ScienceRich

HP Filament® (Super flexible type)

Flexible Filament for General 3D Printers.

This flexible filament can be used with general 3D Printers.

HP filament is a very flexible filament produced by our compound technology.
It has the core and is rigid when it is the filament form, and does not extend in the vertical direction during modeling. Thereby, flexible and high precise 3D models can be produced stably by general FDM mechanism 3D printers in the market.
Stabler modeling is possible by using our Sube-up Tube for 3D Printer Filament-supply.
It can be colored. Please consult us.

Able to make precise mockup
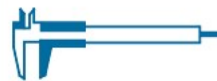
Very flexible, Easily back to original shape

Features

Flexibility
Very flexible models can be produced.

Preciseness
Precise 3D models can be produced.
Stabler modeling is possible by using our Sube-up Tube for 3D Printer Filament-supply.

Functionality
It can be used as supporting materials by machine settings.

Colorability
It can be colored. Please consult us.

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Recommended printing conditions

■ Extruder temperature : 200 – 240°C

■ Recommended print speed : 20 mm / sec or less
The recommended print speed varies depending on the model shape, the state of the nozzle, etc.
If clogging occurs, please slow the speed to 10 mm / sec etc. You can make the precise model at slower speed.

■ Recommended print pitch: 0.2 or less
※The printing condition varies according to the 3D printers.
※This filament can be used with the 3D printers that can print with layer height pitches 0.2 or less, such as Rep-Rap type 3D printers, MakerBot Replicator series and compatible machines, etc.
※MakerBot Replicator and MakerBot compatible 3D printers are recommended.
MakerBot : Replicator 2, FLASHFORGE : Finder, QIDI TECHNOLOGY : X-one, QD3DA4-01, Aurora 3D Printer : Z-603S (Molding test finished with above recommended condition)

Before use

1. Please remove filament material left in the nozzle with 1.7 - 1.0 Φ metal stick (cf. Photograph 1 and 2)

2. If the filament gets caught in the filament guide tube, remove the guide tube.

3. After cleaning the head, the nozzles of the extruder feeding guide may cause clogging because filaments cannot be sent straight ahead.
Please check if the extruder head mounted horizontally (cf. Photo 4).
In the case of flexible filaments, deviation from the drive gear affects stable filament delivery more than hard filaments (cf. Photo 5)

4. If filaments cannot be supplied well, please slack the filament as shown in photo 6.
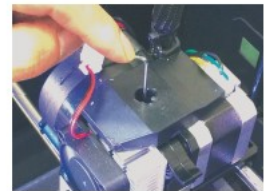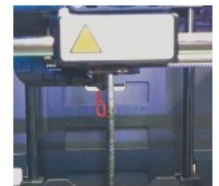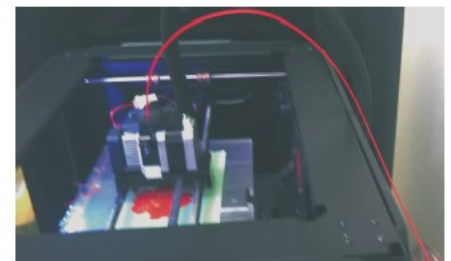

Photo 1

Photo 2

Photo 3

CAM data condition

1. Please set the retraction distance to 0.
Example
▶ Makerware : Set the Retraction Distance of Extruder to 0.
▶ Slic3r   : Set the Distance of the Retraction item to 0.

2. If the shell thickness of the object is thin, the printed model will be easy to tear, so please set the parameter thicker (2 mm or more) than the hard filament setting.
▶ Makerware : Increase Number of Shells.
▶ Slic3r   : Increase Shell thickness.

※If the printed model tears, it can be bonded with instant adhesive.
※Do not store the filaments under direct sunlight, high temperature and humidity conditions.

Photo 4

Photo 5

Photo 6

This information is current as of November 1, 2016. It is subject to change without notice.
For more information, please feel free to contact us.