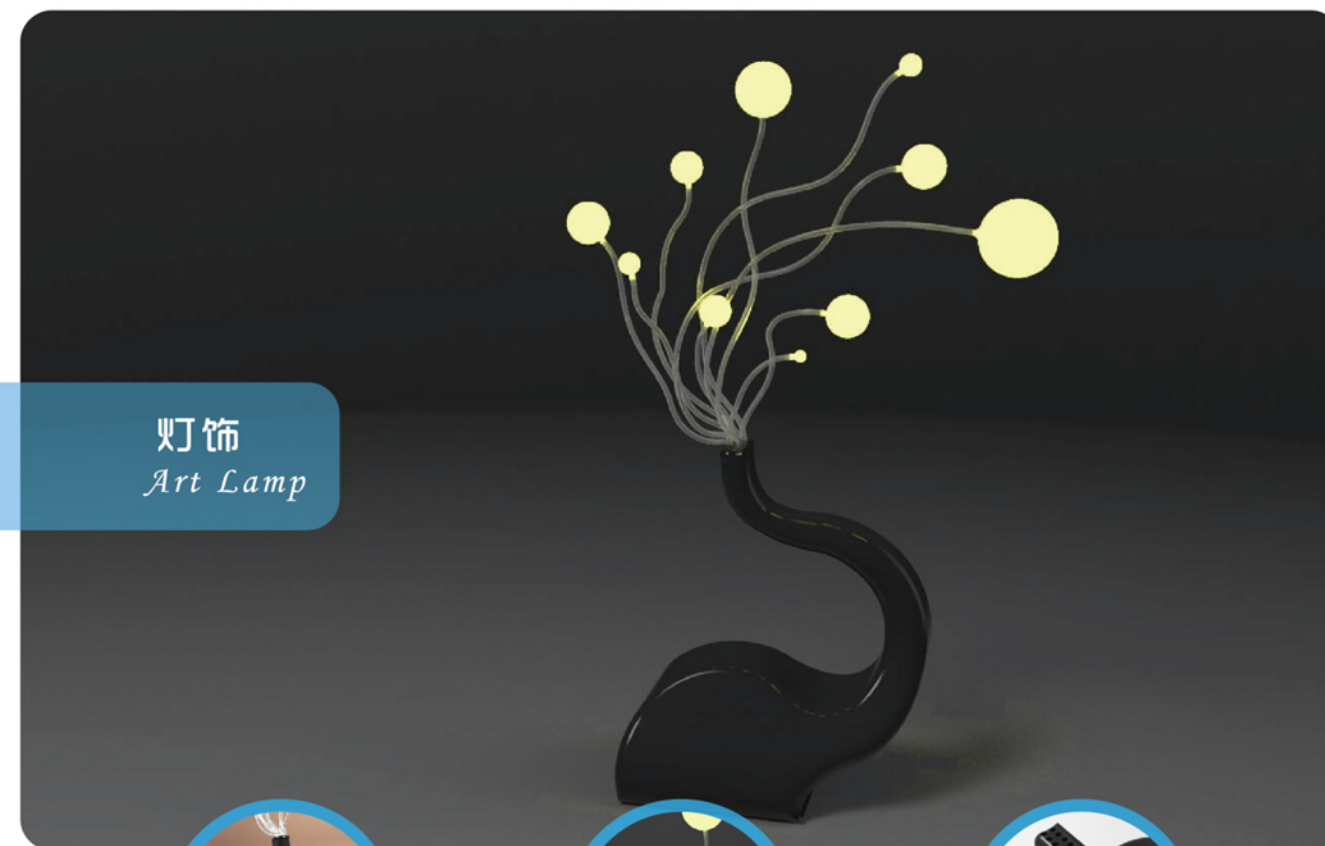


## 04 ▲ 加工与服务 PROCESSING AND SERVICE

1

### SLS激光烧结成型 SLS-SELECTIVE LASER SINTERING

灯饰  
Art Lamp



#### 基本参数

专用设备: SLS工业级打印机  
成型缸尺寸: 500\*500\*400mm  
可加工材料: PA/PA复合材料/PS  
适用范围: 适合制作高强度手板模型  
成型精度:  $\pm 0.1\text{mm}$

#### 技术特性

成型件具有良好的力学性能、成型精度高, 可进行功能测试或小批量使用;  
可以制造任意复杂形状的原型;  
无需支撑结构, 材料利用率高。

#### BASIC PARAMETERS

Professional equipment: SLS industrial 3D printer  
The size of forming cylinder: 500\*500\*400mm  
Materials: PA/PA Composite/PS  
Uses: building the high strength palm  
The forming precision:  $\pm 0.1\text{mm}$

#### TECHNICAL CHARACTERISTICS

The model has good mechanical properties and high accuracy.  
It can be used for functional test or directly used small batch.  
Can be manufacturing for prototype of any complex shape.  
Without supporting structure, high usage rate of materials.



## 2 SLA激光固化成型

SLA-STEREO LITHOGRAPHY APPARATUS



灯饰  
Art Lamp

### 基本参数

专业设备: SLA工业级打印机  
成型缸尺寸: 450\*450\*350mm  
可加工材料: 光敏树脂材料  
适用范围: 适合高精度、表面细致的手板模型

### BASIC PARAMETERS

Professional equipment: SLA industrial grade  
3D printer  
The size of forming cylinder: 450\*450\*350mm  
Materials: photosensitive resin  
Usage: High accuracy prototype

### 技术特性

成型精度高, 可处理任意结构复杂的零件;  
表面光洁度高, 可进行抛光、电镀、喷漆等  
高要求表面处理;  
成型速度快, 大大缩短研发周期。

### TECHNICAL CHARACTERISTICS

Precision, available for complex structure.  
High surface finishing, available for any surface  
treatment of high requirements.  
High manufacturing speed, greatly shorten  
product development cycle.

## 3 FDM熔融挤出成型

FDM-FUSED DEPOSITION MODELING



花盆  
Flower pot

### 基本参数

专业设备: FDM桌面级打印机  
适用范围: 玩具、手板等工艺模型  
耗材: PLA耗材、ABS耗材、PVA水溶性支撑材料

### BASIC PARAMETERS

Professional equipment: FDM industrial grade  
3D printer.  
Usage: toys, prototype and so on  
Materials: PLA、ABS、PVA

### 技术特性

耗材颜色多样性;  
多种材料可选;  
成型速度快。

### TECHNICAL CHARACTERISTICS

Varieties of colors.  
More selective materials.  
High manufacturing speed.



## 05 网络营销 MARKETING NETWORK

现代化的研发中心、先进的仪器设备确保了公司持续、快速、健康发展。高性价比的产品和“坦诚协作”的理念为公司赢得了众多合作伙伴的信赖。除了广阔的国内应用市场，公司积极推行市场国际化战略，客户遍及亚洲、欧洲、北美洲、大洋洲等多个国家和地区。

Advance equipped R&D center ensures the company's sustainable, rapid and healthy development. Silver Age's international marketing strategy, cost-effective products and the concept of "honest cooperation" had earned the trust of partners throughout Asia, Europe, North America, Oceania and other countries and regions.

