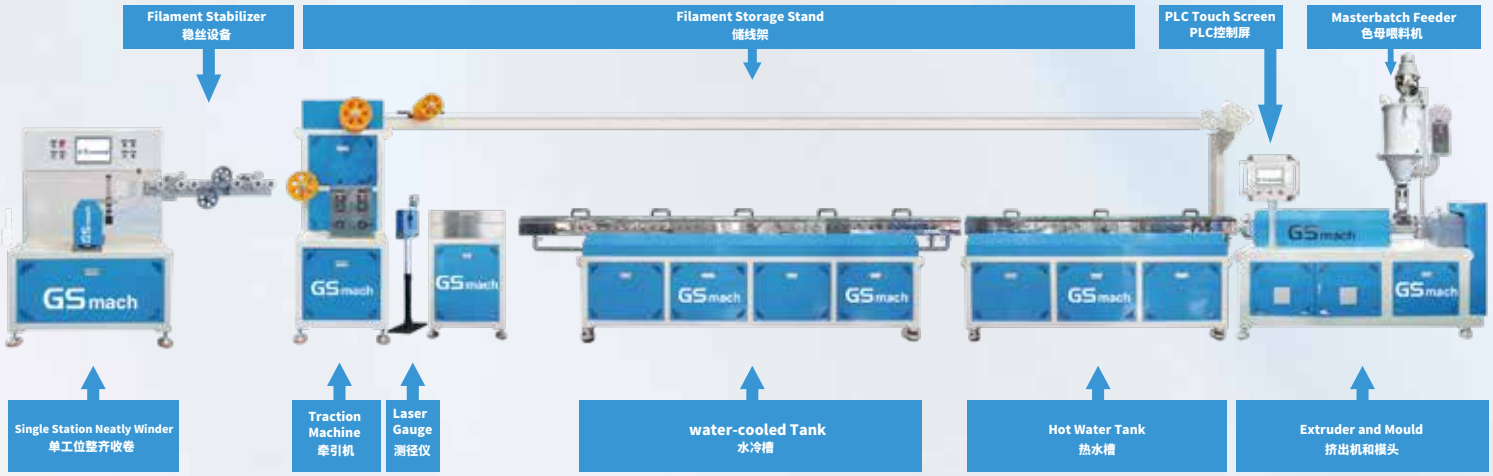
GSmach
南京国塑智能装备

3D耗材打印拉丝机与新材料生产

3D Printer Filament Extrusion Line And New Material Production

www.gsextruder.com

普通款GS50 3D塑料打印丝挤出机
GS50 3D Plastic Filament Extruder



升级款高速3D塑料打印丝挤出机
High Speed GS50 3D Plastic Filament Extruder （NEW)

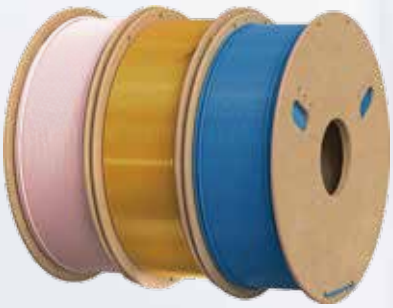
GS35彩虹色3D打印拉丝机
GS35 Rainbow Filament Extruder Machine

产品 Product

GS50一出二3D打印拉丝机
GS50 One-to-Two 3D Filament Extruder Machine （NEW)

GS35多色3D打印拉丝机
GS35 Customized Multi-color Filament Extruder Machine

GS25实验型3D打印拉丝机 Lab GS25 Filament Extruder Machine



机器优势

1. 整机设计兼容常温及高温工程塑料的生产需求，适应多种材料成型工艺。
2. 采用分区独立控温的水槽保温系统，实现精准温控分区管理，有效降低热能损耗。
3. 优化牵引辊轮结构设计，显著降低易损件更换频率，提升后续维护便利性。
4. 双收卷系统独立控制，可分别调节收卷张力与速度，提升工艺适应性。
5. 集成在线加热干燥功能，实现丝材挤出后即时烘干处理，无需二次烤箱干燥，降低单位能耗。
6. 同型号设备产量较行业平均水平提升30%，同时塑化效果更优，成型质量稳定。
7. 整机采用全伺服驱动与控制，提升运行精度与响应速度，保障设备长期运行稳定性。
8. 配置PLC智能控制系统，支持远程监控与参数调整，便于实时优化工艺与系统升级维护。

Machine advantages

1. The machine design is compatible with the production needs of both ambient and high-temperature engineering plastics, adapting to various material molding processes.

2. It adopts a zoned, independently temperature-controlled water bath insulation system, achieving precise temperature control and effectively reducing heat loss.

3. The optimized traction roller structure design significantly reduces the frequency of replacement of vulnerable parts, improving subsequent maintenance convenience.

4. The dual winding systems are independently controlled, allowing for separate adjustment of winding tension and speed, enhancing process adaptability.

5. Integrated online heating and drying function enables immediate drying of the filament after extrusion, eliminating the need for secondary oven drying and reducing unit energy consumption.

6. The output of the same model is 30% higher than the industry average, while providing superior plasticizing effect and stable molding quality.

7. The entire machine adopts full servo drive and control, improving operational accuracy and response speed, ensuring long-term operational stability.

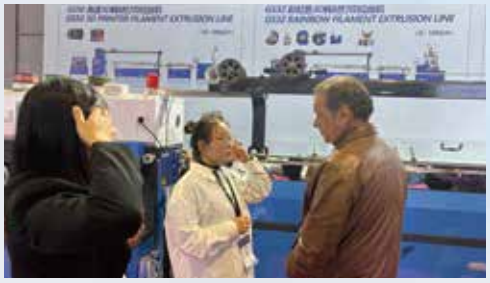
8. Configure a PLC intelligent control system to support remote monitoring and parameter adjustment, facilitating real-time optimization of processes and system upgrades and maintenance.

机器参数
Machine parameters

Type	Tolerance（mm）	Output（kg/h）	Material
GS25	±0.03mm	3-5kg/h	PLA/ABS/PS/PETG/PEEK/BVOH/PA/PET/HIPS
GS35	±0.02mm	8-12kg/h	PLA/ABS/PS/PETG/PEEK/BVOH/PA/PET/HIPS
GS35(Rainbow)	±0.02mm	6-10kg/h	PLA/ABS/PS/PETG/PEEK/BVOH/PA/PET/HIPS
GS35(Multi-color)	±0.02mm	15-25kg/h	PLA/ABS/PS/PETG/PEEK/BVOH/PA/PET/HIPS
GS50	±0.02mm	20-30kg/h	PLA/ABS/PS/PETG/PEEK/BVOH/PA/PET/HIPS
GS50（high speed）	±0.02mm	30-40kg/h	PLA/ABS/PS/PETG/PEEK/BVOH/PA/PET/HIPS
GS50（One out of two）	±0.02mm	35-45kg/h	PLA/ABS/PS/PETG/PEEK/BVOH/PA/PET/HIPS

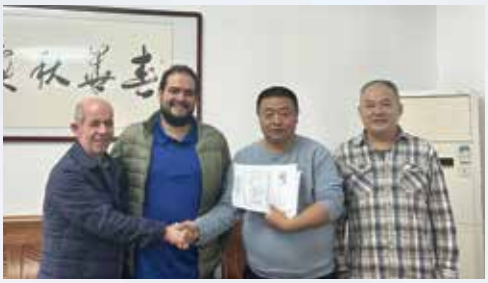
客户案例 Client Cases

荷兰客户 Dutch customers



墨西哥客户 Mexican customers

美国客户 US customers



阿联酋客户 UAE customers

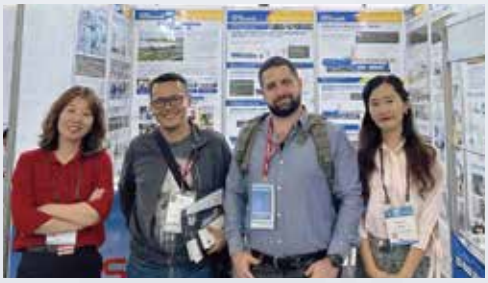
土耳其客户 Turkey customers

乌克兰客户 Ukrainian customers

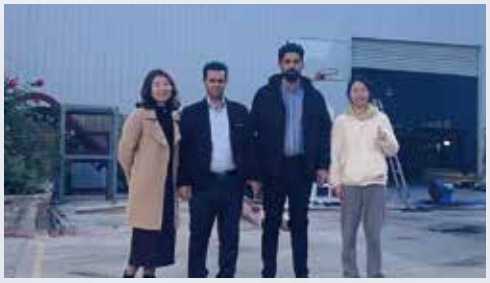
孟加拉客户 Bangladesh customers

俄罗斯客户 Russia customers

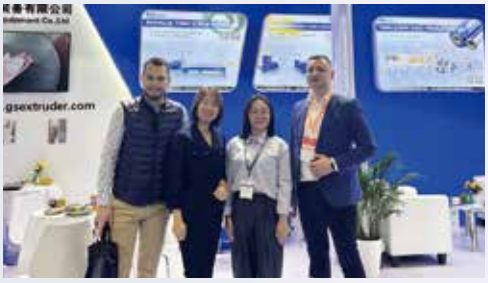
伊朗客户 Iran customers



英国客户 U.K. customers



匈牙利客户 Hungary customers



白俄罗斯客户 Belarus customers

誉遍全球·Global Reputation

立足前沿智造，服务全球市场。全系 3D 耗材拉丝机经过反复打磨，具备高产能、高精度、易操作、通用性强等优势，可满足不同场景的线材生产需求。目前产品已覆盖全球 60 多个国家和地区，收获各地客户一致好评。我们坚持技术创新与品质坚守，面向全球客户提供优质设备与贴心售后，让中国制造惠及世界。

We specialize in manufacturing professional 3D filament production lines. With superior performance, high precision and stable operation, our machines have been sold to more than 60 countries and regions across the globe. We provide reliable equipment and comprehensive solutions for 3D filament manufacturing, and sincerely welcome partners from all over the world to cooperate.

GSmach 3D耗材打印拉丝机生产线

GSmach 的拉丝机生产线专为高精度、稳定和高效的灯丝生产而设计。它采用先进的自动化和节能技术，可确保平稳运行和稳定的质量。

为什么选择 GSmach?

1.精确的长丝控制 - 将直径公差控制在±0.02毫米以内。

2.高产高效：产量可达 40kg/h左右，运行稳定，生产效率高。

3.冷却效果好：水箱配备冷冻机，保证丝径稳定，提高产品质量。

4.热风吹干：高速丝采用热风吹干，无需二次烘干，节能省工。

5.智能控制：配备昆仑通态触摸屏，支持远程诊断和监控，维护更加方便。

6.低噪音设计：整机采用静音配置，运行平稳，工作环境更舒适。

7.高品质电气系统：采用西门子PLC、施耐德低压电器和汇川伺服系统，控制精准，性能稳定。

8.自动化程度高：操作简单，收卷整齐，适合连续稳定生产。

需要稳定、高质量生产的灯丝制造商。

测试新型 3D 打印材料的研发团队。

追求灵活性和效率的定制长丝生产商。

GSmach 3D Printer Filament Extrusion Line

GSmach's filament drawing production line is designed for high-precision, stable, and efficient filament production. It employs advanced automation and energy-saving technologies to ensure smooth operation and consistent quality.

Why Choose GSmach?

1. Precise Filament Control – Diameter tolerance is controlled within ±0.02 mm.
2. High Output and Efficiency: Output reaches approximately 40 kg/h, with stable operation and high production efficiency.
3. Excellent Cooling: The water tank is equipped with a chiller to ensure stable filament diameter and improve product quality.
4. Hot Air Drying: High-speed filaments are dried with hot air, eliminating the need for secondary drying, saving energy and labor.
5. Intelligent Control: Equipped with a Kunlun Tongtai touchscreen, supporting remote diagnostics and monitoring for easier maintenance.
6. Low Noise Design: The entire machine is designed for quiet operation, ensuring smooth running and a more comfortable working environment.
7. High-Quality Electrical System: Utilizes Siemens PLC, Schneider low-voltage electrical components, and Huichuan servo systems for precise control and stable performance.
8. High degree of automation: Simple operation, neat winding, suitable for continuous and stable production.

Ideal for:

Filament manufacturers requiring stable, high-quality production.

R&D teams testing new 3D printing materials.

Custom filament producers seeking flexibility and efficiency.

TPU Material

www.gsextruder.com

TPU-GF改性料
TPU-GF modified material

拉伸强度/MPa	Tensile Strength/MPa	34
断裂伸长率/%	Elongation at Break/%	＞600

刚性增强：玻纤改性，刚性提升
弹性依旧：保留 TPU 优良弹性，柔韧不脆，回弹稳定
尺寸稳定：低收缩、低翘曲，大件柔性件成型更规整
耐磨抗撕：耐磨性与抗撕裂性提升，耐用性更强

Reinforced rigidity: Glass fiber modification enhances rigidity.
Retained elasticity: Retains the excellent elasticity of TPU, remaining flexible and non-brittle.
Dimensional stability: Low shrinkage and low warpage allow for more regular molding of large flexible parts.
Abrasion and tear resistance: Improved abrasion and tear resistance.

TPU-CF改性料
TPU-CF modified material

工业级耗材产品，市场定制
Industrial-grade consumables, market-customized.
颜色、性能可联系按需定制
Color and performance can be customized upon request.

高端弹性结构件首选。
弹性强度：碳纤维增强，弹性与强度兼备，不易变形
耐磨抗撕：耐磨性大幅提升，耐弯折，使用寿命更长
外观质感：哑光磨砂质感，表面细腻，高级不显塑料感

The top choice for high-end flexible structural components.
Elasticity and Strength: Reinforced with carbon fiber, resistant to deformation.
Abrasion and Tear Resistance: High abrasion resistance, bending resistance, and longer service life.
Appearance and Texture: Matte frosted texture, delicate surface, and a high-end feel.

丝绸TPU改性料
Silk TPU modified material

拉伸强度/MPa	Tensile Strength/MPa	34.9
断裂伸长率/%	Elongation at Break/%	1014
弯曲强度/MPa	Flexural Strength/MPa	4.15

柔软高韧，强拉伸，
耐弯折、抗撕裂，反复揉捏不变形、不开裂
耐磨抗造，长期使用不易留痕
表面具有丝绸效果，增加美观性，
触感柔滑温润、不粘手、不留指纹，握持感舒适
相比普通 TPU：无蜡感、不油腻、不显廉价

Soft and highly resilient with strong tensile strength; resistant to bending and tearing; will not deform or crack even after repeated kneading; wear-resistant and durable, does not easily leave marks with long-term use; silky surface enhances aesthetics; smooth and warm to the touch, non-sticky, fingerprint-resistant, and comfortable to hold; compared to ordinary TPU: no waxy feel, non-greasy, and does not look cheap.

南京国塑智能装备有限公司，国家级高新技术企业，国内生物降解材料场景化应用领域先行者。公司聚焦生物基材料产业，依托政产学研用协同发展优势，整合顶尖科研资源，技术底蕴深厚。
主营 3D 打印原材料、3D 耗材拉丝机研发制造，不仅拥有标准化量产能力，更可针对客户个性化需求，提供专属产品研发、工艺优化及配套应用方案，是值得信赖的一站式合作伙伴。

Nanjing GSmach Equipment Co., Ltd., a national high-tech enterprise, is a pioneer in the application of biodegradable materials in China. Focusing on the bio-based materials industry, the company leverages the advantages of collaborative development among government, industry, academia, and research institutions, integrating top-tier scientific research resources and possessing profound technological expertise. The company's main business is the R&D and manufacturing of 3D printing raw materials, 3D consumables, and wire drawing machines. It not only has standardized mass production capabilities but also provides customized product development, process optimization, and supporting application solutions to meet individual customer needs, making it a trustworthy one-stop partner.

PLA Material

www.gsextruder.com

PLA丝绸改性料
PLA silk modified material

拉伸强度/MPa	Tensile Strength/MPa	30.29
断裂伸长率/%	Elongation at Break/%	17
弯曲强度/MPa	Flexural Strength/MPa	51.87
弯曲模量/MPa	Flexural Modulus/MPa	2050.23
z轴强度	Z-axis Strength	15.27
拉伸模量/MPa	Tensive Modulus/MPa	1908.93
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	19.64
缺口冲击KJ/m2	Notched Impact (KJ/m²)	4.63

线径精度：误差±0.01毫米
良品率：高速生产（180米/分钟）良品率＞95%
耐久性：室内裸露60天，性能保持 >80%
亮度：丝绸质感光泽，亮度提升10%～20%，
强度：结实耐用，支持定制软硬度；

Wire diameter accuracy: ±0.01 mm
Yield rate: >95% with high-speed production (180 m/min)
Durability: >80% performance retention after 60 days of indoor exposure
Brightness: Silky texture luster, brightness increased by 10%–20%
Strength: Sturdy and durable, customizable hardness/softness supported;

PLA 哑光母粒
PLA Matte Masterbatch

拉伸强度/MPa	Tensile Strength/MPa	/
断裂伸长率/%	Elongation at Break/%	/
弯曲强度/MPa	Flexural Strength/MPa	/
弯曲模量/MPa	Flexural Modulus/MPa	/
拉伸模量/MPa	Tensive Modulus/MPa	/
无缺冲击KJ/m²	Undamaged Impact (KJ/m²)	/
缺口冲击KJ/m ²	Notched Impact (KJ/m²)	/

PLA哑光混用母粒，可直接生产。
线径精度：±0.03mm
与聚乳酸混合使用，添加比例为30-50%
混合使用，不单独测试，性能数据参考PLA哑光改性料

PLA matte blending masterbatch, ready for direct production.
Wire diameter accuracy: ±0.03mm. Used in combination with polylactic acid (PLA) at a ratio of 30-50%. Not tested separately; performance data referenced from PLA matte modified material.

PLA丝绸浓缩料
PLA Silk Concentrate

拉伸强度/MPa	Tensile Strength/MPa	/
断裂伸长率/%	Elongation at Break/%	/
弯曲强度/MPa	Flexural Strength/MPa	/
弯曲模量/MPa	Flexural Modulus/MPa	/
z轴强度	Z-axis Strength	/
拉伸模量/MPa	Tensive Modulus/MPa	/
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	/
缺口冲击KJ/m2	Notched Impact (KJ/m²)	/

PLA混用母粒：45%添加量，吨省500-1000元，
性能同步DGSC3D0203，可直接生产。
线径精度：±0.03mm
良品率：＞95%（中低速工况）
混合使用，不单独测试，性能数据参考PLA丝绸改性料

PLA mixed masterbatch: 45% addition, saving 500-1000 RMB per ton.
Performance is synchronized with DGSC3D0203, ready for direct production.
Wire diameter accuracy: ±0.03mm ; Yield rate: >95% (medium-low speed conditions)
For mixed use, no separate testing required. Performance data is referenced from modified PLA silk material.

PLA+增韧改性料
PLA+ toughened modified material

拉伸强度/MPa	Tensile Strength/MPa	53.22
断裂伸长率/%	Elongation at Break/%	50%
弯曲强度/MPa	Flexural Strength/MPa	63.47
弯曲模量/MP	Flexural Modulus/MPa	2104.12
z轴强度	Z-axis Strength	15.27
拉伸模量/MPa	Tensive Modulus/MPa	2008.31
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	23.7
缺口冲击KJ/m2	Notched Impact (KJ/m²)	6.1

PLA增韧改性料在保留易打印、易着色特性的同时，
显著提升韧性：断裂伸长率×8-10、
拉伸≥50MPa、弯曲≥2000MPa，
货架期+30～60天，免复配直出色母调色。

PLA toughened modified material retains its easy-to-print and easy-to-color properties while significantly improving toughness: elongation at break ×8-10, tensile strength ⩾50MPa, flexural strength ⩾2000MPa, shelf life +30-60 days, and direct color matching without compounding.

PLA 哑光改性料
PLA matte modified material

拉伸强度/MPa	Tensile Strength/MPa	28.12
断裂伸长率/%	Elongation at Break/%	14.6
弯曲强度/MPa	Flexural Strength/MPa	53.4
弯曲模量/MPa	Flexural Modulus/MPa	2435
拉伸模量/MPa	Tensive Modulus/MPa	1991.45
无缺冲击KJ/m²	Undamaged Impact (KJ/m²)	20.31
缺口冲击KJ/m ²	Notched Impact (KJ/m²)	5.83

良品率：高速生产、量产更高效
耐久性：室内裸露 60 天，性能保持＞80%，持久稳定
质感：细腻哑光雾面，无反光不刺眼，高级低调
外观：层纹遮盖更佳，成品质感温润，高级耐看

Yield Rate: High-speed production and mass production for greater efficiency
Durability: Performance retains >80% after 60 days of indoor exposure
Texture: Delicate matte finish, non-reflective and glare-free
Appearance: Better coverage of textured surfaces, resulting in a smooth and refined finish

PLA+增韧母粒
PLA+ toughening masterbatch

拉伸强度/MPa	Tensile Strength/MPa	/
断裂伸长率/%	Elongation at Break/%	/
弯曲强度/MPa	Flexural Strength/MPa	/
弯曲模量/MPa	Flexural Modulus/MPa	/
z轴强度	Z-axis Strength	/
拉伸模量/MPa	Tensive Modulus/MPa	/
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	/
缺口冲击KJ/m2	Notched Impact (KJ/m²)	/

添加比例25%，提高PLA的韧性，
实现PLA基础耗材向PLA+耗材的性能转变
混合使用，不单独测试，性能数据参考PLA+增韧改性料

Adding 25% improves PLA's toughness, enabling a performance transformation from basic PLA consumables to PLA+ consumables. This is used in combination; individual testing is not conducted. Performance data is referenced from PLA+ toughened modified materials.

PLA Material

www.gsextruder.com

PLA+高模量改性料
PLA+high modulus modified material

拉伸强度/MPa	Tensile Strength/MPa	50
断裂伸长率/%	Elongation at Break/%	55
弯曲强度/MPa	Flexural Strength/MPa	88
弯曲模量/MPa	Flexural Modulus/MPa	4100-4500
z轴强度	Z-axis Strength	18.2
拉伸模量/MPa	Tensive Modulus/MPa	⩾4500
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	38
缺口冲击KJ/m2	Notched Impact (KJ/m²)	12.2

模量与刚性显著提升，抗弯曲、不易变形
耐热性大幅改善，高温环境下不发软、不塌陷，适用更广；
强度与耐用性增强，承重与抗疲劳性能优于普通 PLA

Significantly improved modulus and rigidity, resulting in enhanced resistance to bending and deformation.Greatly improved heat resistance, preventing softening and collapse at high temperatures, thus broadening its applicability.Enhanced strength and durability, with load-bearing capacity and fatigue resistance superior to ordinary PLA.

PLA耐温食品级
（耐温80°C）
PLA food-grade heat-resistant (heat resistant up to 80°C)

拉伸强度/MPa	Tensile Strength/MPa	55.76
断裂伸长率/%	Elongation at Break/%	27%
弯曲强度/MPa	Flexural Strength/MPa	81
弯曲模量/MPa	Flexural Modulus/MPa	2758
z轴强度	Z-axis Strength	16.33
拉伸模量/MPa	Tensive Modulus/MPa	2314
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	49.4
缺口冲击KJ/m2	Notched Impact (KJ/m²)	6.3

PLA哑光改性料是具有折光率高、
耐温效果好（可耐80°C）、可直接应用于食品容器；
质感强、线径稳定、易着色等特点，一体成型，
仅需色母调色，即可制备各色耗材。

PLA matte modified material features high refractive index, good temperature resistance (up to 80°C), direct application to food containers, strong texture, stable wire diameter, and easy coloring. It can be molded in one piece, and only color masterbatch is needed to prepare consumables of various colors.

PLA-GF 改性料
PLA-GF modified material

拉伸强度/MPa	Tensile Strength/MPa	53.5
断裂伸长率/%	Elongation at Break/%	3.65
弯曲强度/MPa	Flexural Strength/MPa	75
弯曲模量/MPa	Flexural Modulus/MPa	4351.62
拉伸模量/MPa	Tensive Modulus/MPa	18.2

工业级耗材产品，
根据GF添加量分为5%，10%，15%三款，
玻纤增强，刚性显著提升，抗变形，适配性高。
此数据以10%添加量为测试条件

Industrial-grade consumables, available in three types based on GF (glass fiber reinforced) content: 5%, 10%, and 15%. These glass fiber reinforced products offer significantly improved rigidity, resistance to deformation, and high adaptability. This data is based on a 10% GF content as the testing condition.

HT-PLA(工程级耐高温)改性料
HT-PLA (Engineering Grade High Temperature Resistant) Modified Material

维卡软化温度/°C	Vicat softening temperature / °C	157
热变形温度/°C	Heat distortion temperature / °C	68

维卡软化点157°C带载10N
免退火即可耐高温，抗热变形、不软塌
低收缩、低翘曲，大件与高温环境下尺寸精准
耐高温 PLA = 解决了普通 PLA 怕热的缺点，
同时保留了可降解、食品级、易加工、低成本的优点，
是目前“耐热 + 环保 + 易用”平衡最好的生物基材料。

Vicat softening point 157°C, 10N load capacity. High temperature resistance, resistant to heat deformation and does not soften or collapse. Low shrinkage, low warpage, dimensional accuracy for large parts and high temperature environments. High temperature resistant PLA is currently the best bio-based material in terms of "heat resistance + environmental protection + ease of use".

PLA-CF 改性料
PLA-CF modified material

拉伸强度/MPa	Tensile Strength/MPa	51.3
断裂伸长率/%	Elongation at Break/%	3.12
弯曲强度/MPa	Flexural Strength/MPa	78
弯曲模量/MPa	Flexural Modulus/MPa	4264.4
拉伸模量/MPa	Tensive Modulus/MPa	19.6

工业级耗材产品，
根据GF添加量分为5%，10%，15%三款，
高强度、轻量化，结实耐用，承重结构件优选
此数据以10%添加量为测试条件

Industrial-grade consumables, available in three types based on GF (Genomic Gravity) content: 5%, 10%, and 15%. High strength, lightweight, robust and durable, ideal for load-bearing structural components.
This data is based on a 10% GF content test.

PLA发泡母粒
PLA foaming masterbatch

拉伸强度/MPa	Tensile Strength/MPa	26.3
断裂伸长率/%	Elongation at Break/%	4.23
弯曲强度/MPa	Flexural Strength/MPa	50.18
弯曲模量/MPa	Flexural Modulus/MPa	1852.24
z轴强度	Z-axis Strength	18.2
拉伸模量/MPa	Tensive Modulus/MPa	1671.41
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	5.13
缺口冲击KJ/m2	Notched Impact (KJ/m²)	2.06

PLA发泡母粒轻质发泡减重，降低原料消耗与运输成本
缓冲隔热性能优异，抗震隔音效果突出；
通过调整发泡倍率与配方，最大发泡率可达1.8倍；
可做到高刚、高韧、高缓冲，适用范围广。

PLA foaming masterbatch is lightweight and reduces weight, lowering raw material consumption and transportation costs. It has excellent cushioning and heat insulation properties, as well as good shock absorption and sound insulation effects. The maximum foaming rate can reach 1.8 times. It can achieve high rigidity, high toughness, and high cushioning, and has a wide range of applications.

PETG Material

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PETG哑光改性料
Matte modified PETG

拉伸强度/MPa	Tensile Strength/MPa	47.36
断裂伸长率/%	Elongation at Break/%	35%
弯曲强度/MPa	Flexural Strength/MPa	63.12
弯曲模量/MPa	Flexural Modulus/MPa	1736
z轴强度	Z-axis Strength	14.22
拉伸模量/MPa	Tensive Modulus/MPa	1678
无缺冲击KJ/m²	Undamaged Impact (KJ/m²)	51.3
缺口冲击KJ/m²	Notched Impact (KJ/m²)	4.9

PETG哑光改性料在保持原有PETG的物理性能的基础上通过配方优化，增强了抗冲击性能和层间粘性，使打印更加细腻、降低了打印层纹和表面光泽。

The matte modified PETG material maintains the original physical properties of PETG while improving impact resistance and interlayer adhesion through formula optimization, resulting in finer printing and reduced printing texture and surface gloss.

PETG-GF改性料
PETG-GF modified material

拉伸强度/MPa	Tensile Strength/MPa	54
断裂伸长率/%	Elongation at Break/%	26
弯曲强度/MPa	Flexural Strength/MPa	57.6
弯曲模量/MPa	Flexural Modulus/MPa	1780
z轴强度/MPa	Z-axis Strength	30.56
拉伸模量/MPa	Tensive Modulus/MPa	1905
缺口冲击KJ/m²	Notched Impact (KJ/m²)	5.76

工业级耗材产品，
根据GF添加量分为5%，10%，15%三款，
玻纤增强，刚性大幅提升，
保留 PETG 优良韧性，不脆裂，抗冲击性好

Industrial-grade consumables,
available in three types based on GF (Glass Fiber) content: 5%, 10%, and 15%.
Glass fiber reinforcement significantly improves rigidity,
while retaining the excellent toughness of PETG, preventing brittleness and providing good impact resistance.

PETG高速改性料
PETG high-speed modified material

拉伸强度/MPa	Tensile Strength/MPa	48.63
断裂伸长率/%	Elongation at Break/%	11.25
弯曲强度/MPa	Flexural Strength/MPa	81.3
弯曲模量/MPa	Flexural Modulus/MPa	2354
拉伸模量/MPa	Tensive Modulus/MPa	2296.5
无缺冲击KJ/m²	Undamaged Impact (KJ/m²)	22.65
缺口冲击KJ/m²	Notched Impact (KJ/m²)	4.68

耐久性：室内裸露 60 天，性能保持＞80%，
耐候耐老化，长期使用不衰减
高速打印：流动性优异，支持高速打印不堵头
强度韧性：兼具高强度与高韧性，抗冲击不易脆断

Durability: Retains >80% performance after 60 days of indoor exposure; weather-resistant and aging-resistant, with no performance degradation over long-term use. High-speed printing: Excellent flowability, supports high-speed printing without clogging. Strength and toughness: Combines high strength and high toughness, impact-resistant and not easily broken.

PETG-CF改性料
PETG-CF modified material

拉伸强度/MPa	Tensile Strength/MPa	36.2
断裂伸长率/	Elongation at Break/%	31.4
弯曲强度/MPa	Flexural Strength/MPa	58
弯曲模量/MPa	Flexural Modulus/MPa	2315
缺口冲击KJ/m²	Notched Impact (KJ/m²)	23

根据GF添加量分为5%，10%，15%三款，
通过碳纤增强韧性，抗摔耐砸，经久耐用，不易断裂变形
强而不脆、韧而不软”
适合大多数需要强度与韧性的功能件。

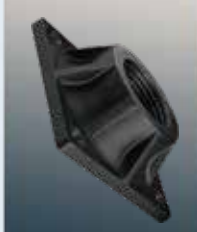
Available in three grades based on GF content: 5%, 10%, and 15%. Enhanced with carbon fiber for increased toughness, impact and shock resistance, durability, and resistance to breakage and deformation. "Strong yet not brittle, tough yet not soft," suitable for most functional components requiring both strength and toughness.

PETG遮光改性料
（广告字系列）
PETG light-blocking modified material (Advertising lettering series)

拉伸强度/MPa	Tensile Strength/MPa	46.5
断裂伸长率/%	Elongation at Break/%	21
弯曲强度/MPa	Flexural Strength/MPa	92.6
弯曲模量/MPa	Flexural Modulus/MPa	4360
无缺冲击KJ/m²	Undamaged Impact (KJ/m²)	116
缺口冲击KJ/m²	Notched Impact (KJ/m²)	4.24

遮光性能：高遮盖力，全遮光不透光，无漏光、无泛白
强度韧性：保持 PETG 原有高韧性，抗冲击、不易脆裂
外观质感：表面均匀细腻，哑光雾面，无反光不刺眼

Light-blocking performance: High coverage, completely opaque, no light leakage, no whitening.Strength and toughness: Maintains the original high toughness of PETG, impact-resistant and not easily brittle.Appearance and texture: Uniform and delicate surface, matte finish, non-reflective and non-glaring.



PETG耐低温改性料
PETG Low Temperature Modified Material

市场独有产品	Exclusive product in the market
可提供定制化服务	Customization services available
颜色、性能可联系按需定制	Colors and performance can be customized upon request.

耐低温可达-70°C
耐低温性能：低温环境下韧性优异，
不脆化、不开裂，耐寒性强
强度韧性：保持 PETG 高韧性，抗冲击、结实耐用

Low temperature resistance up to -70°C
Low temperature performance: Excellent toughness at low temperatures, does not become brittle or crack, strong cold resistance
Strength and toughness: Maintains the high toughness of PETG, impact resistant, strong and durable

ABS Material

PA

www.gsextruder.com

ABS-GF改性料
ABS-GF modified material

拉伸强度/MPa	Tensile Strength/MPa	37
断裂伸长率/%	Elongation at Break/%	6.5
弯曲强度/MPa	Flexural Strength/MPa	70
弯曲模量/MPa	Flexural Modulus/MPa	2935
拉伸模量/MPa	Tensive Modulus/MPa	3150
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	15.2
缺口冲击KJ/m2	Notched Impact (KJ/m²)	4.56

根据GF添加量分为5%，10%，15%三款，
与普通ABS相比，ABS-GF具有更高的强度和刚度，
尺寸稳定，减少打印过程中的翘曲和变形，

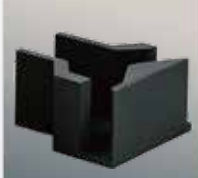
Available in three formulations based on GF content: 5%, 10%, and 15%. Compared to regular ABS, ABS-GF offers higher strength and stiffness, greater dimensional stability, and reduces warping and deformation during printing.

PA6-CF改性料
PA6-CF modified material

拉伸强度/MPa	Tensile Strength/MPa	98
断裂伸长率/%	Elongation at Break/%	6.15
弯曲强度/MPa	Flexural Strength/MPa	146
弯曲模量/MPa	Flexural Modulus/MPa	5432
拉伸模量/MPa	Tensive Modulus/MPa	4412
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	38.9
缺口冲击KJ/m2	Notched Impact (KJ/m²)	12.6

根据CF添加量分为5%，10%，15%三款，
具有高韧性、耐冲击防碰撞，
适合打印对耐热性要求较高的模型，

Available in three formulas based on CF (cream crystal) content: 5%, 10%, and 15%. These models offer high toughness, impact resistance, and collision protection, making them suitable for printing models requiring high heat resistance.



ABS-CF改性料
ABS-CF modified material

拉伸强度/MPa	Tensile Strength/MPa	32
断裂伸长率/%	Elongation at Break/%	5.9
弯曲强度/MPa	Flexural Strength/MPa	75.9
弯曲模量/MPa	Flexural Modulus/MPa	2783
缺口冲击KJ/m2	Notched Impact (KJ/m²)	3.86

根据CF添加量分为5%，10%，15%三款，
专为高强度、耐久性的工业应用
耐化学性，耐腐蚀性，使用环境多样化

Available in three formulations based on CF content: 5%, 10%, and 15%. Specifically designed for high-strength, durable industrial applications. Excellent chemical and corrosion resistance, suitable for diverse operating environments.

PA66-CF改性料
PA66-CF modified material

拉伸强度/MPa	Tensile Strength/MPa	98.6
断裂伸长率/%	Elongation at Break/%	12.3
弯曲强度/MPa	Flexural Strength/MPa	157
弯曲模量/MPa	Flexural Modulus/MPa	5836
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	52.94
缺口冲击KJ/m2	Notched Impact (KJ/m²)	14.3

根据CF添加量分为5%，10%，15%三款，
打印精度高，不易翘曲，尺寸稳定
高韧性，耐冲击，适合打印耐用零件

Available in three formulations based on CF (cream crystal) content: 5%, 10%, and 15%. High printing precision, less prone to warping, and dimensionally stable. High toughness and impact resistance, suitable for printing durable parts.

PA6-GF改性料
PA6-GF modified material

拉伸强度/MPa	Tensile Strength/MPa	76
断裂伸长率/%	Elongation at Break/%	3.89
弯曲强度/MPa	Flexural Strength/MPa	118
弯曲模量/MPa	Flexural Modulus/MPa	3597
拉伸模量/MPa	Tensive Modulus/MPa	2980
无缺冲击KJ/m2	Undamaged Impact (KJ/m²)	26.4
缺口冲击KJ/m2	Notched Impact (KJ/m²)	3.6

根据GF添加量分为5%，10%，15%三款，
强韧耐用，抗弯折抗冲击
优越的热稳定性，在高温下保持原有的机械性能

Available in three formulas based on GF content: 5%, 10%, and 15%.
Strong and durable, resistant to bending and impact.
Superior thermal stability, maintaining original mechanical properties at high temperatures.

PA66-GF改性料
PA66-GF modified material

工业级耗材产品，市场定制
Industrial-grade consumables, market-customized.
颜色、性能可联系按需定制
Color and performance can be customized upon request.

根据GF添加量分为5%，10%，15%三款，
耐磨、耐油、耐化学腐蚀，
耐高温，热变形温度高，高温工况不易软化
适配汽车高温件、工业重载工装、
新能源电子结构件等高端场景。

Based on the GF content, there are three types: 5%, 10%, and 15%. They are wear-resistant, oil-resistant, chemically resistant, high-temperature resistant, and heat-deformation resistant, making them suitable for high-end applications such as high-temperature automotive parts, heavy-duty industrial tooling, and new energy electronic structural components.