Installation and service
instructions, warranty
terms & conditions

DeeGreen

User Guide

Version 2.6

1. Contents

2. Technical parameters

Print technology	FFF (Fused Filament Fabrication)
Build volume	150 x 150 x 150 mm
Print accuracy	0.1 mm
Layer thickness	0.05 / 0.1 / 0.15 / 0.2 mm
Nozzle diameter	0.4 mm
Print speed	up to 90 mm / s
Printer control	Touchscreen
Interior lighting	LED
Supported material	PLA, PLA based filaments
Power source	230 V / 120 W
Noise level	70 dB
External dimensions	495 x 395 x 390 mm
Weight	22 kg
Inputs	USB, SD card

3. Safety instructions

Warranty void if damaged due to not following the instructions in this User Guide

1. None of the printer components or accessories are suitable for eating. Avoid eating anything delivered from be3D.
2. Spatula, which is part of the accessory box, is sharp. Beware of cuts.
3. Mind the top lid limit switch. Its edges are sharp. Beware of cuts.
4. Damage caused by improper use, in contradiction with this User Guide, or by violating the security instructions, is full responsibility of the user.
5. This device is not suitable for children and must be operated by persons over the age of 18, in all other instances, supervision of an adult is required.
6. The device must not be left unattended whilst in operation.
7. Some parts of the printer operate at temperatures greater than 70°C! Danger of burns! Avoid any contact with hot parts.
8. Disabled people not able to fully operate the device must be supervised by a technically qualified person.
9. Make sure the product is complete before use.
10. Danger of electric shock if not operated correctly.
11. The printer is a heavy device. In order to avoid injury, or damage to the printer, do not let it fall.
12. Disposal of the device must be performed in accordance with correct environmental directions.
13. Keep the printer away from any flammable substances.
14. Install the printer in a place that is:

- Dry and free from dust
- A stable environment (temperature, humidity)
- Well ventilated
- Close to an easily accessible electrical supply
- At a sufficient distance from objects that could cover the ventilation shafts of the printer
- At a sufficient distance from objects susceptible to heat (e.g. curtains and drapery), also from splash able liquids and organic gases (e.g. ammonia)
- Out of direct sunlight
- Without sudden temperature changes
- At a sufficient distance from heating vents, ventilation and air-conditioning systems

Attentions:

- Danger

- Read the instruction manual

- Before any manipulation, except of print task and print preparation, pull the plug out of socket

- The device contains moving parts, it may cause crushing and capturing

- Warning of hot surfaces, marked part of the product may heat up dangerously

Certifications:

In order to avoid interruption of the print task due to an ESD event, the DeeGreen M3D0100 3D printer should not be touched during the printing process. If an ESD occurs, the printer will restart. After this situation, it is recommended to use the "parking position" button.

§ 15.21 Information to user
Warning:
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
§ 15.105 Information to user

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
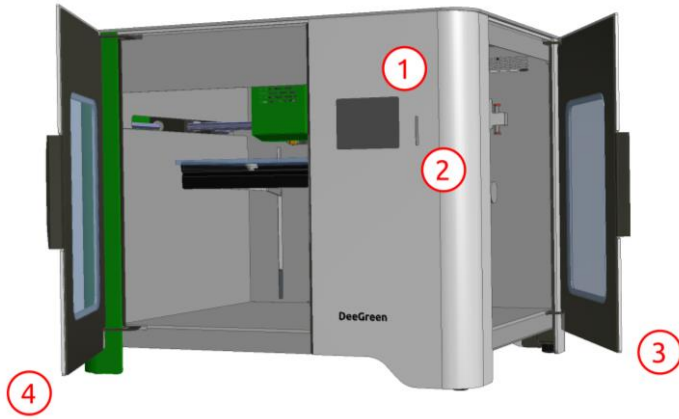*—Consult the dealer or an experienced radio/ TV technician for help.*

4. Package contents

- 3D printer DeeGreen
- Box with accessories
  - Power supply 24 V/5 A
  - USB cable
  - Spool holder
  - Spatula for print bed cleaning and model removal
  - Glue-stick for print bed
  - CD with DeeControl software
  - User Manual DeeControl
  - User Guide DeeGreen
  - Set of 2 nozzles and nozzle tubes with service tool
- SD card plugged into the printer slot
- Speed Manual on the top of the printer
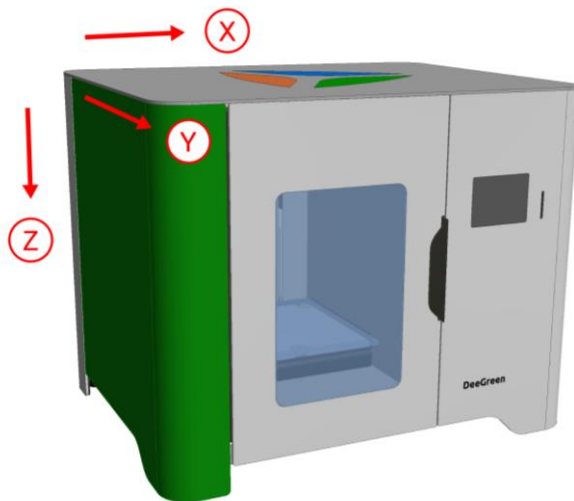- Localized power supply cable
- Spool of 250 grams of filament

SD card includes:

- STL sample files with be3D models
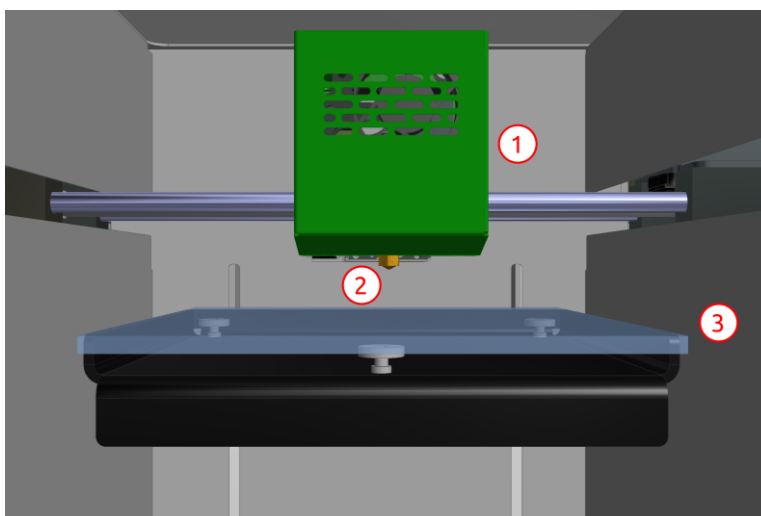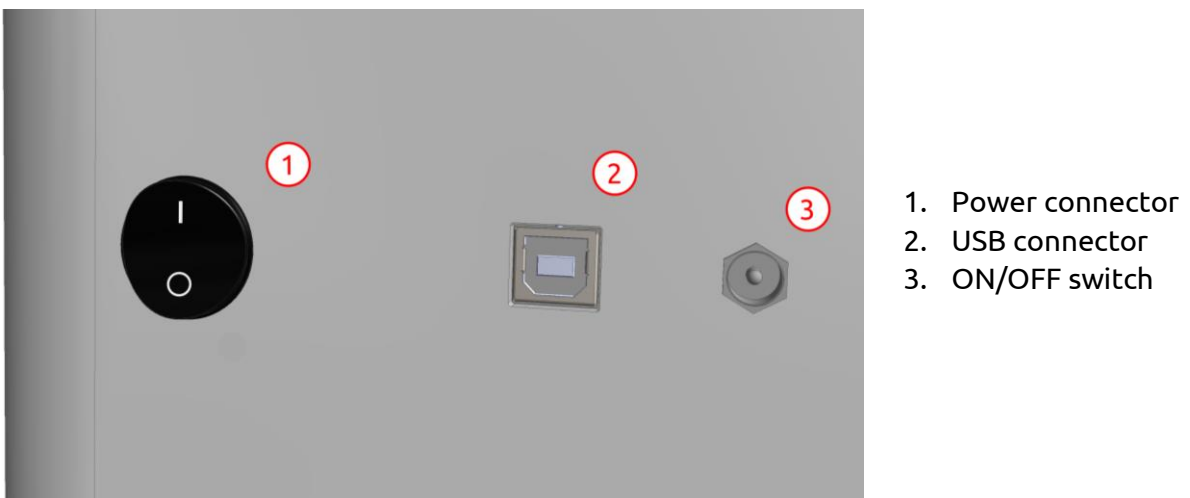- GCO sample files with prepared print tasks

5. Parts description

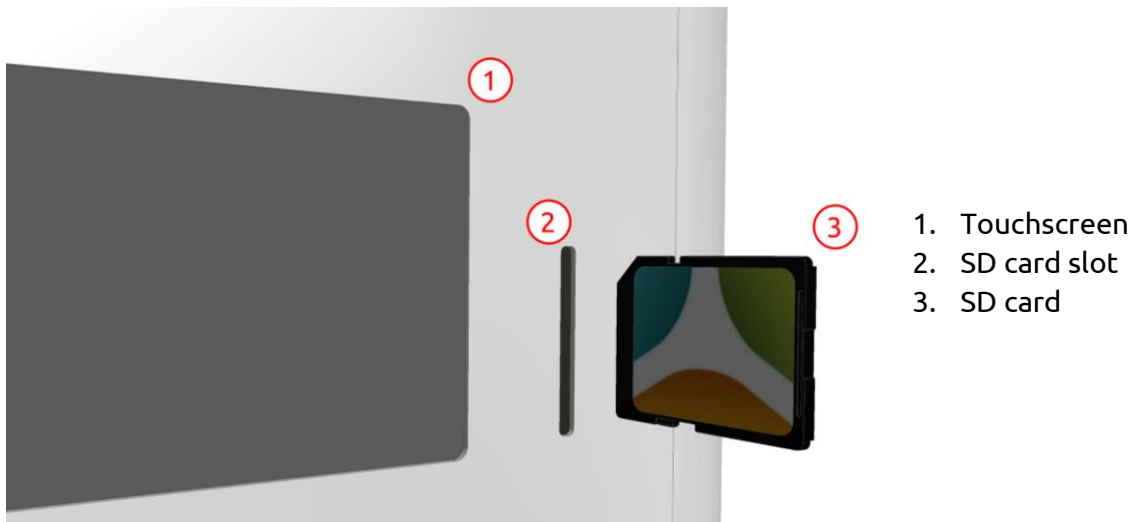

1. Touch screen
2. SD card slot
3. spool chamber
4. main door to the print area

X – axis X
Y – axis Y
Z – axis Z

1. Print head
2. Nozzle
3. Print bed

1. Touchscreen
2. SD card slot
3. SD card

1. Power connector
2. USB connector
3. ON/OFF switch

6. Getting the printer ready for operation

Unboxing

1. Make sure the printer is standing on a solid platform and is not upside down.
2. Stand the printer so the protective foam can be accessed. Remove the protection.
3. Take the printer out of the box. Use extra caution while doing so. First, stand in front of the box and bend down at your knees. Keep your back straight. Grab the printer from both sides at the bottom to take it out. Pull the printer out very carefully and put it on a solid surface, e.g. a desk.
4. Remove the plastic using your hands only. Avoid using scissors or any other sharp items.
5. Take the top lid off.
6. Carefully remove the protective foam.

7. Open the spool chamber (side door) and take out the foam. You will find accessory box there.
8. Hold the box with both hands and take it out. Mind your fingers.
9. Cover the printer with the top lid and make sure that the lid fits.
10. Check the accessories.
11. Now, follow the *print preparation* chapter

Print preparation

1. Place the spool holder inside the filament chamber
2. Unpack the glass print bed.
3. Use the glue stick to make a thin even layer on the glass print bed. Then make another one in a different direction and allow it to dry for a couple of minutes. Check if the final layer is straight without any bumps. If not, wash and follow this step again.
4. Put the bed into the printing chamber. The three magnets have to fit together with the three pins on the table inside the chamber. Check if the bed is immovable.
5. Connect the printer with a power source.
6. Turn on the printer
7. Now, follow the *Preparing your filament* chapter.

Preparing your filament

1. Unpack the spool of filament.
2. Find the end of the plastic string and release it from the holes. Hold the string at all times.
3. Cut off the string's end using either scissors or a knife at under a 45-degree angle. Do not allow the string to go loose.
4. Straighten up the last 5 cm of the string.
5. Hang the spool on the spool holder. Do not let go of the end of the string freed.
6. Now, follow the *Filament installation* chapter

Filament installation

1. Push the string end through the filament input on the back of the spool chamber, until it cannot go any further. You should use roughly 50 cm of the string to reach the print head.
2. Use the touch screen on the front of the printer to manage the filament loading.
3. Go to Settings in the Main menu.
4. Choose Filament change.
5. Wait until the nozzle warms up and press Continue.
6. Select Feed in and press Continue and gently push the string in until you notice that the extruder pulls it itself.

7. Wait to see if the nozzle extrudes the filament. If it does not, press the Repeat button.
8. Clean the nozzle of the extruded plastic. MIND, THE NOZZLE IS HOT!
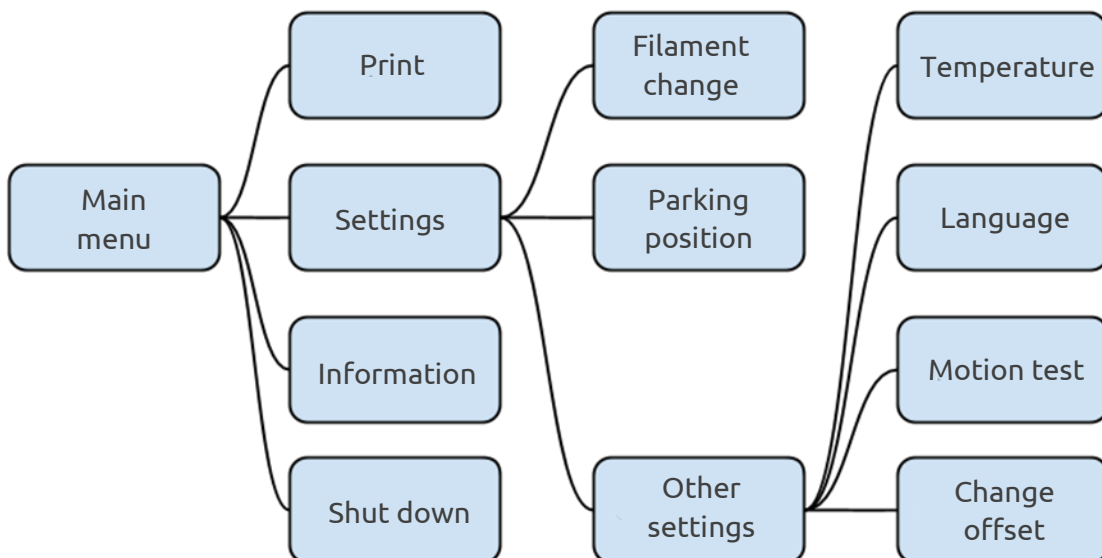9. Now, follow the *Beginning printing* chapter.

Beginning printing

1. Check the SD card is plugged in the SD card slot on the front of the printer.
2. Check the print chamber door and top lid are closed.
3. Press the Print button in Main menu.
4. Choose a print task you would like to print.
5. Press the Print button.
6. Wait until the printer prints the first layer, check everything worked.

After printing

1. Gently remove the glass print bed with the printout from the printer.
2. Use the spatula to remove the printout from the glass. Take care of the sharp edge of the spatula! Mind your hands!
3. Before the next printing, scrape the glass bed with the spatula to achieve a flat surface of the glass without any bumps.

7. Printer menu scheme

8. Cleaning and support

Keep the print area clean and free of filament remnants. Clean the print area after every print task

9. Filaments and spare parts

Filaments and selected spare parts can be ordered at your supplier or via distributors of be3D printers.

10.   Warranty terms and conditions

DeeGreen 3D printer warranty

Defect product liability law
The law is in accordance with the latest Czech laws regarding product defect responsibility. The quality warranty is not covered by this law. Mechanical parts are covered by the warranty for a term of 12 months from purchase. This warranty covers any unintended mechanical failures or malfunctions caused by either manufacturing procedures or flaws that might have occurred during the assembly procedure. The warranty does not cover misuse or inappropriate usage, inadequate manipulation, usage and installation in conflict with this User Guide.

Terms & conditions:
- The manufacturer is responsible for both the device and delivered software to operate properly, all in accordance with this User Guide.
- All malfunctions and flaws caused by the manufacturing process or the assembly are covered by the manufacturer within the limits of the warranty.
- The rightful printer owner is eligible for free repair should there be a flaw within the manufacturer's responsibilities. Flaws will be fixed within 30 days from the day the flaw is reported.

The warranty does not cover malfunctions and/or interruptions caused by:

- Usage of other than recommended filaments

- Installation in contradiction with this User Guide, valid laws and norms.

- Operation in inappropriate climate conditions.

- Inappropriate use.

The user is obliged to pay for the work of and removal by technician's costs in case of an incorrect fault report or request to:

- Fix a flaw caused by a user

- Unauthorized alterations to the printer

- Checking and cleaning the printer

- Repairs caused by power supply blackouts

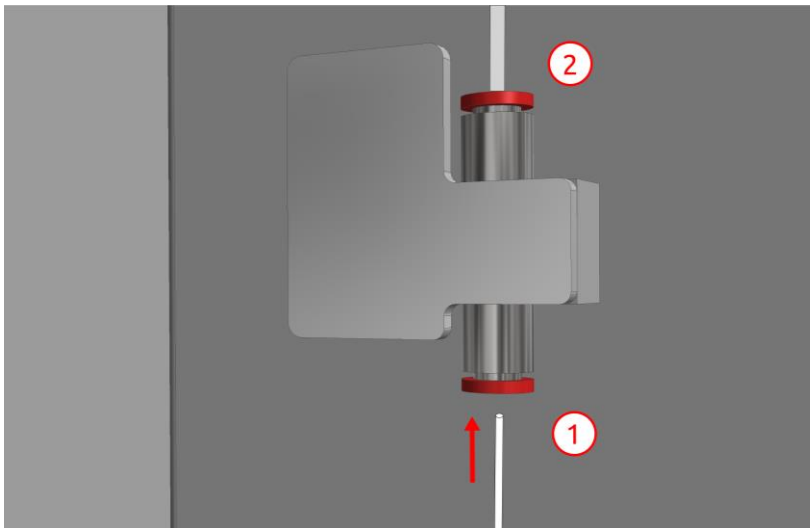**The warranty is void when:**

1. The printer build is altered

2. Instructions stated in this User Guide were ignored

3. Other than recommended filaments were used

4. Printer electronics were interfered with

5. The user/owner has financial commitments to the seller or manufacturer

6. The printer was damaged due to inappropriate usage or due to inadequate movement during transportation or keeping the printer in wrong climate conditions, especially inappropriate temperature and humidity

7. The warranty is void when the printer's electronics and control units are damaged due to atmospheric events such as a thunderstorm, a power network surge, pollution and damage of a mechanical, chemical or heat character, as well as repairs, alternations or modifications by an unauthorized service center or user.

11. Authorized servicing

Authorized servicing is allowed only when it complies exactly with either the instructions provided in this part of the User Guide or with spare parts, if received:

Placing a new filament string

1. Release the string following the instructions on the printer screen
2. Remove the released string manually
3. Cut off the string end at under a 45-degree angle and straighten the last 5 cm (2 inches). The string must be straight
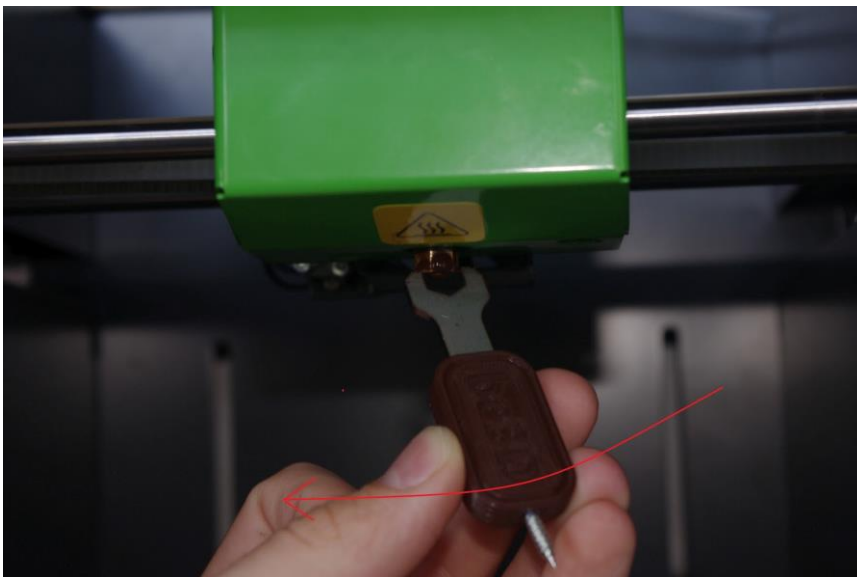4. Put the string into the input hole

1. Filament
2. Filament detector / input

5. Push the string gently through the filament detector. Apply a little force if necessary
6. Pull the string through the transparent tube into the nozzle. Check visually (remove the top lid)
7. Finish the procedure following the instructions on the printer screen until the part when the automatic rolling is initiated; push the string gently towards the printer until it is rolled on automatically. Repeat the process if required
8. Visually check if the string is pulled in and complete the guide until the melted filament is released off the nozzle. Remove the released filament from the print bed and nozzle. Be extra cautious when removing the filament from the extruder as it is hot and may cause injury

Nozzle changing

1. Using touch screen remove filament from the printer. If the filament is already removed, use same process to let nozzle heat up (It is easier to change the nozzle while it is heated, but mind you do not burn yourself).

2. Turn off the printer and pull the plug out of socket.

3. Using the wrench tool from accessory box unscrew the nozzle.

4. Put the pike of screw (which is included with the wrench) into the tube placed above the nozzle. Turn the screw until you grab the tube and pull it out.

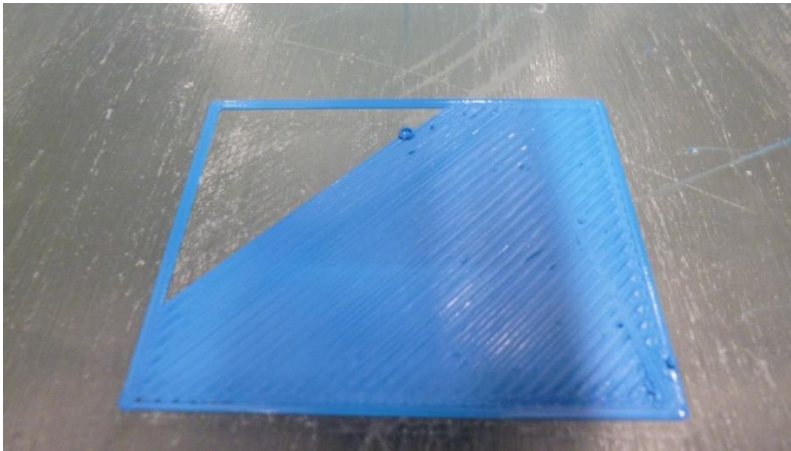5. Then wait about 15minutes to let the heated part of print head cool down.

6. Using your finger place new tube to same position as removed old one, then put and screw the new nozzle same way as you removed it.

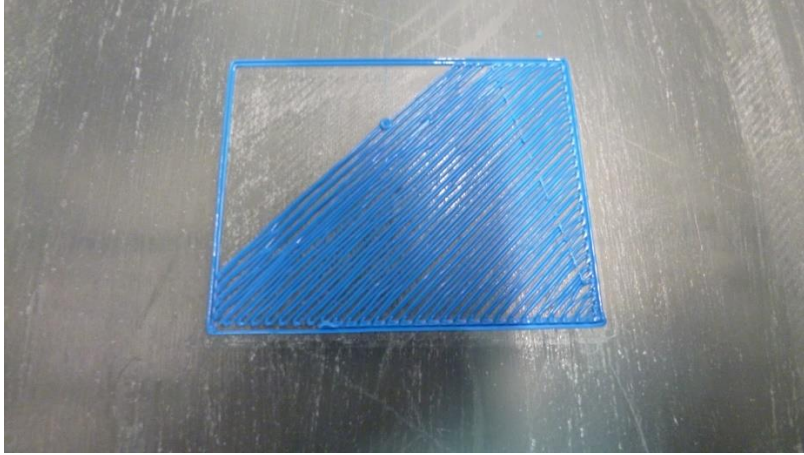7. After that setting the offset setting is necessary

Offset setting

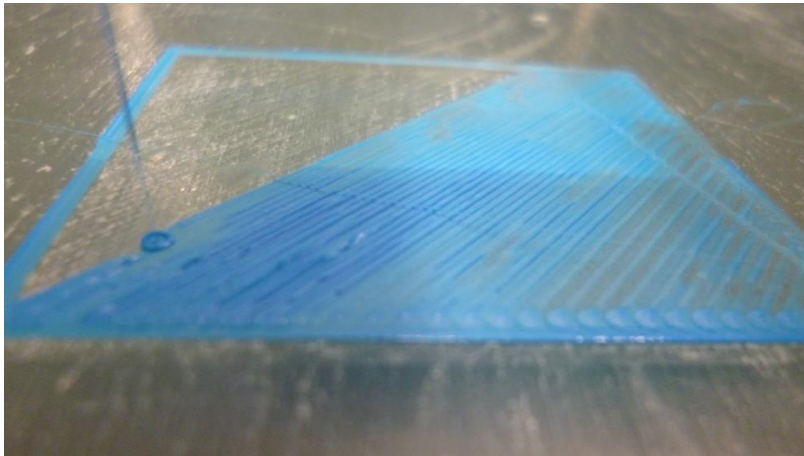Offset is the distance between the nozzle and the print bed

1. This is how the model should look when the offset is set correctly. The surface is smooth an even.

2. If there are gaps between the lines in one layer, if the offset is too high or if the nozzle is too close to the print bed (or even if it is in contact with the print bed during the printing process) please use the printer display. On the printer display, go to "Settings" → "Other Settings" → "Set Offset" → "Reload" to see the current value. If there is a gap, press the minus button as many times as necessary. If the nozzle is too close, use the plus button.
    Change the offset value carefully, especially when you decrease the offset, in order not to damage the print bed.
    After you have finished, do not forget to save the value by clicking the "Save" button. Then run the print.

The results of printing the first layer with too big a gap between the nozzle and the print bed.

The result of printing the first layer with the nozzle too close to the print bed.

3.   After saving the new offset value, press the "Motion test" button to test your setting.

4.   If everything appears as in the picture from paragraph 1, you have set the offset correctly.

12.   Contact details

Manufacturer:
be3D, s.r.o.
ID No.: 49356593
VAT No.: CZ49356593

Contact address:
Pod Hajkem 406/1a,
Prague 8, 180 00,
Czech Republic

Invoicing address:
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Prague 8, 180 00,
Czech Republic

Email: help@be3d.cz / info@be3d.cz
Web: www.be3d.cz

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