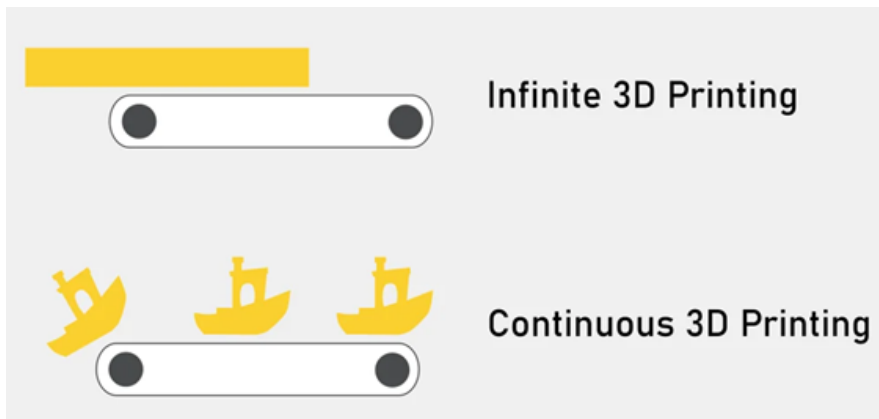
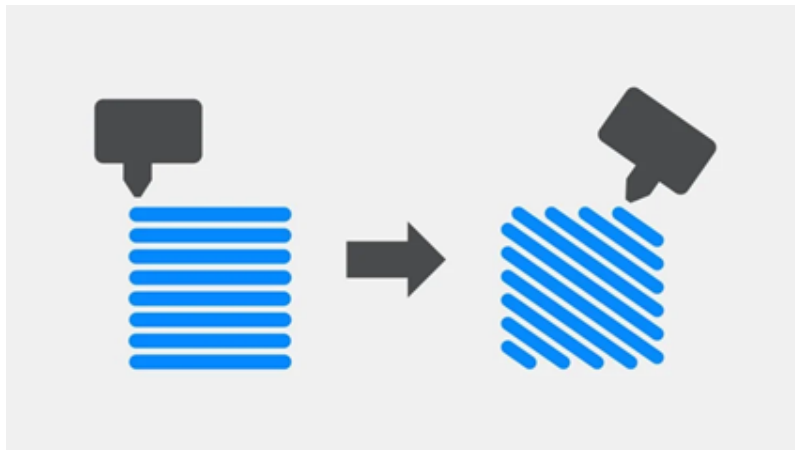


Infinite 3D printing:

The aim of an infinite 3d printer is to print objects as long as possible along one direction or it might also do a continuous printing job of printing continuous objects one after another.

The aim is satisfied by having a conveyor belt as the print bed and changing the print orientation.



- Different print jobs can be sent to the 3D printer one after the other, which are processed one after the other without human intervention.
- Unlike FDM printers, the belt 3D printers use tilted nozzles

- The 45-degree rotated models no longer require support props on overhangs, as was previously the case.
- Bed adhesion for this type of printer can be a problem, As one can't have a fully-heated conveyor belt bed. However, painter's tape can be used instead.
- 3D printing on a conveyor belt allows prints to slide off the build platform, and the next print can start automatically.
- Leveling the print bed and making adjustments before each print job are easier with the permanently installed conveyor belt.
- With the belt, the large build space is unnecessary, the model can be rotated so that a small print space on the belt is sufficient.
- Examples are 'The white knight', 'Powerbelt3D Zero''

Necessity of tilted extruder:

- If we desire to build a long part in a normal 3D printer we can either print the part in multiple sections or have an extraordinarily large printer to complete the print
- In an angled printer the extruder prints layers that are angled at 45 degrees and moves horizontally with each layer
- There will be no geometric constraints and it allows axis aligned with the printer to be infinitely long
- Another advantage will be its ability to print parts in series
- It is also able to eliminate the need for some overhangs compared to ground up layering.

Necessity of conveyor belt:

- Can 3D print continuously
- It helps eject parts and then move on to the next one without human intervention
- Can print extremely large parts or mass produce smaller items

Infinite Z 3D Printer - Creality 3DPrintMill



- Continuous, unattended part printing.
- parts detach themselves and fall into a bin.

Main Features



Infinite-Z
build volume



Stable Core-XY
structure



Broadband
power supply



Exclusive
slice software



45° angled
hot-end



Nylon
conveyor-belt



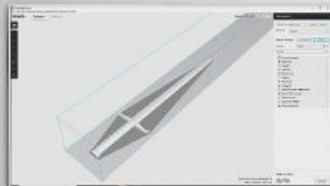
Smart filament
detector



Ultra-silent
motherboard

Exclusive Slice Software for 3DPrintMill Only

This slice software CrealityBelt is specially designed for 3DPrintMill. CrealityBelt is truly user-friendly ascribing to its simple operation



Adaptive Broadband Power Supply

The brand 24V/350w power supply can be manually adjusted to global AC100-120V
Rest assured of the system stability



Filament Breakage Detector

Filament run-out / Filament breakage, the smart sensor forces the machine to suspend printing. Printing will be automatically resumed after the new filament feed-in



The White Knight:



Carl's Thingiverse post where he states "This is my design for a

400mm x 430mm x Infinity belt printer. The main design works around a CoreXY D-bot design

In addition the large belt printer is using:

- Duet Wifi 3d printer electronics
- E3D 5 to 1 geared down stepper motor
- Mosquito Hotend by Slice Engineering
- Bondtech Extruder
- Buildtak printing surface (belt)

Blackbelt 3D printer:

This 3D printer is equipped with a conveyor belt system and a 45° angled extruder, enabling continuous production. Users can also choose between 15°, 25°, 34° and 45° angles.

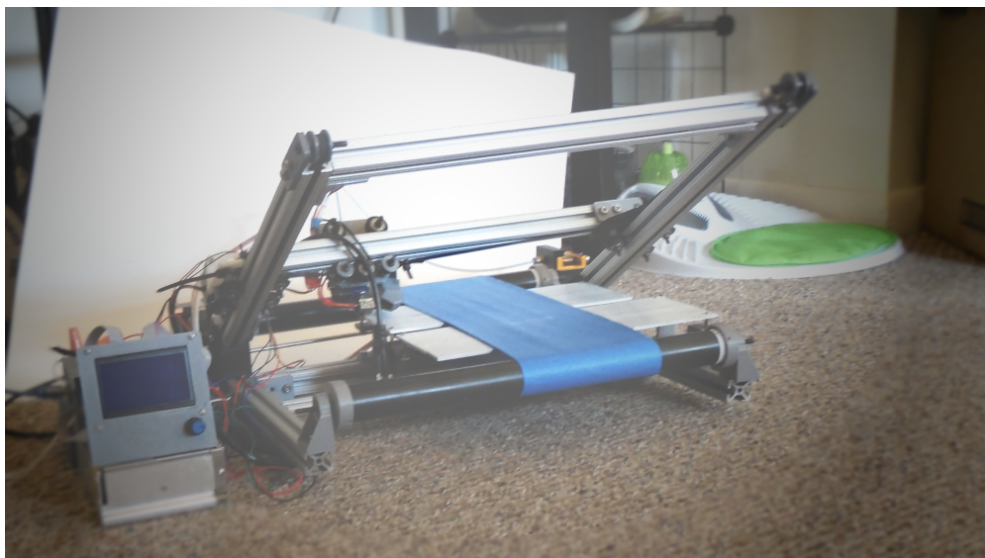
As an object 3D prints, it moves along the belt until it curls under. This releases the 3D print, making it fall into a bin. The angled extrusion approach allows avoiding the use of support structures on some 3D prints. However, there are still situations requiring traditional support structures.

The BLACKBELT 3D PRINTER is able to build parts of 340 mm x 340 mm on the XY axis. For 3D prints of 1300 mm or longer, Blackbelt 3D recommends using the roller table to provide additional support during the 3D printing process. The BLACKBELT 3D PRINTER can 3D print with ABS, PLA and Co-Polyester.

Finally, this 3D printer features interchangeable print heads. A set of nozzles of 0.4, 0.6 and 0.8 mm diameters are available.



Powerbelt3D Zero



- Core-XY Motion System
- Easily Tighten Conveyor Belt
- Direct Drive Extruder
- Build volume (mm): 200 x 170 x infinity
- Control Board: MKS Base V1.4
- Motor Drivers: DRV8825
- All-metal hotend
- Steel-reinforced GT2 Belts