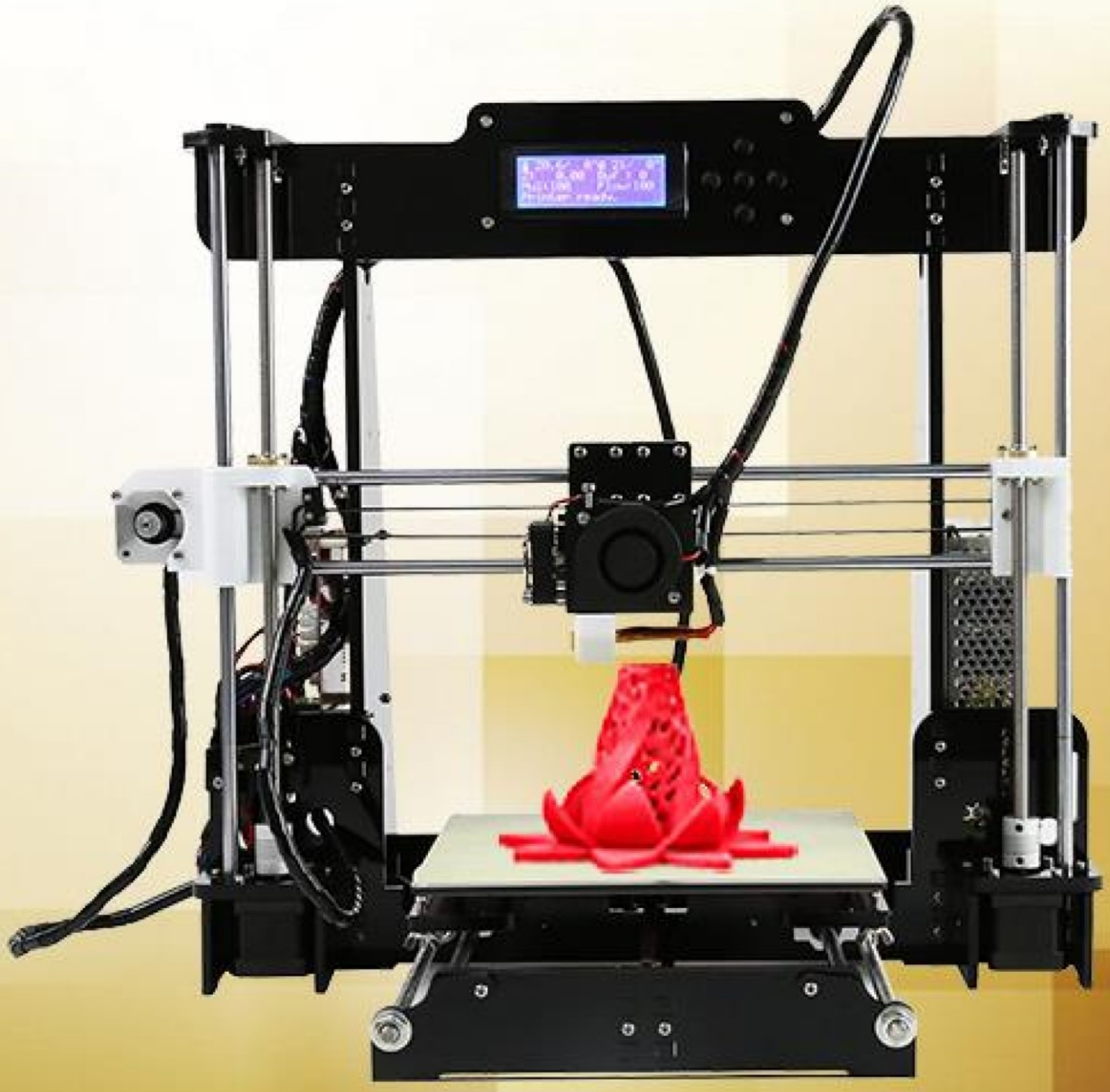
Operation Instruction

Model:A8



Contents

INTRODUCTION

A8 FDM 3D printer can print CAD 3D printer model to real . A8 uses Acrylic to build its frame while it uses linear bearings , belts and threaded rods to build X , Y , Z axis .

It enables A8 to print steadily with no vibration .

Note:

1. All statement included in this Instructions have been checked carefully , if any typographical errors or misunderstanding , we have the final interpretation .
2. No noification if any update .

A. Security Considerations

To avoid danger when using 3D printer , please pay attention to precautions below .

⦸ Danger

During Operation , the maximum temeprature of nozzle can be 260 ℃ while hotbed can be 100 ℃ . For your safety , during printing or cooling down , do not touch the nozzle , hotbed and models under printing . Power works at 110V/220V 50HZ AC and supply ground needed . Do not use other power supply , or it may cause components damage , fire or electric shock . And we take no responsibility for this .

⚠ Warning

We suggest wering protective goggles when removing auxiliary support materials . Some filaments will emit slight irritant gases , so we suggest to use 3D printer in a ventilated environment .

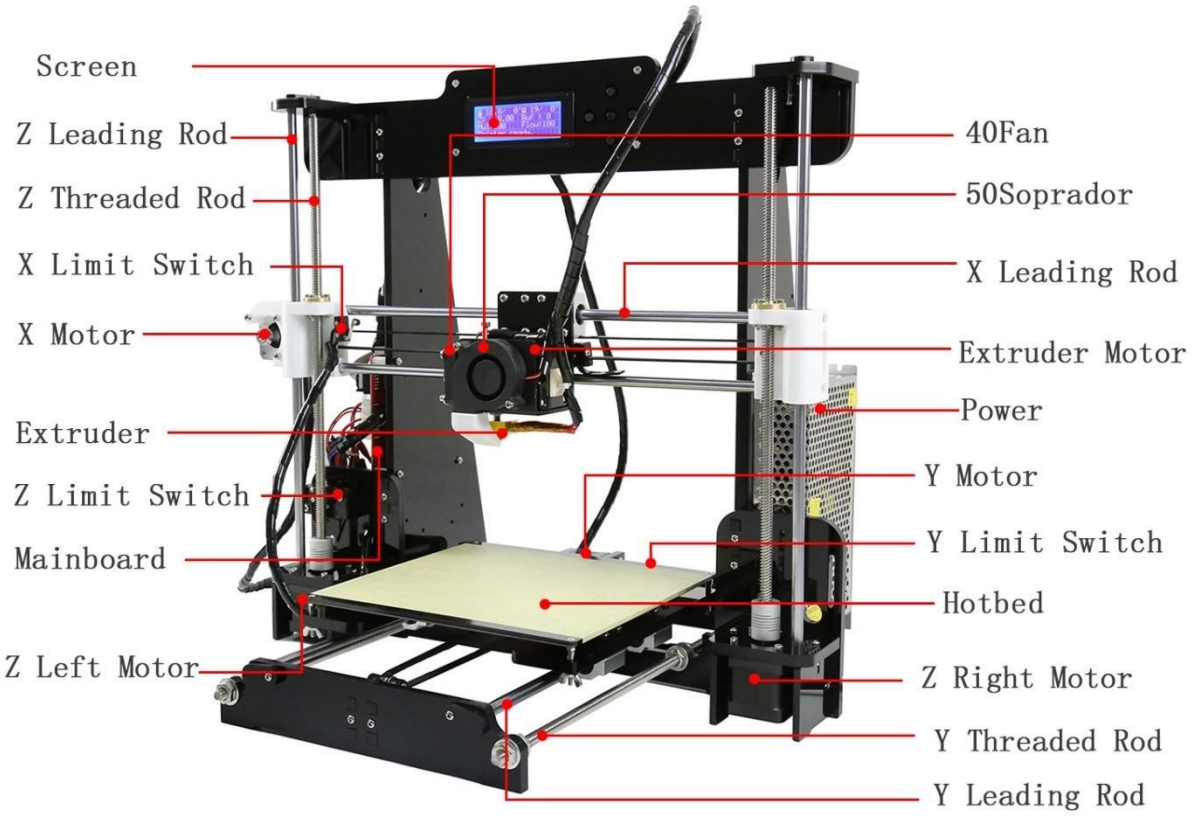
Note: ABS filament will emit a bit toxic gases when it melts .

B. Product Details

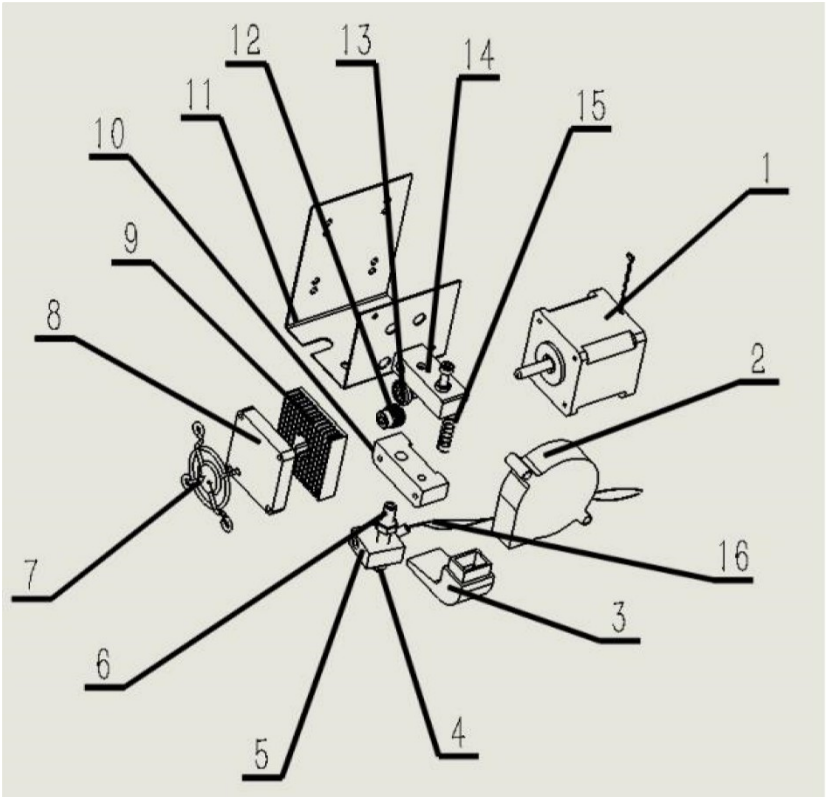
1.Specifications

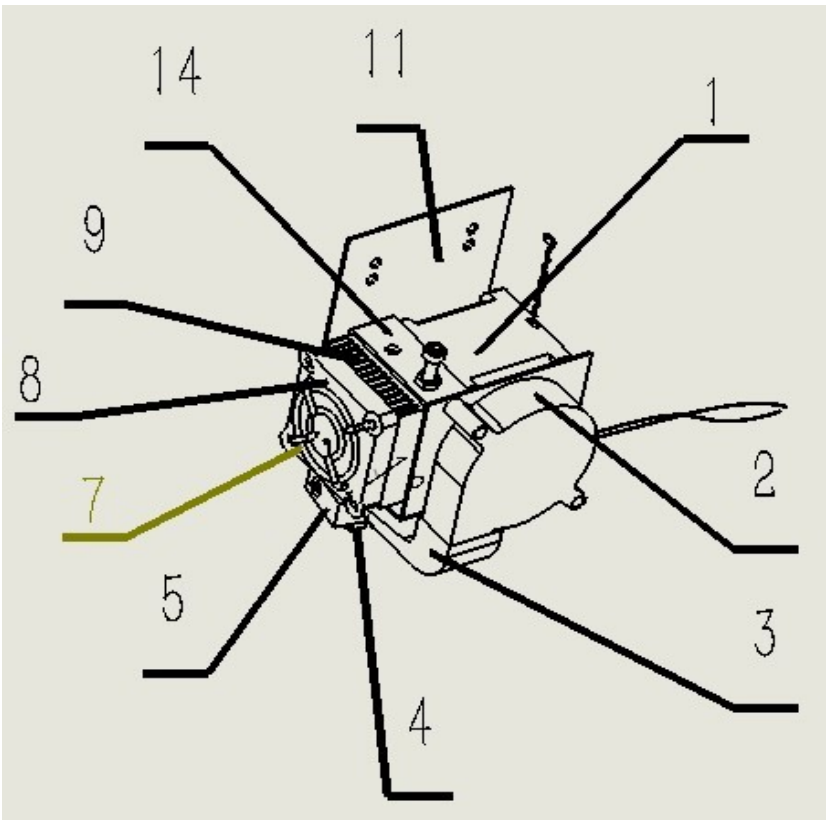
Model：A8	Nozzle diameter： 0.4mm
Layer thickness：0.1-0.3mm	Machine size： 500*400*450mm
Printing speed：10-120mm/s	Machine weight：7.5KG
X Y axis position accuracy：0.012m	Packing size：510*345*215mm
Z axis position accuracy：0.004m	Gross weight：9.2KG
Printing material：ABS,PLA	Build size：220*220*240mm
Material tendency：PLA	LCD screen：Yes
Filament diameter ：1.75mm	Offline printing：TF CARD
Software language：Multi-Language	File format：STL、G-Code、OBJ
Function of support：automatically	OS：windows(linux、mac)
Software： Cura	Working condition： 10-30℃，Humidity 20-50%

2.Machine parts



3.Extruder drawing





No.	Part Name	Quantity
1	Extruder Motor	1
2	Blower	1
3	Wind Mouth	1
4	Nozzle （0.4mm)	1
5	Heating Block	1
6	Throat	1
7	Fan Cover	1
8	Fan	1
9	Heat Sink	1
10	Extruder Seat	1
11	Bend Parts	1
12	Brass Wheel	1
13	U-Bearing	1
14	Briquetting	1
15	Spring	1
16	Heating Pipe	1

4.Tool List

3D Printer A8 assembly parts list

Item	Material number	Picture	Name	QTY	Item	Material number	Picture	Name	QTY
1-1	1700100001		Hot bed fixed aluminum plate	1	2-1	1700200004		Mainboard	1
1-2	1700200001		220mm*220mm*3mm Hot bed	1	2-2	1700300005		Left Z axis nut support	1
1-3	1101900001		Plastic nippers	1	2-3	1700300006		Right Z axis nut support	1
1-4			1.5M Power line	1	2-4	1300300001		Wind mouth	1
1-5	1101900008		5mm*160mm Screwdriver	1	2-5	1700300001		1.7M Belt	1
1-6	1700200002		Four parts below in this bag	1	2-6	1202200007		1.5M wire	1

Item	Material number	Picture	Name	QTY	Item	Material number	Picture	Name	QTY
1-6-1	1700200003		40*10 Fan	1	2-7	1700200005		5015 Air blower	1
1-6-2	1101200002		40*11 Cooling fin	1	2-8	1700300002		Y axis belt bearing support	1
1-6-3	1101700001		Fan cover	1	2-9	1700300003		Five parts below in this bag	1
1-6-4	1700100003		M3*45 Screw 2pcs M3 Spacer 8pcs	1	2-9-1	1300100009		Z axis Limit switch fixed plate	2
1-7	1700100004		Screw bag include below screws	1	2-9-2	1300100004		Y axis motor support	1
1-7-1	1700100005		M3*18 screw 50pcs	1	2-9-3	1300100007		Y axis Limit switch fixed plate	1
1-7-2	1700100006		M3 Nut 60pcs	1	2-9-4	1300100005		Y axis belt fixation clamp	2

Item	Material number	Picture	Name	QTY	Item	Material number	Picture	Name	QTY
1-7-3	1700100007		M8 Nut 16pcs M8 Spacer 12pcs	1	2-9-5	1300100010		Guide rod back up plate	6
1-7-4	1700100008		M4*8 screw 16pcs M4*14 screw 16pcs	1	2-10	1300100020		Side support plate	2
1-7-5	1700100009		M3*30 screw 14pcs	1	2-11	1300100012		Filament support plate	2
1-7-6	1700100010		M3*12 screw 15pcs	1	2-12	1300100013		Filament support plate connecting plate	2
1-7-7	1700100011		M2*12 screw 2pcs wing nut 4pcs Spring 4pcs	1	2-13	1300100014		Screen baffle plate	1
1-7-8	1700100012		M3*20 screw 4pcs M2.3*10screw 2pcs M3*25 screw 2pcs	1	2-14	1300100008		Z axis motor support Plate	4
1-8	1700200006		Three parts below in this bag	1	2-15	1700200007		8GB TF card and card reader	1

Item	Material number	Picture	Name	QTY	Item	Material number	Picture	Name	QTY
1-8-1	1202100006		Wire 65CM	1	3-1	1300100017		Bottom support plate	1
1-8-2	1700200013 1700200014 1700200014		Z Limit switch A 20CM X Limit switch B 50CM Y Limit switch C 50CM	3	3-2	1300100016		Top support plate	1
1-8-3	1300400003 1300400004		Pillar washer M3*7 4pcs Pillar washer M3*15 4pcs	8	3-3	1300100011		Back plate	1
1-9	1700100013		Three parts below in this bag	1	3-4	1300100015		Front plate	1
1-9-1	1101900010		3mm*130mm Screwdriver	1	3-5	1700300024		Support plate lock plate	2
1-9-2	1101900004 1101900006 1101900005 1101900007		Hex wrench M1.5 Hex wrench M2 Hex wrench M2.5 Hex wrench M3	4	3-6	1300100019		Z axis motor fixed plate	2
1-9-3	1101900002		Open spanner	1	3-7	1300100003		Y axis motor fixed plate	1

Item	Material number	Picture	Name	QTY	Item	Material number	Picture	Name	QTY
1-10	1300500005		Four parts below in this bag	1	3-8	1700100016		Extruder	1
1-10-1	1300500001		4.5M Winding pipe	1	3-9	1700200008		X axis motor	1
1-10-2	1300900001		Belting	10	3-10	1700200009		Y axis motor	1
1-10-3	1300400006		R clip	3	3-11	1700200010		Z axis motor	2
1-10-4	1300400005		Locating piece	2	3-12	1101300008		Linear bearing	7

Item	Material number	Picture	Name	QTY	Item	Material number	Picture	Name	QTY
1-11	1700200011		LCD 2004 screen	1	3-13	1700100014		Guide rod 436mm 2pcs Guide rod 380mm 4pcs	6
1-12	1202100031		X Motor line 40CM Y Motor line 40CM Left Z Motor line 40CM Right Z Motor line 90CM Extruder Motor line 90CM	5	3-14	1700100015		T type lead screw M8*345mm 2pcs Threaded rod M8*400mm 2pcs Threaded rod M8*150mm 1pcs	5
1-13	1700200027		Heat bed line 90CM	1	3-15	1200100002		Power Supply	1

C. Cura Software

1.Installation of Cura14.07 a:

Where can I find the software?

1) TF card with shipment; 2) download from Internet; b:

Installation process

1) From TF card with shipment

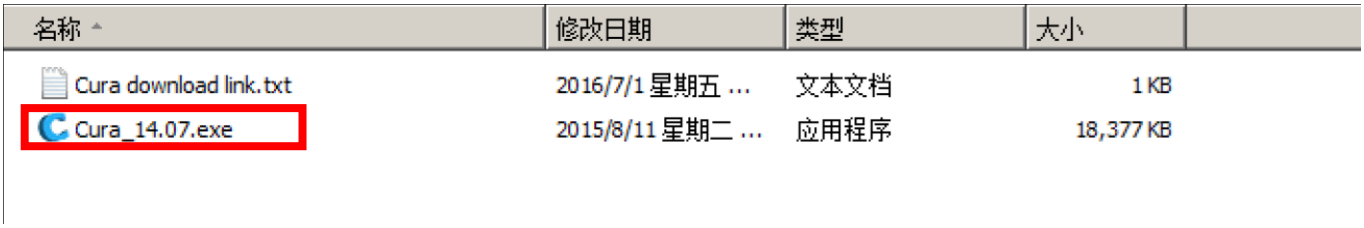
Insert TF card and open the file **1.1**

File location in the TF card

1)Insert TF card , open the file

名称	修改日期	类型	大小
Installation Instruction	2016/7/7 星期四 ...	文件夹	
Print Model STL	2016/6/22 星期三 ...	文件夹	
Software	2016/7/7 星期四 ...	文件夹	
Test file GCODE	2016/6/22 星期三 ...	文件夹	
Tool List&other pictures	2016/7/7 星期四 ...	文件夹	

名称	修改日期	类型	大小
CH340G Drive	2016/7/7 星期四 ...	文件夹	
Cura 14.07	2016/7/7 星期四 ...	文件夹	
RepetierHost_1_0_5	2016/7/7 星期四 ...	文件夹	



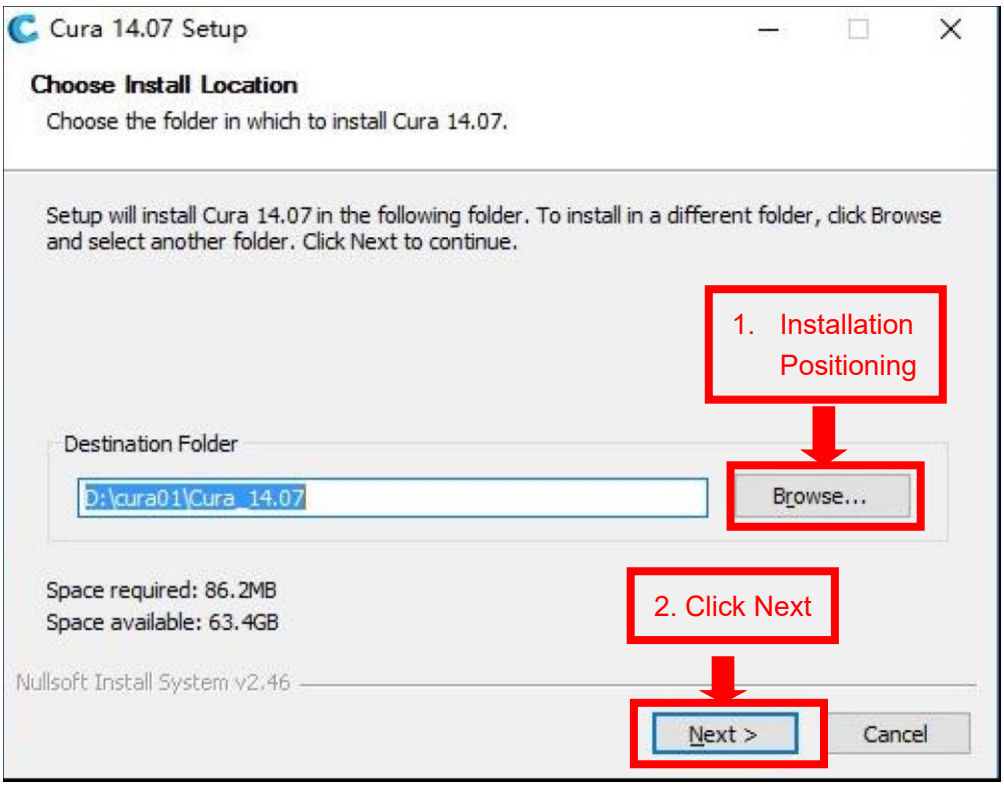
名称	修改日期	类型	大小
Cura download link.txt	2016/7/1 星期五 ...	文本文档	1 KB
Cura_14.07.exe	2015/8/11 星期二 ...	应用程序	18,377 KB

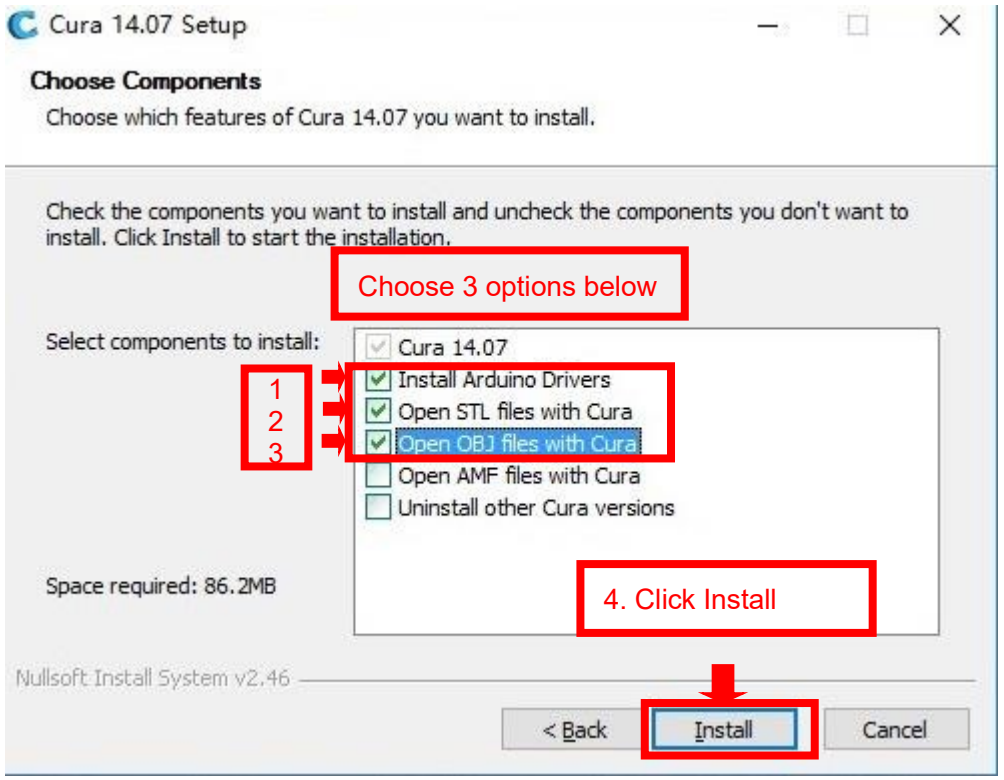
2) Download from Internet

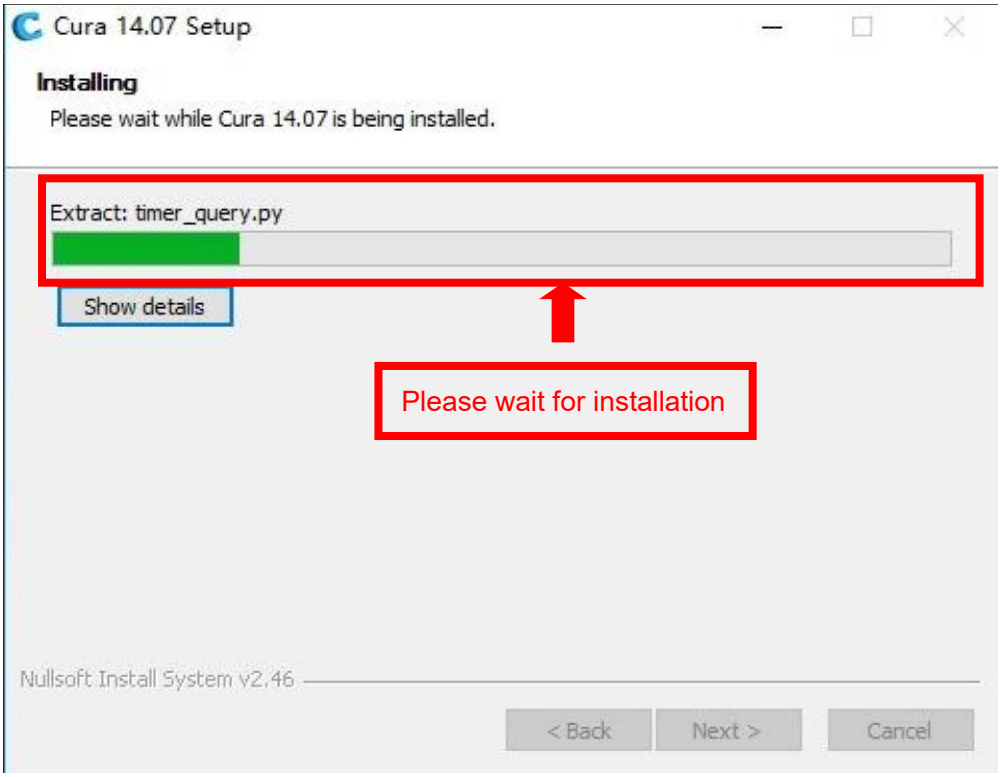
Official Website：https://ultimaker.com/en/cura-software/list

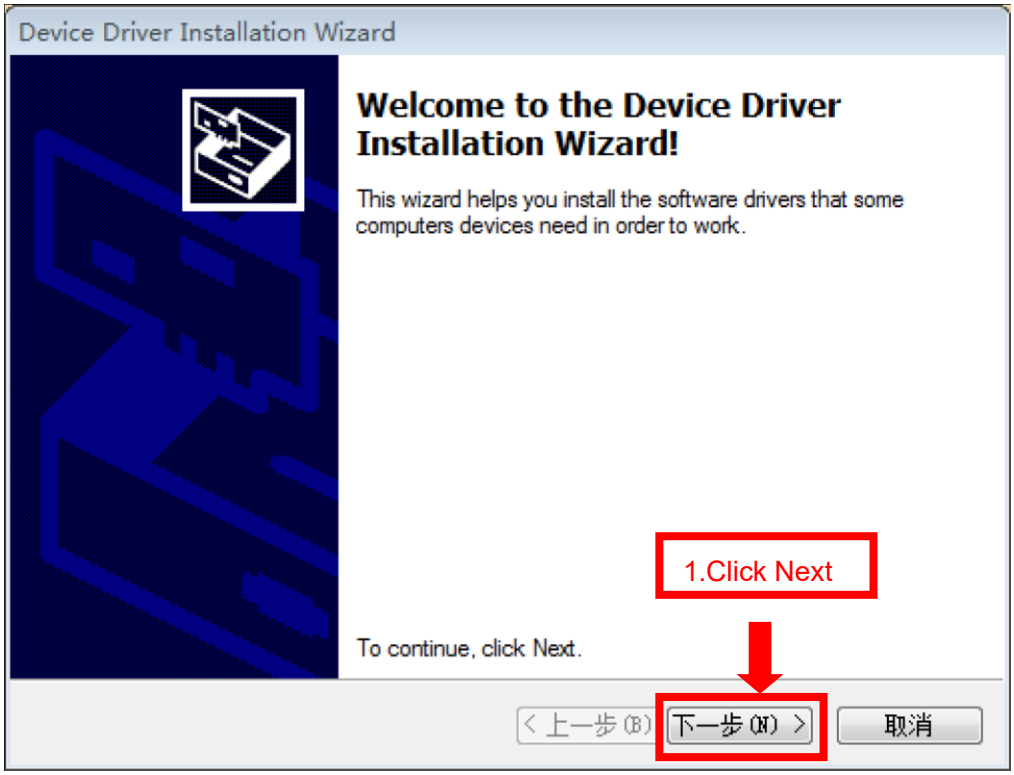
Choose corresponding software to download

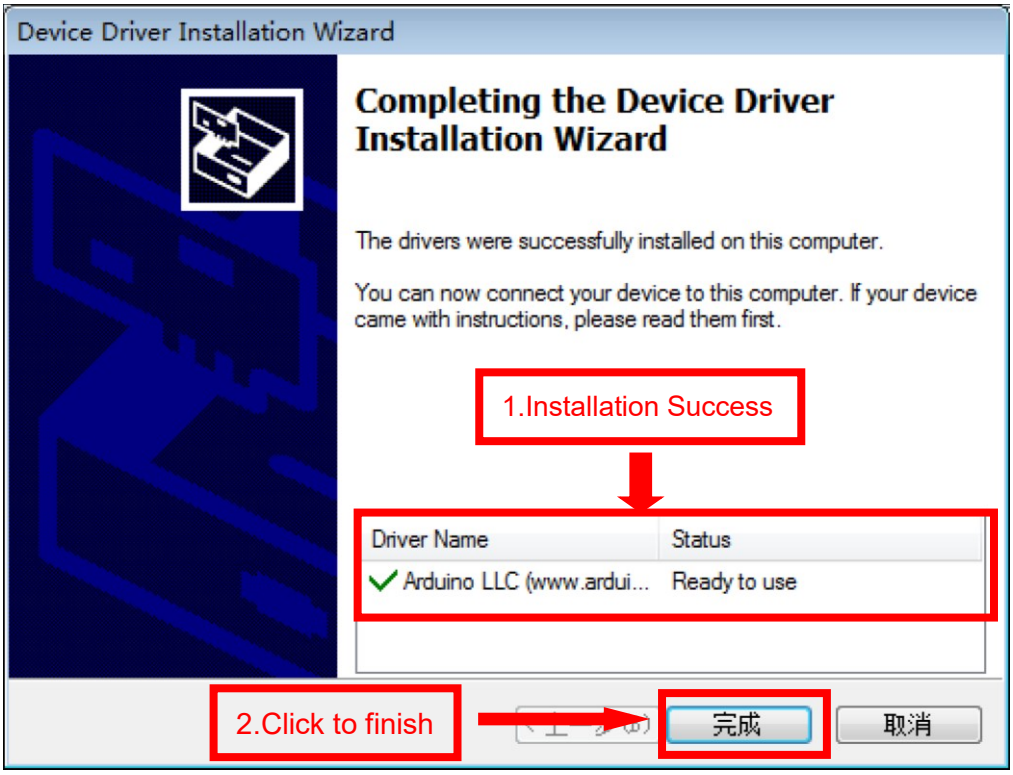
b.Software Installation Process

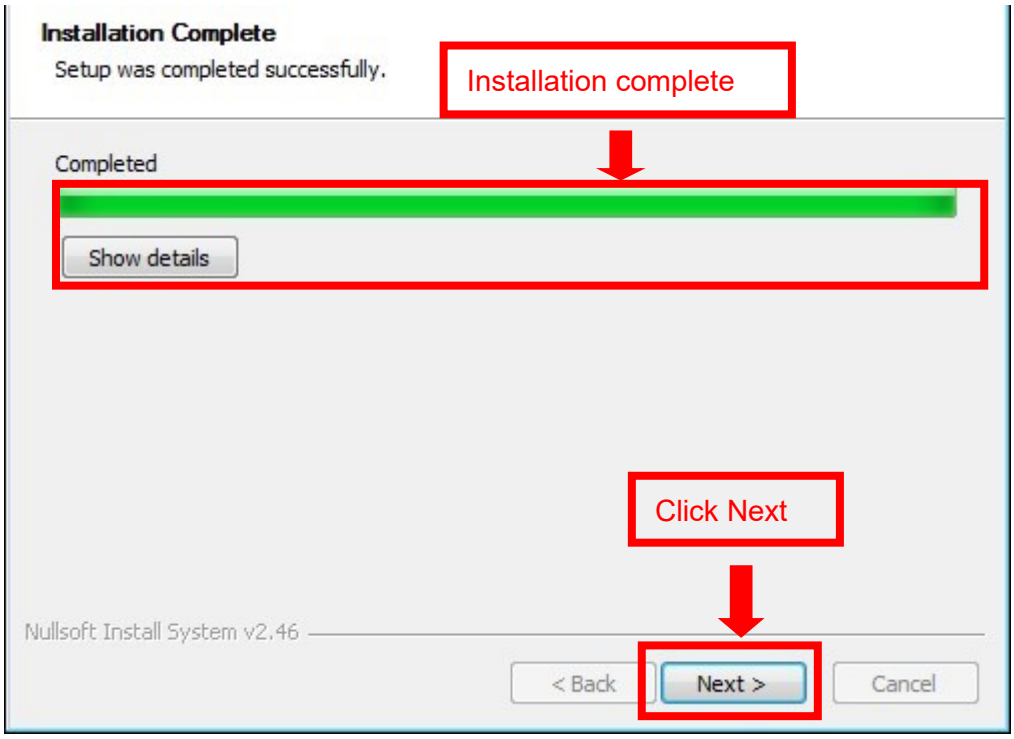

Cura 14.07 Setup
Choose Install Location
Choose the folder in which to install Cura 14.07.
Setup will install Cura 14.07 in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.
1. Installation Positioning
Destination Folder
D:\cura01\Cura_14.07
Browse...
Space required: 86.2MB
Space available: 63.4GB
2. Click Next
Nullsoft Install System v2.46
Next >
Cancel


Cura 14.07 Setup
Choose Components
Choose which features of Cura 14.07 you want to install.
Check the components you want to install and uncheck the components you don't want to install. Click Install to start the installation.
Choose 3 options below
Select components to install:
1
2
3
Cura 14.07
Install Arduino Drivers
Open STL files with Cura
Open OBJ files with Cura
Open AMF files with Cura
Uninstall other Cura versions
Space required: 86.2MB
4. Click Install
Nullsoft Install System v2.46
< Back
Install
Cancel


Cura 14.07 Setup
Installing
Please wait while Cura 14.07 is being installed.
Extract: timer_query.py
Show details
Please wait for installation
Nullsoft Install System v2.46
< Back
Next >
Cancel

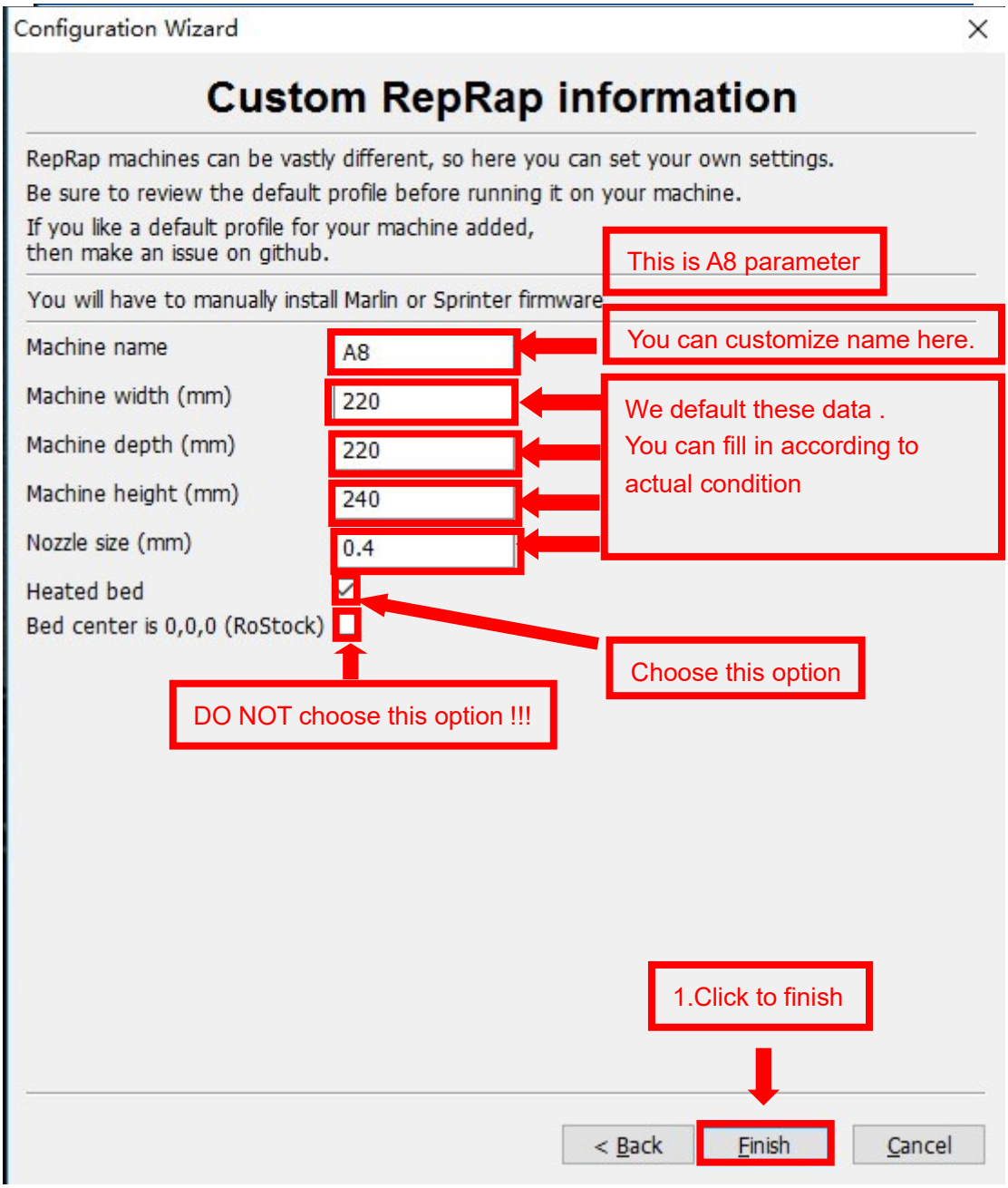

Device Driver Installation Wizard
Welcome to the Device Driver Installation Wizard!
This wizard helps you install the software drivers that some computers devices need in order to work.
1.Click Next
To continue, click Next.
< 上一步(B)
下一步(N) >
取消

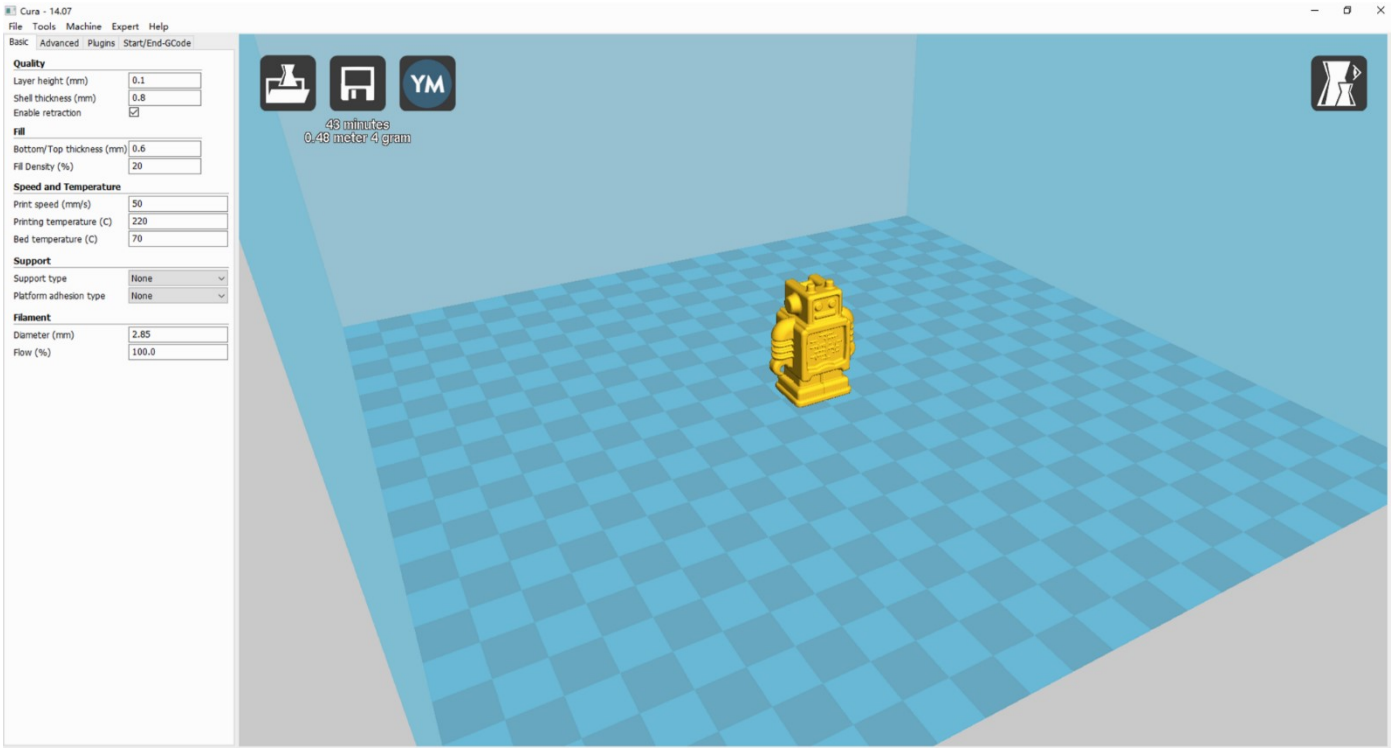

Device Driver Installation Wizard
Completing the Device Driver Installation Wizard
The drivers were successfully installed on this computer.
You can now connect your device to this computer. If your device came with instructions, please read them first.
1.Installation Success
Driver Name
Status
Arduino LLC (www.ardui...
Ready to use
2.Click to finish
完成
取消


Installation Complete
Setup was completed successfully.
Installation complete
Completed
Show details
Click Next
Nullsoft Install System v2.46
< Back
Next >
Cancel


Cura 14.07 Setup
Completing the Cura 14.07 Setup Wizard
Cura 14.07 has been installed on your computer.
Click Finish to close this wizard.
Start Cura 14.07
1.Choose to run Cura
2. Click to finish
< Back
Finish
Cancel


Configuration Wizard
First time run wizard
Welcome, and thanks for trying Cura!
This wizard will help you in setting up Cura for your machine.
Click Next
< Back
Next >
Cancel


Configuration Wizard
Custom RepRap information
RepRap machines can be vastly different, so here you can set your own settings.
Be sure to review the default profile before running it on your machine.
If you like a default profile for your machine added,
then make an issue on github.
You will have to manually install Marlin or Sprinter firmware
Machine name
A8
Machine width (mm)
220
Machine depth (mm)
220
Machine height (mm)
240
Nozzle size (mm)
0.4
Heated bed
Bed center is 0,0,0 (RoStock)
This is A8 parameter
You can customize name here.
We default these data .
You can fill in according to
actual condition
Choose this option
DO NOT choose this option !!!
1.Click to finish
< Back
Finish
Cancel



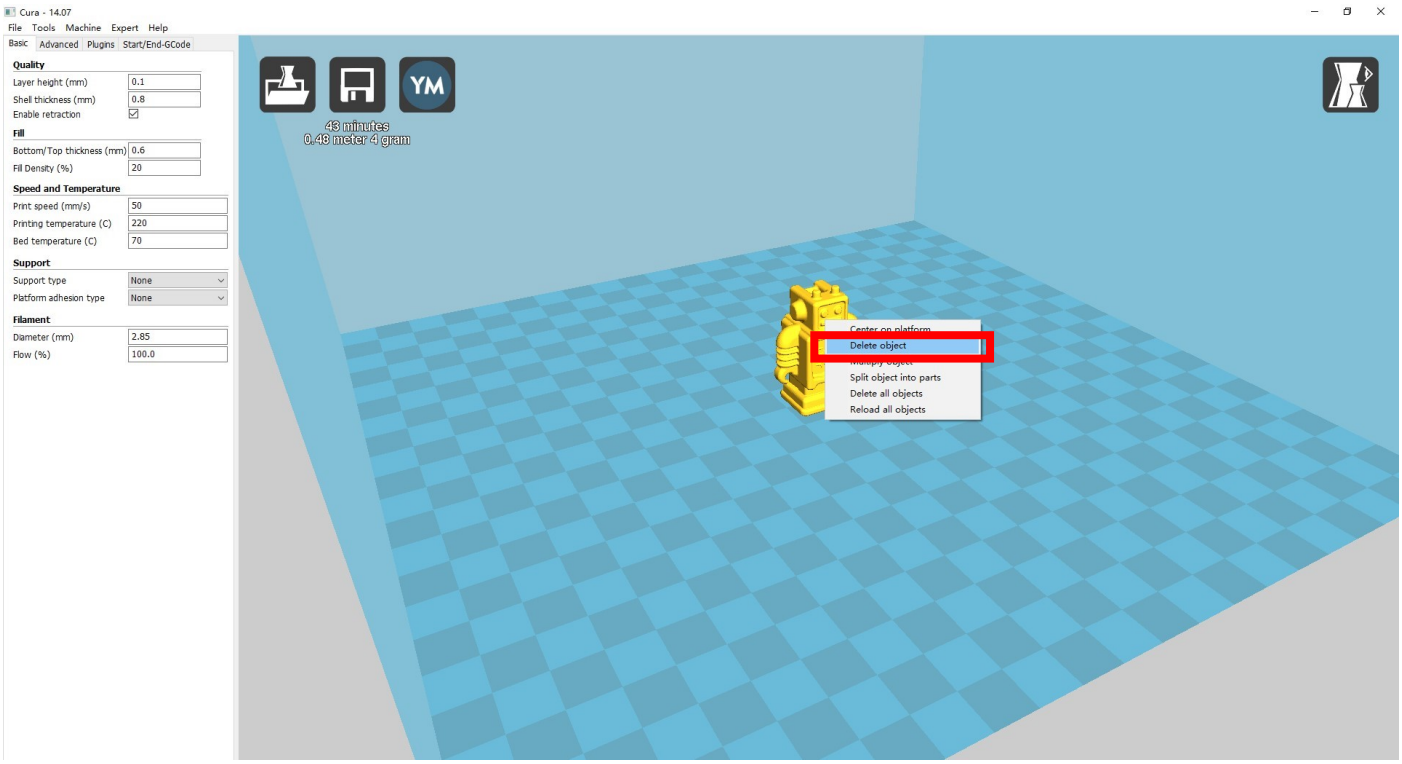
Now you have finished the installation. Next , enter Cura .

2. Cura Setting

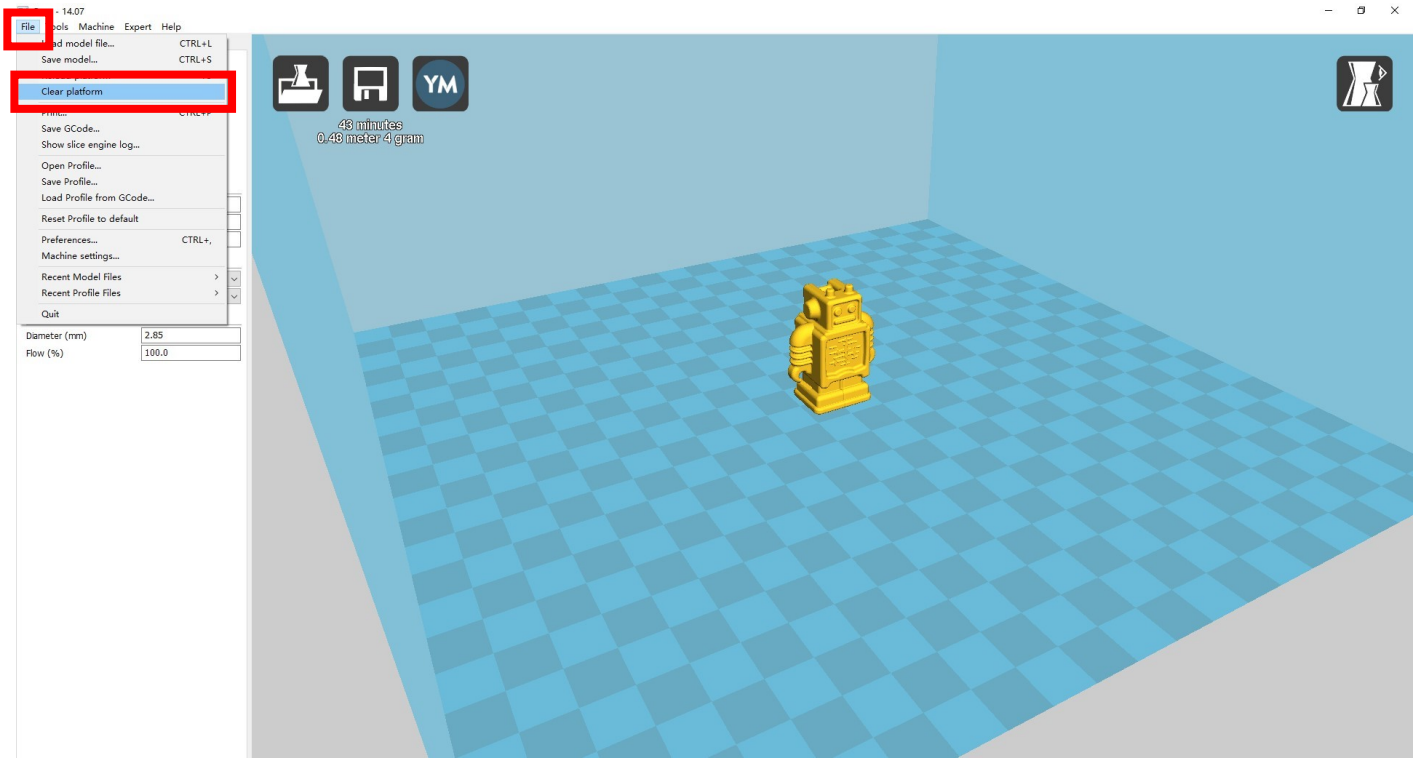
2.1 Clear platform

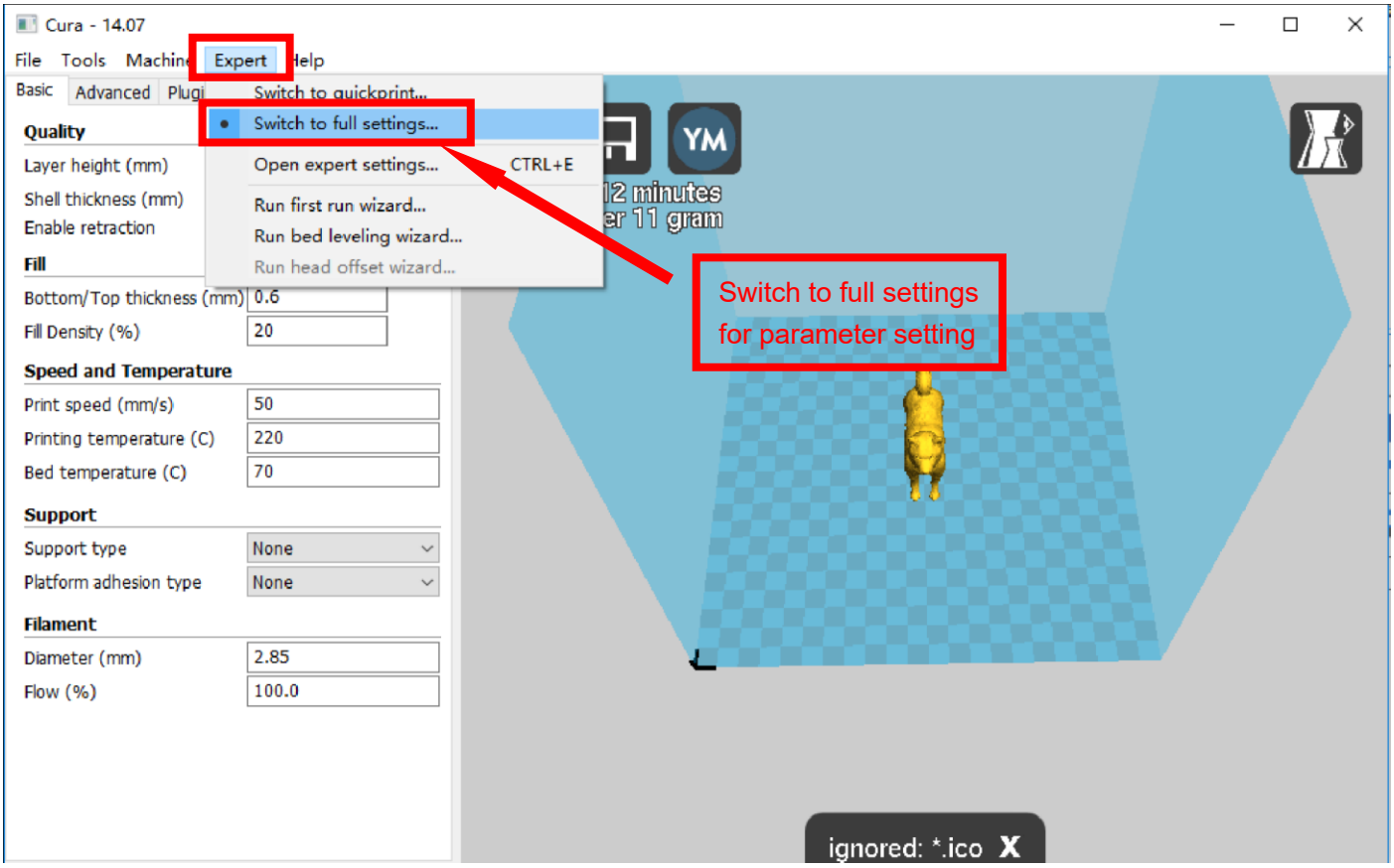
Delete the dog. Two ways for you :

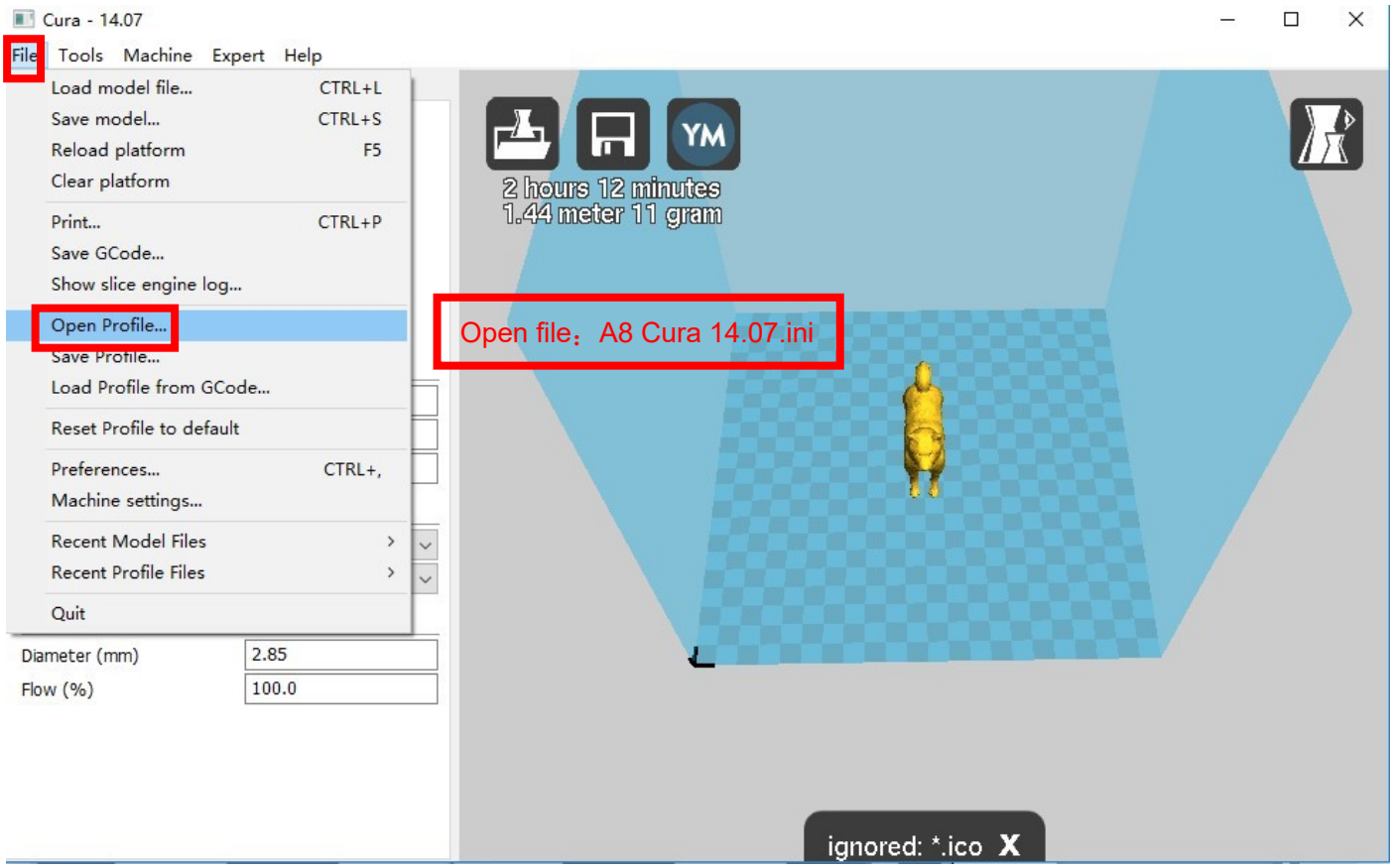
1.Move mouse to dog ,right click, click “delete object”.



2.Left click “File” , choose ”Clear platform”.

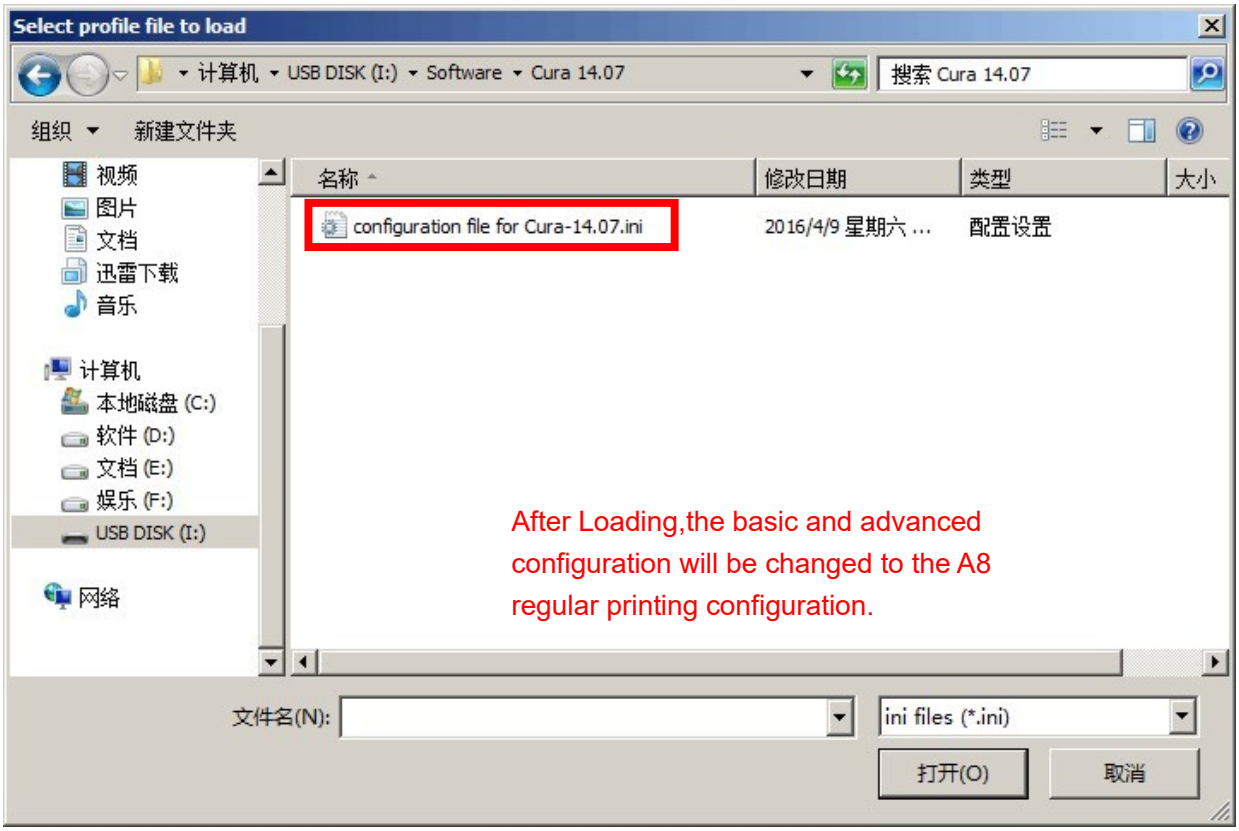


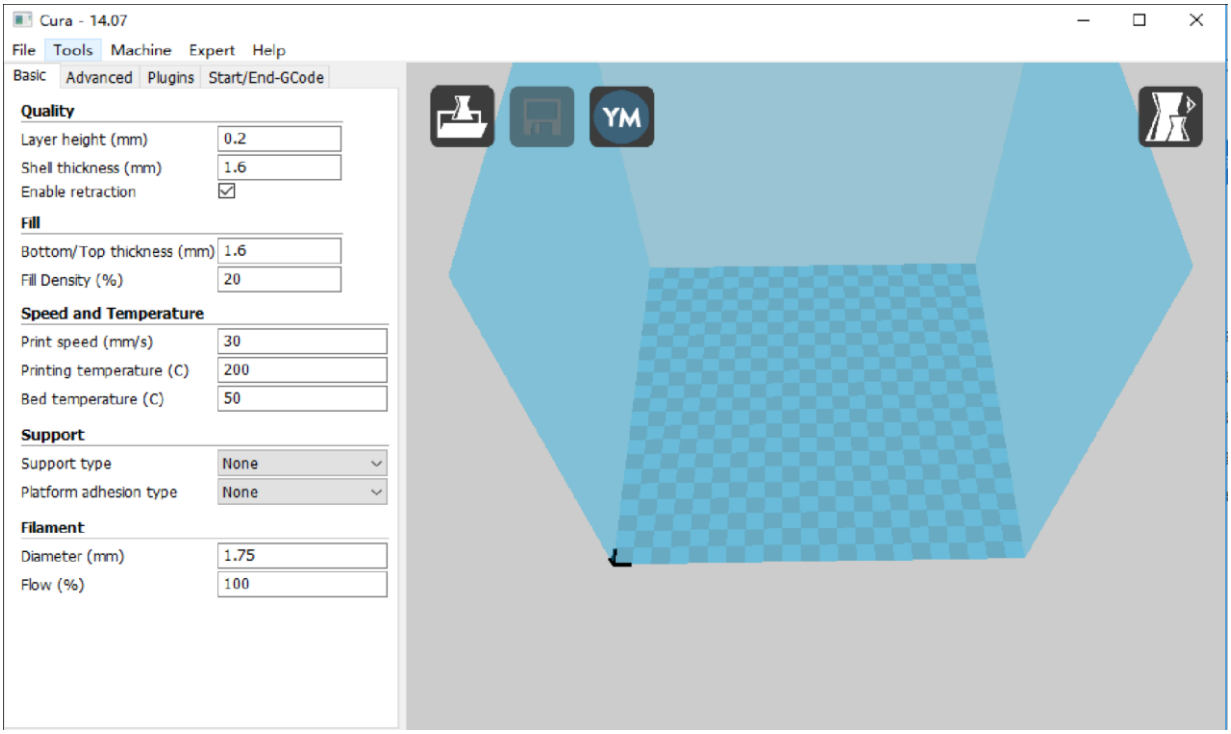

Cura - 14.07
File Tools Machine Expert Help
Basic Advanced Plugi
Switch to quickprint...
Switch to full settings...
Open expert settings... CTRL+E
Run first run wizard...
Run bed leveling wizard...
Run head offset wizard...
Quality
Layer height (mm)
Shell thickness (mm)
Enable retraction
Fill
Bottom/Top thickness (mm) 0.6
Fill Density (%) 20
Speed and Temperature
Print speed (mm/s) 50
Printing temperature (C) 220
Bed temperature (C) 70
Support
Support type None
Platform adhesion type None
Filament
Diameter (mm) 2.85
Flow (%) 100.0
Switch to full settings
for parameter setting
ignored: *.ico

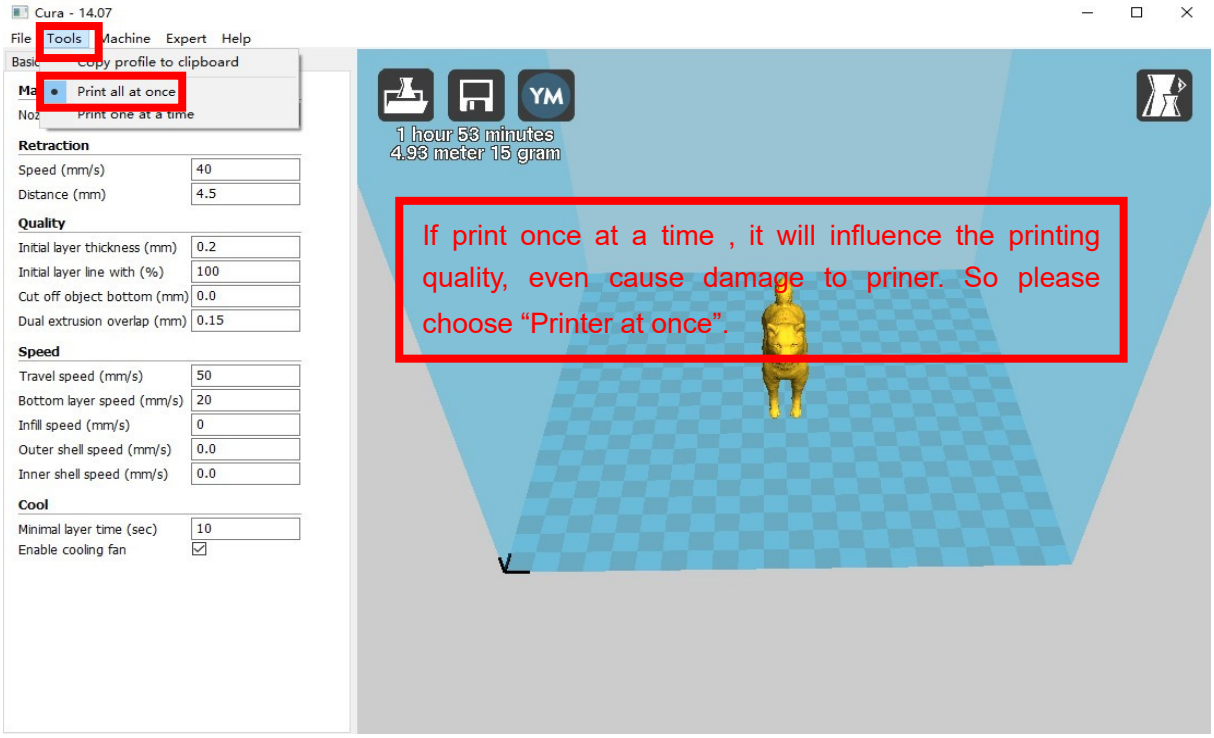

Cura - 14.07
File Tools Machine Expert Help
Load model file... CTRL+L
Save model... CTRL+S
Reload platform F5
Clear platform
Print... CTRL+P
Save GCode...
Show slice engine log...
Open Profile...
Save Profile...
Load Profile from GCode...
Reset Profile to default
Preferences... CTRL+,
Machine settings...
Recent Model Files
Recent Profile Files
Quit
Diameter (mm) 2.85
Flow (%) 100.0
2 hours 12 minutes
1.44 meter 11 gram
Open file，A8 Cura 14.07.ini
ignored: *.ico

Position of configuration file: Computer/TF card)/ configuration file for cura-14.07

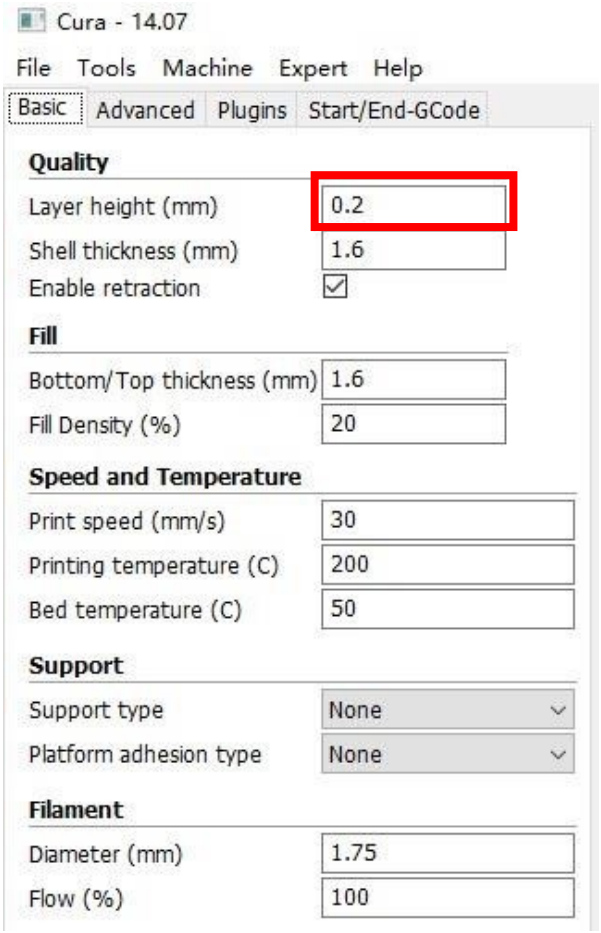
（suggestion :keep this file copy to your computer）



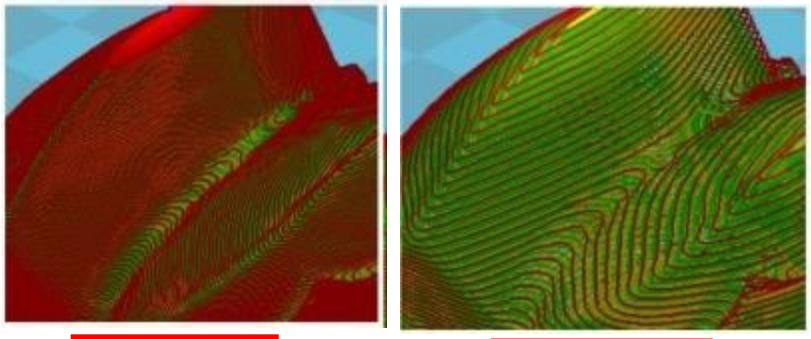



Cura - 14.07
File
Tools
Machine
Expert
Help
Copy profile to clipboard
Print all at once
Print one at a time
Retraction
Speed (mm/s) 40
Distance (mm) 4.5
Quality
Initial layer thickness (mm) 0.2
Initial layer line with (%) 100
Cut off object bottom (mm) 0.0
Dual extrusion overlap (mm) 0.15
Speed
Travel speed (mm/s) 50
Bottom layer speed (mm/s) 20
Infill speed (mm/s) 0
Outer shell speed (mm/s) 0.0
Inner shell speed (mm/s) 0.0
Cool
Minimal layer time (sec) 10
Enable cooling fan
YM
1 hour 53 minutes
4.93 meter 15 gram
If print once at a time , it will influence the printing quality, even cause damage to priner. So please choose “Printer at once”.

2.3 Layer height settings



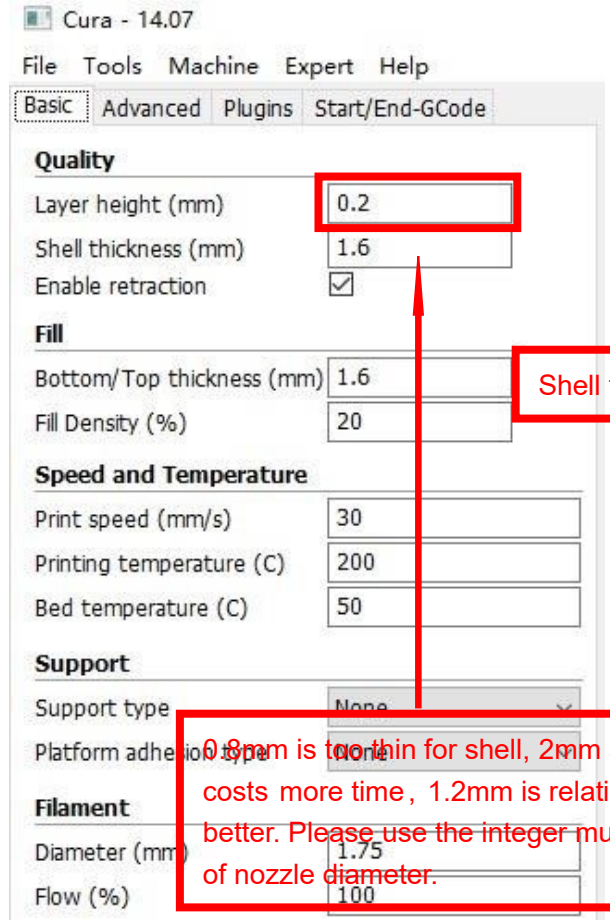
Layer height： 0.1mm cost long time but have the best printing precision. 0.2mm cost half time compared to 0.1mm , but have general printing precision. 0.3 cost less time with not good precision. It defaults 0.2mm.



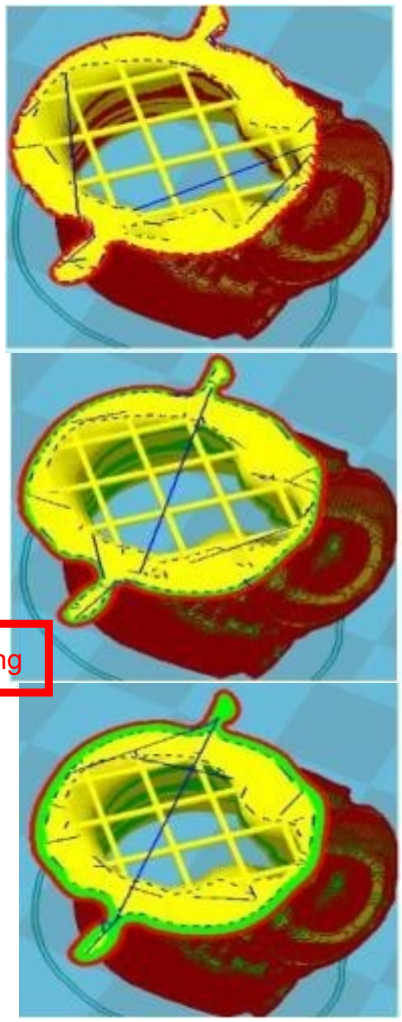
Left：0.1mm Layer height

Right：0.2mm Layer height

Layer height setting



Shell thickness setting

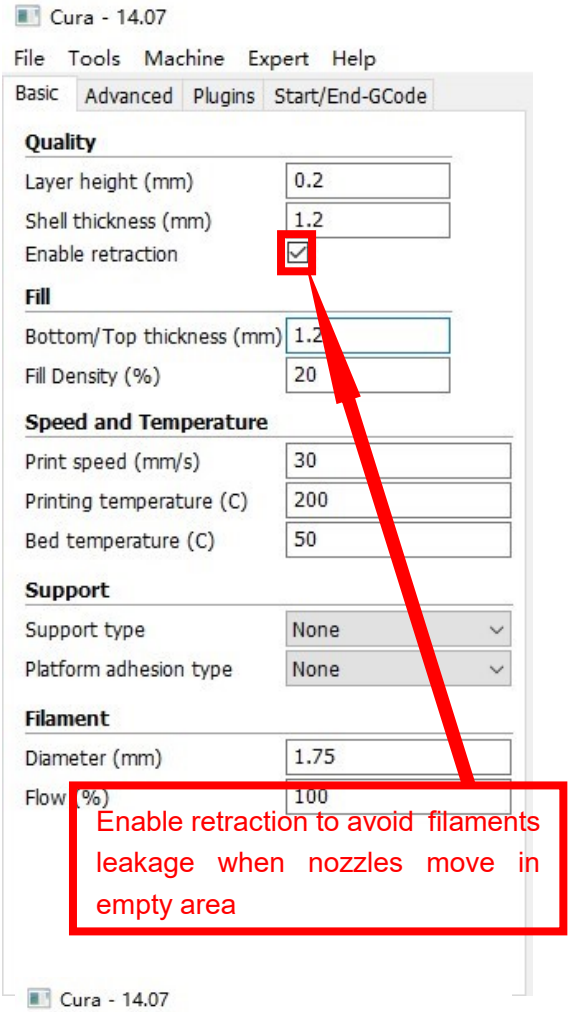


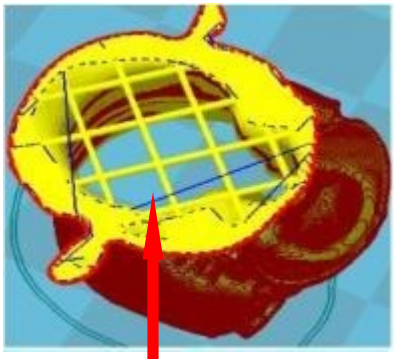
0.8mm

1.2mm

2mm

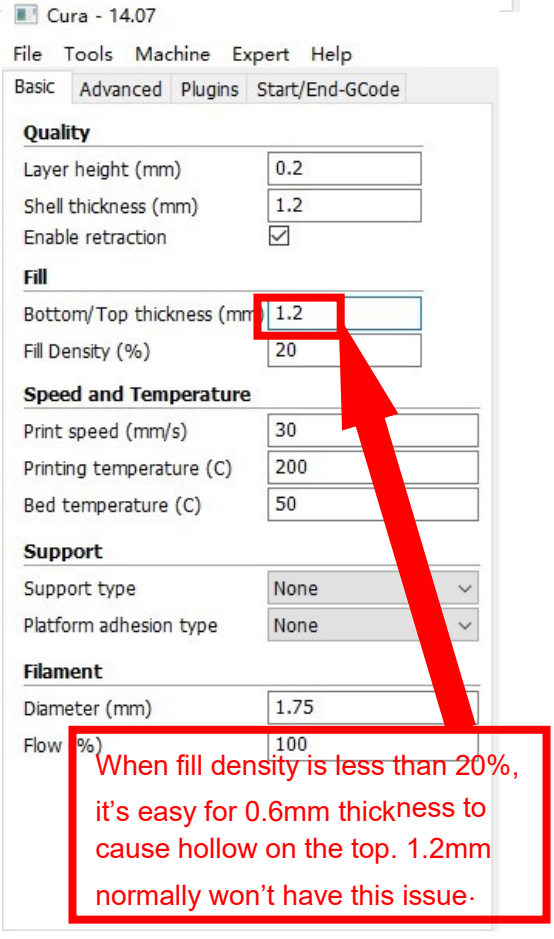
0.8mm is too thin for shell, 2mm shell costs more time, 1.2mm is relatively better. Please use the integer mutiple of nozzle diameter.

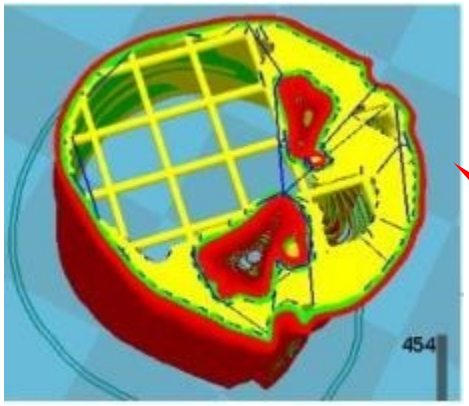




The Blue line is the leak filament

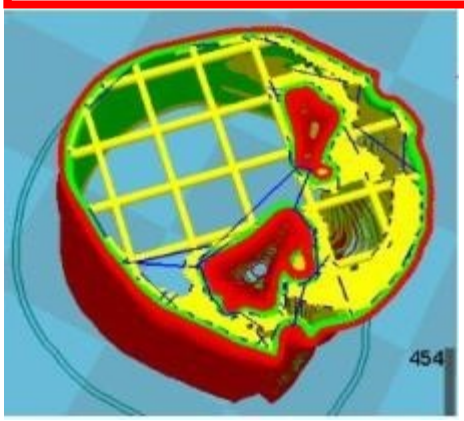
Enable retraction





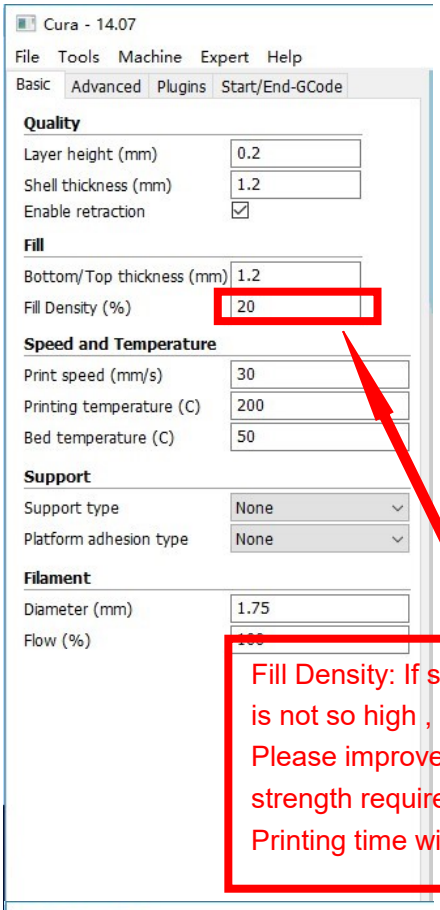
Bottom/Top thickness: 1.2mm

Under the same fill density

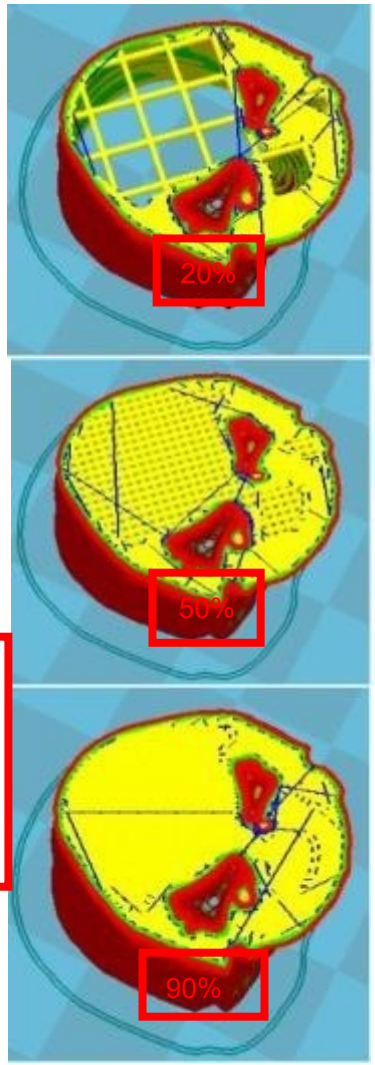


Bottom/Top thickness: 0.6mm

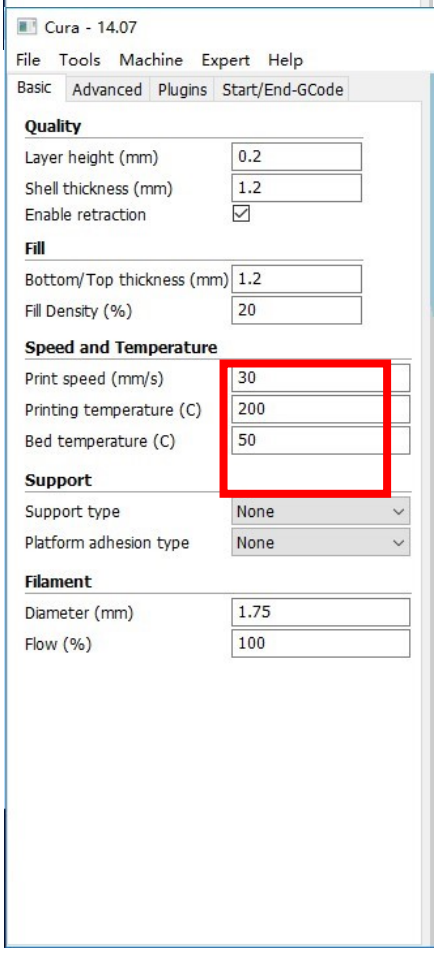
Bottom/Top thickness setting



Fill Density Setting



Fill Density: If strength requirement is not so high , set 10% is ok.
Please improve fill density when strength requirement gets higher.
Printing time will go up as well.



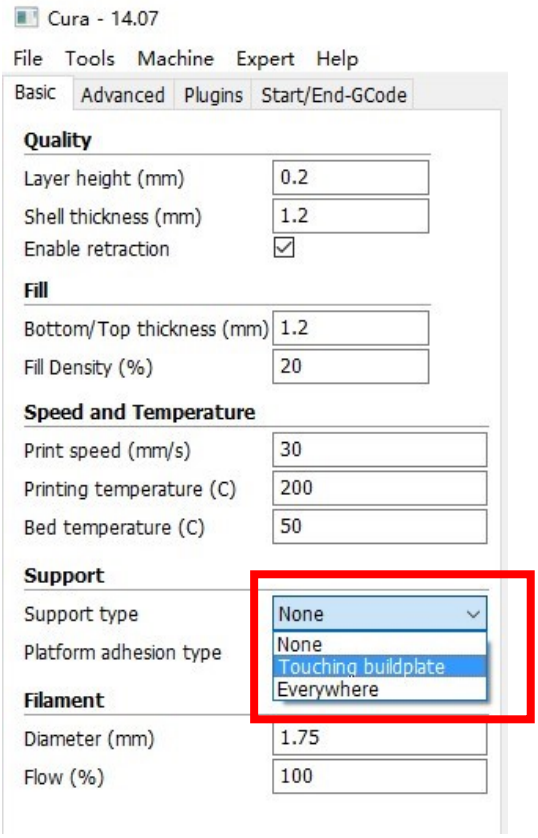
Printing Speed setting

This is default speed. If other settings aren't changed, it prints more accurately while the printing process takes more time.
High printing speed takes less time while it cannot print accurately , making the model have bad quality.
Normally 40-60 print speed is suitable for printing.

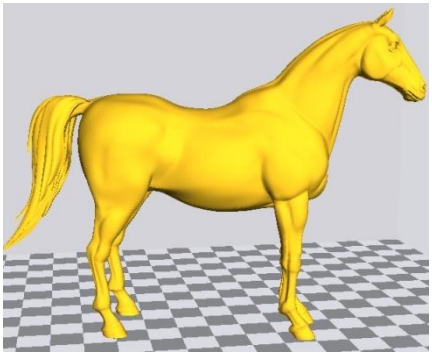
Pringting Temperature

PLA filament temperature setting: nozzle: 190-210 ℃ hotbed: 40-60℃

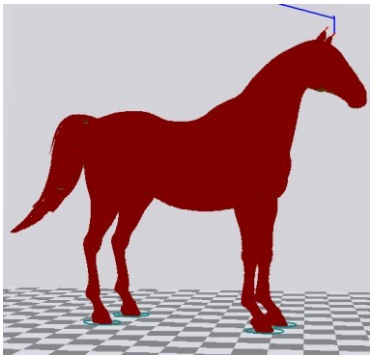
ABS filament temperature setting: nozzle: 230-250℃ hotbed: 60-90℃



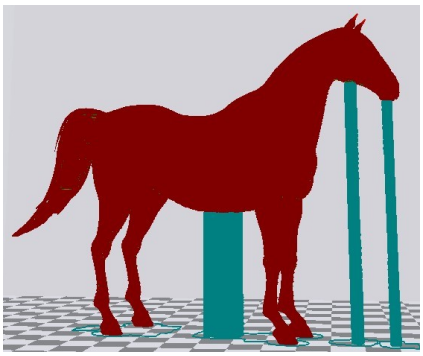
Support type setting



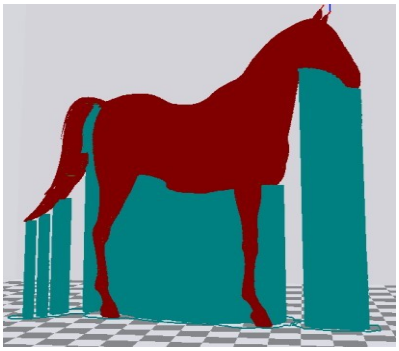
Original Model



Support type: None

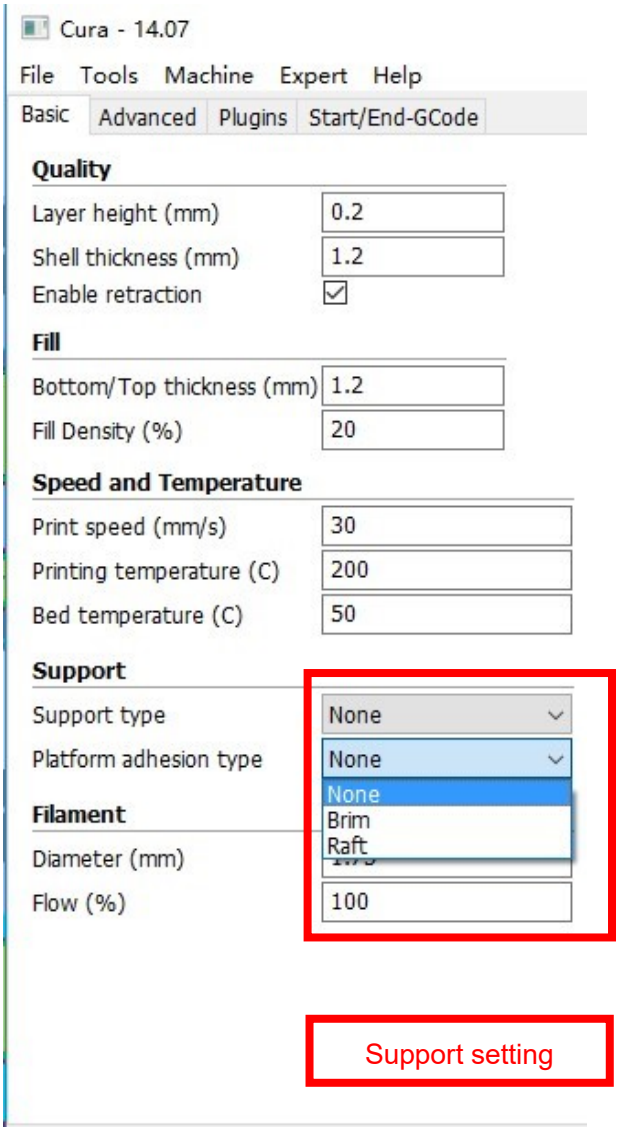


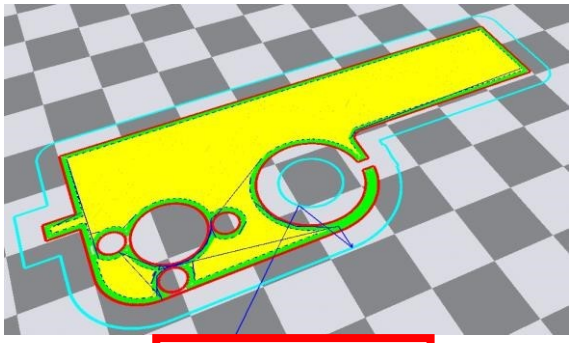
Support type: Touching



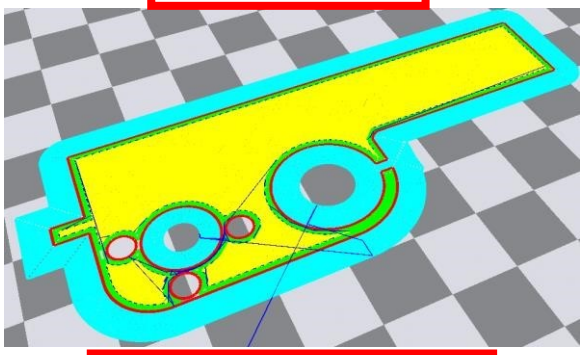
Support type: Everywhere

Attention: Normally we add support to complex model or model with vacant parts. It may have influence on the surface if you choose everywhere. You'd better circle around the model and try to avoid unnecessary support.

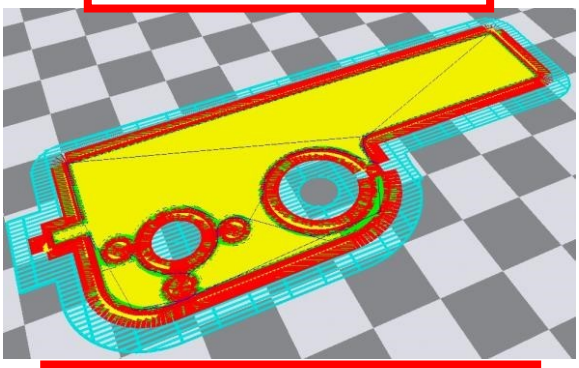

Cura - 14.07
File Tools Machine Expert Help
Basic Advanced Plugins Start/End-GCode
Quality
Layer height (mm) 0.2
Shell thickness (mm) 1.2
Enable retraction
Fill
Bottom/Top thickness (mm) 1.2
Fill Density (%) 20
Speed and Temperature
Print speed (mm/s) 30
Printing temperature (C) 200
Bed temperature (C) 50
Support
Support type None
Platform adhesion type None
None
Brim
Raft
Filament
Diameter (mm)
Flow (%) 100
Support setting



None: no support

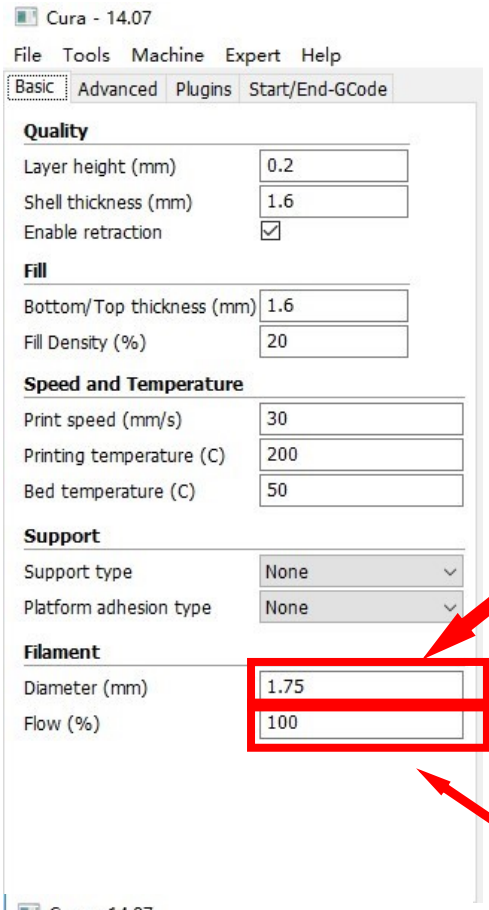


Brim:Touch with the adge



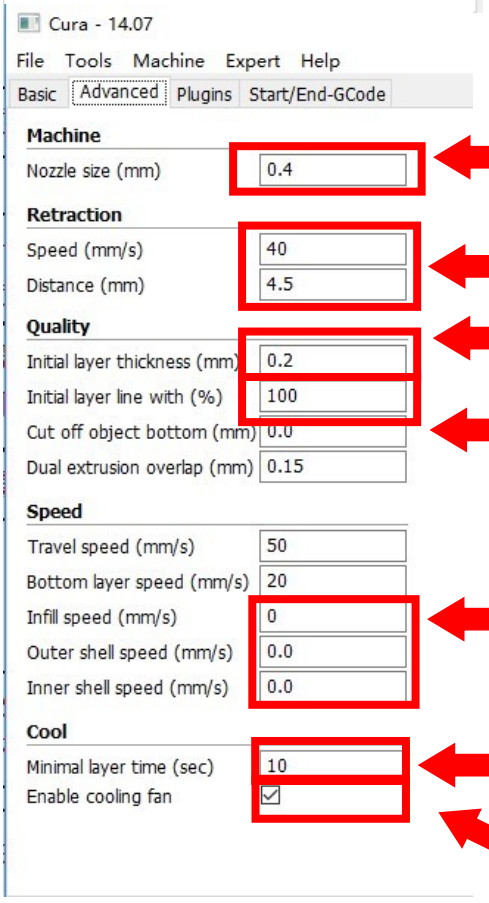
Raft: Totally touch with the bottom

Attention: please choose None if the printing platform is ready and the high temperature adhesive tape is good. Please choose Brim when the model is small . Choosing Raft makes it difficult to seperate model from the platform



Attention: A8 use 1.75mm filament

Attention:
Flow is proportion of filament , we suggest to use 100
Increasing flow & decrease diameter has the similar effect.
Model surface gets many bumps when flow is too big;model frame gets flimsy if flow is too small.



We suggest not to change it , A8 default 0.4mm

We suggest not to change it , or use the date in the picture

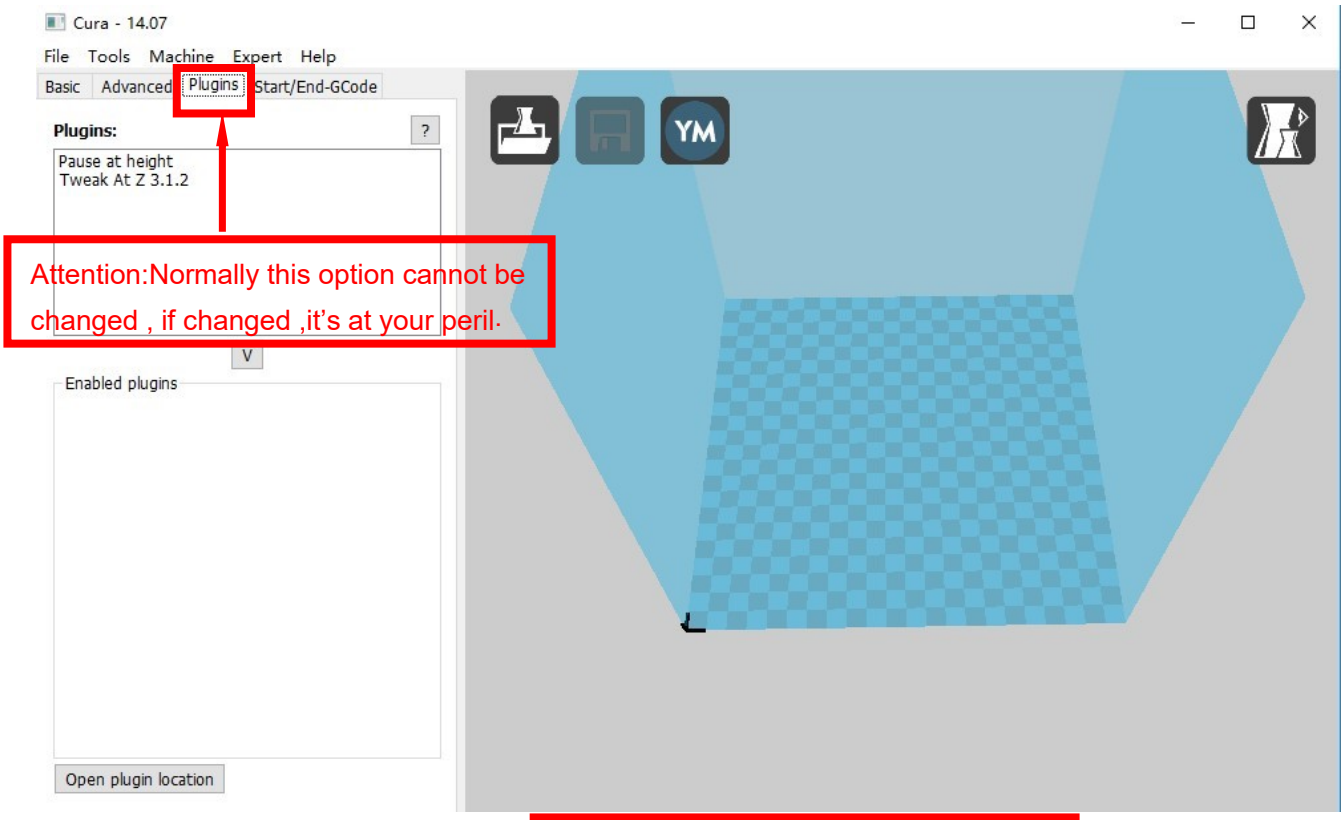
We suggest 0.2mm to avoid initial layer tilt,0.3mm is more easy to seperate from the platform.

Initial layer line proportion

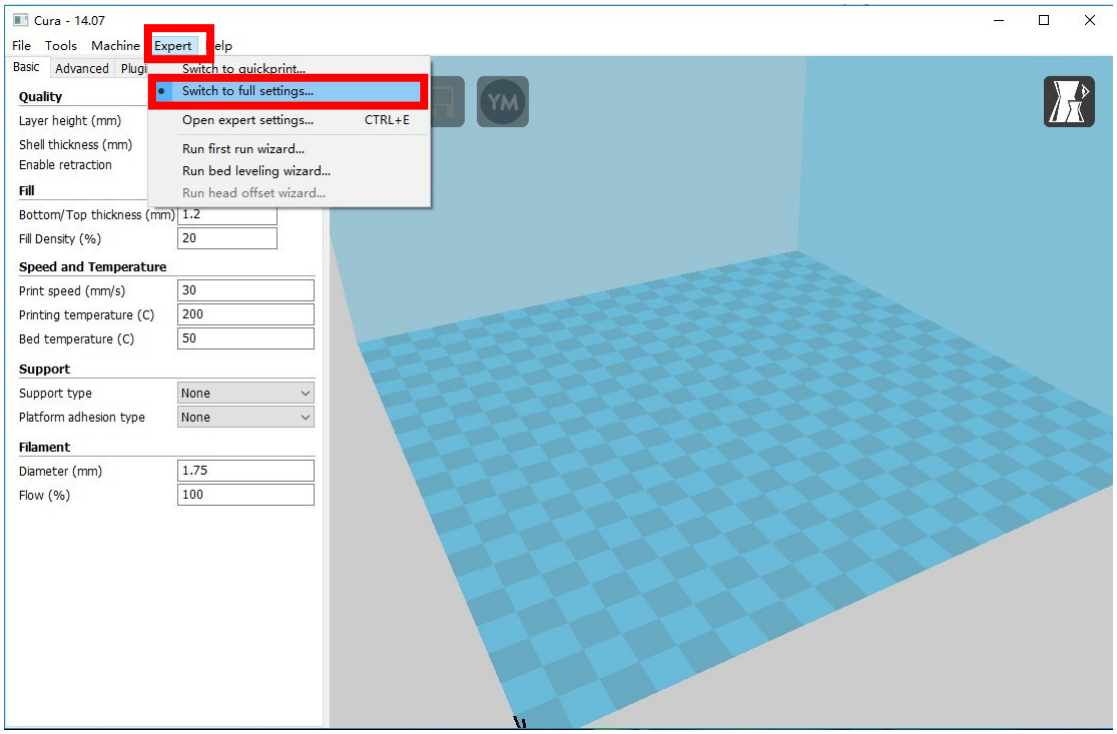
“0” means using default speed

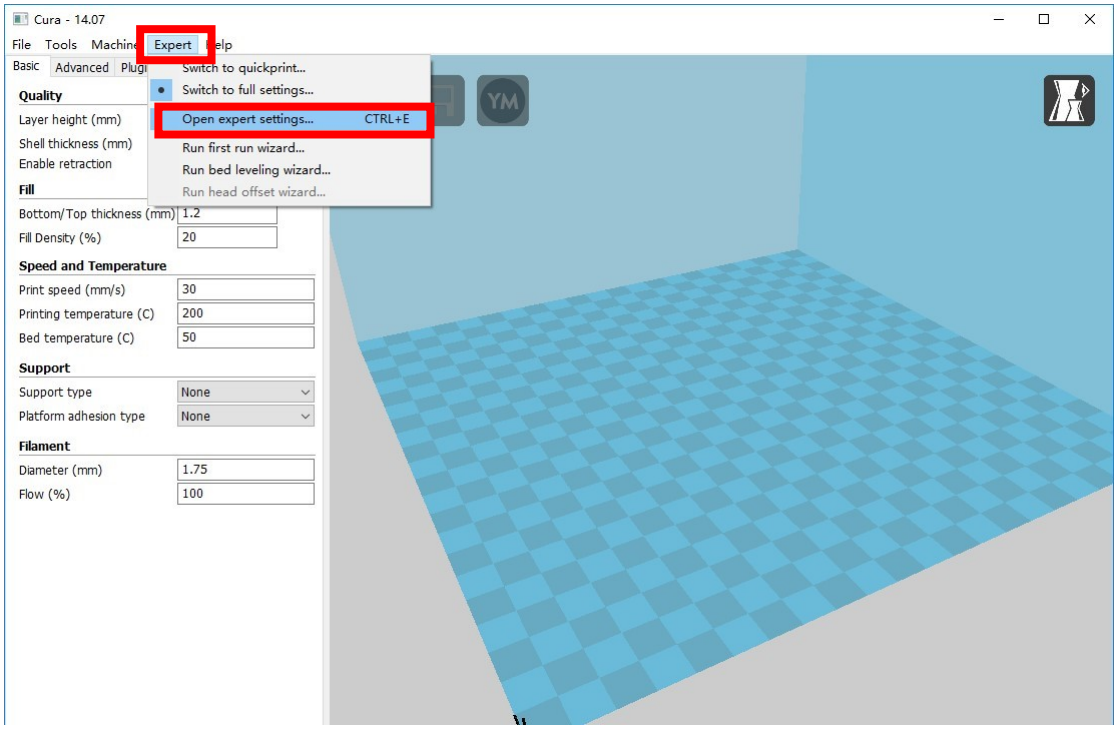
Min printing time for each layer. When the time is less than 10 , it prints slower. It’s better to decrease time when printing thin and long models.

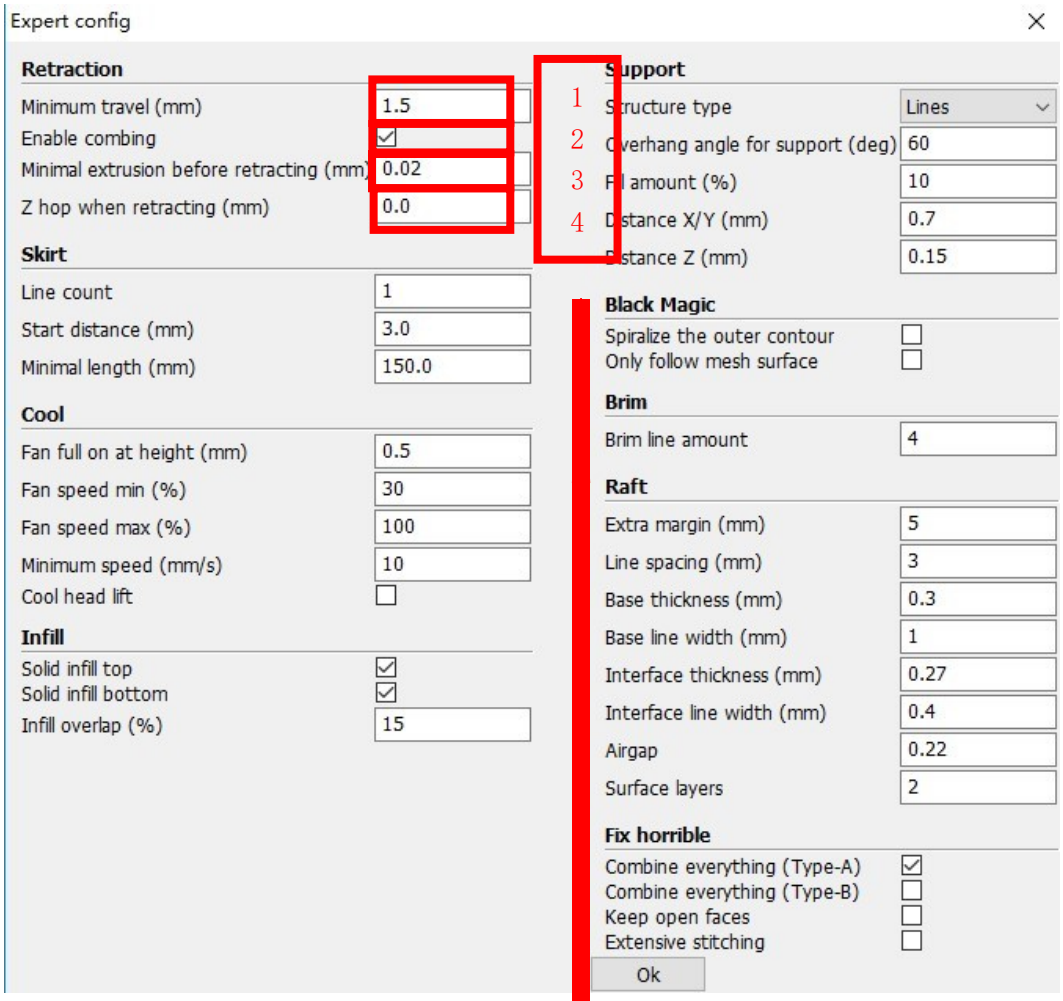
We suggest not choose this when printing ABS.



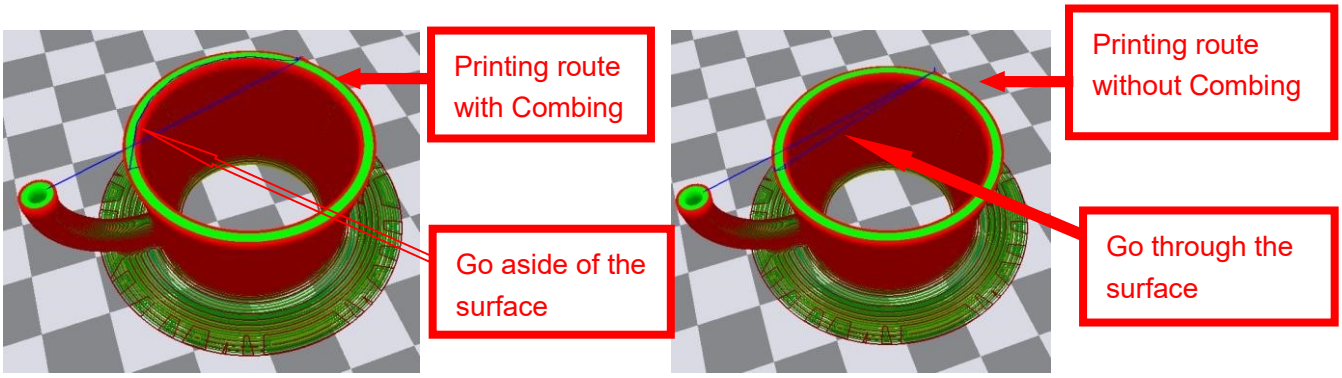
3.Expert Setting

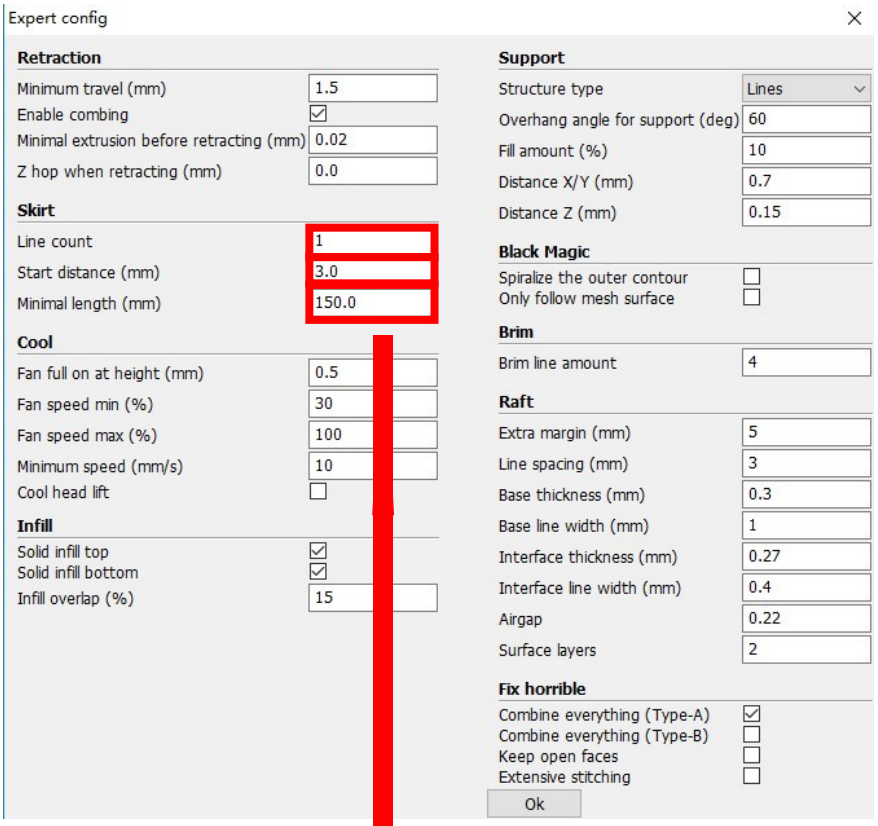

Cura - 14.07
File Tools Machine Expert Help
Basic Advanced Plugi
Switch to quickprint...
Switch to full settings...
Open expert settings... CTRL+E
Run first run wizard...
Run bed leveling wizard...
Run head offset wizard...
Quality
Layer height (mm)
Shell thickness (mm)
Enable retraction
Fill
Bottom/Top thickness (mm) 1.2
Fill Density (%) 20
Speed and Temperature
Print speed (mm/s) 30
Printing temperature (C) 200
Bed temperature (C) 50
Support
Support type None
Platform adhesion type None
Filament
Diameter (mm) 1.75
Flow (%) 100


Cura - 14.07
File Tools Machine Expert Help
Basic Advanced Plugi
Switch to quickprint...
Switch to full settings...
Open expert settings... CTRL+E
Run first run wizard...
Run bed leveling wizard...
Run head offset wizard...
Quality
Layer height (mm)
Shell thickness (mm)
Enable retraction
Fill
Bottom/Top thickness (mm) 1.2
Fill Density (%) 20
Speed and Temperature
Print speed (mm/s) 30
Printing temperature (C) 200
Bed temperature (C) 50
Support
Support type None
Platform adhesion type None
Filament
Diameter (mm) 1.75
Flow (%) 100

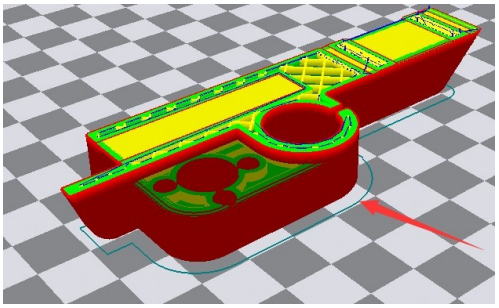


1. The minimum length before retraction . Used to avoid frequent retraction. No need to change.
2. Enable Combing: Digital for surface quality , the nozzle will try not to go through surface , that's why Cura is better than Slic3r.
3. Minimum extrusion length , to avoid frequent extrusion.
4. The height extruder rise in the retraction . If you need to set this option , 2mm is suitable .

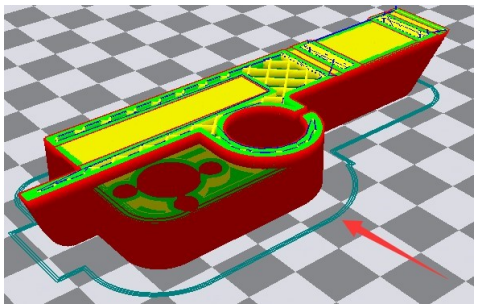




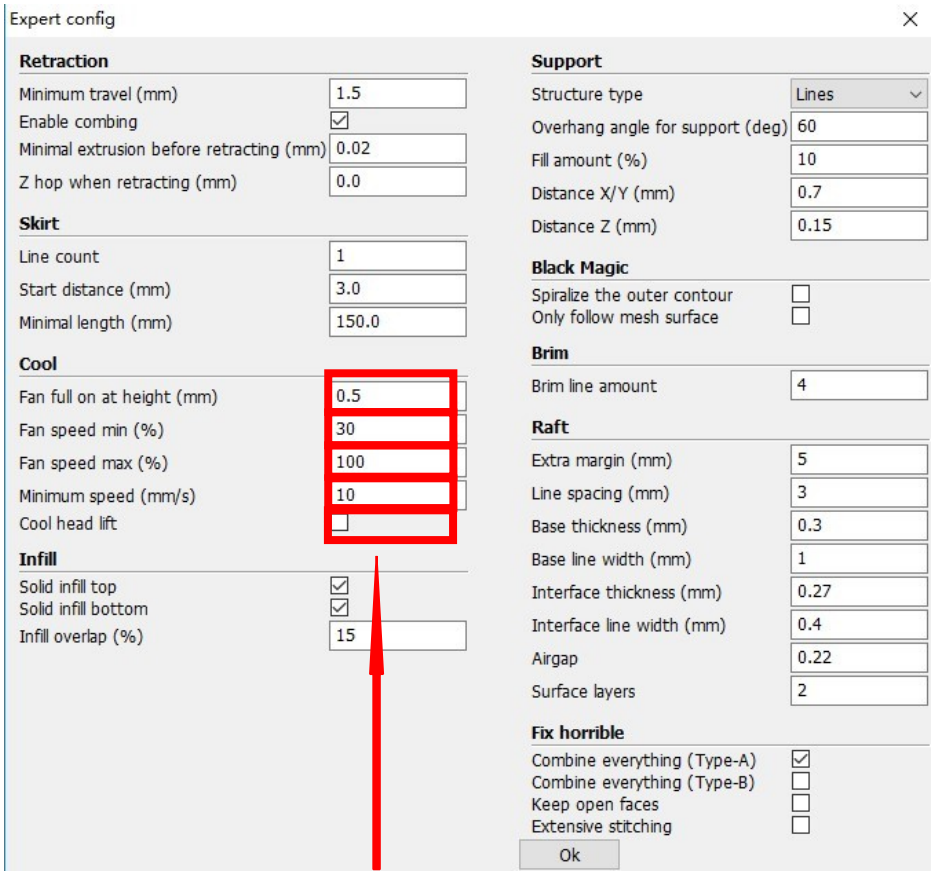
Skirt is to avoid extruder unfilled before printing , and it appears only when platform attachment type is None. Normally “1” is ok . Change it to “0” when your model reaches the maximum size , or the printing size will be too big.



Peripheral line quantity: 1
Start distance: 3



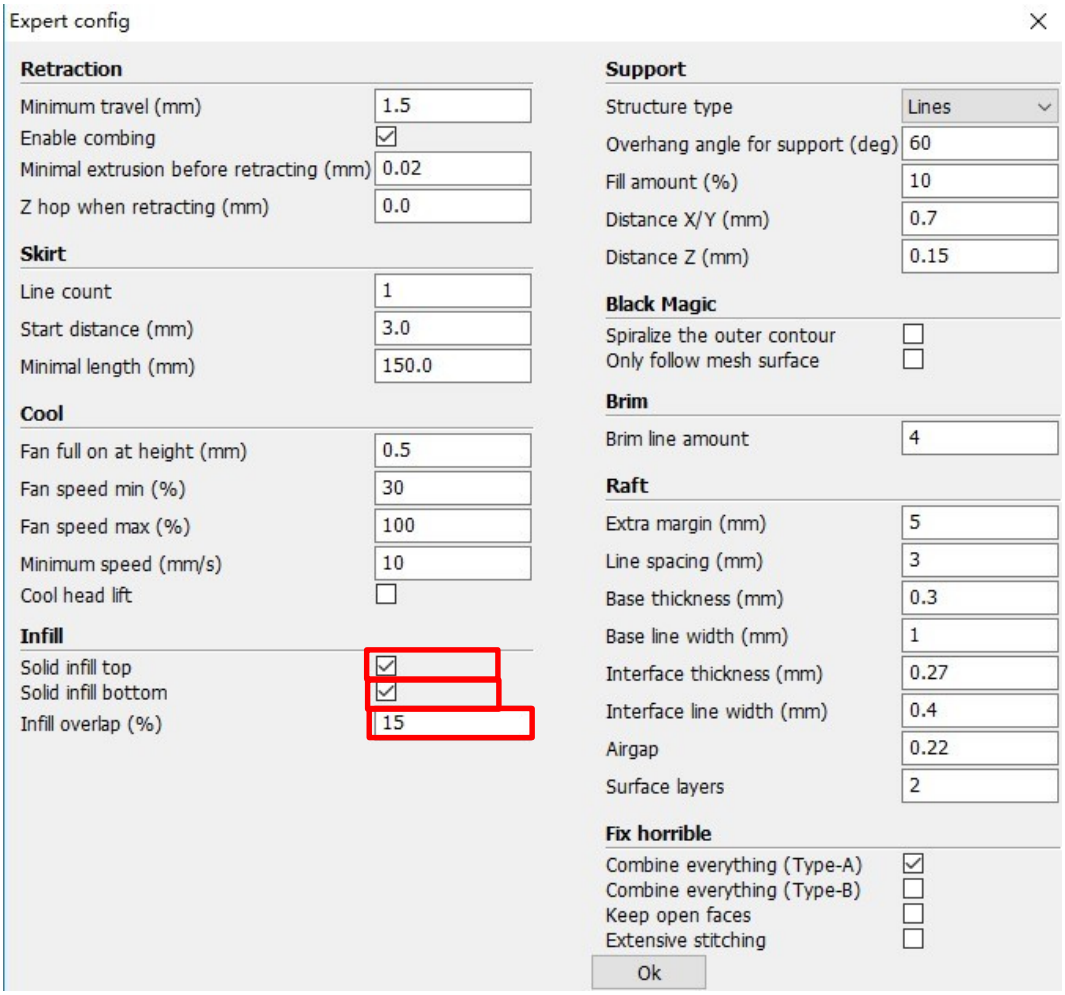
Peripheral line quantity: 1
Start distance: 3



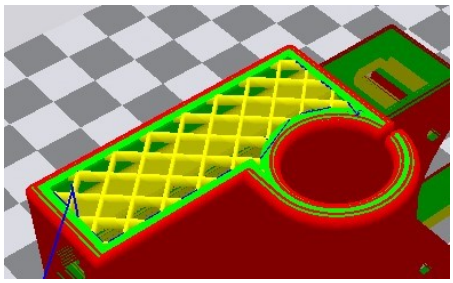
1. To ensure the attachment of model to platform , fan won't start at the beginning.

2-4. Fan speed min & max : If they are not equal , the soft ware will choose a suitable speed during them.

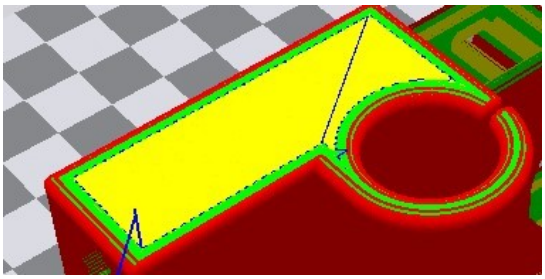
5. Condition to choose cool head lift : When it's printing with the minimum speed but still cannot reach the minimum time , you need to choose cool head lift . But it may cause filament leak.



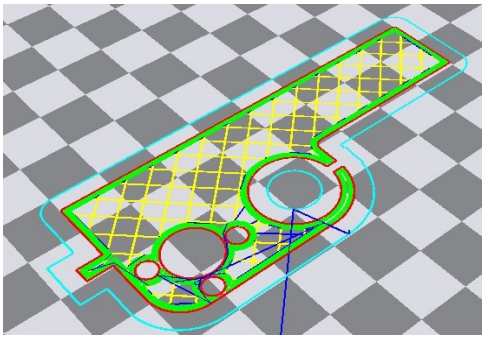
If no solid infill top , the only qualification is the surface thickness .
Please check the detail below.



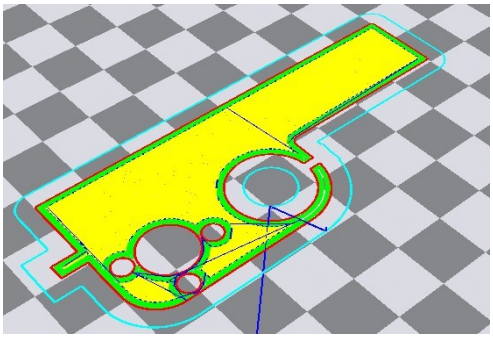
No solid infill top



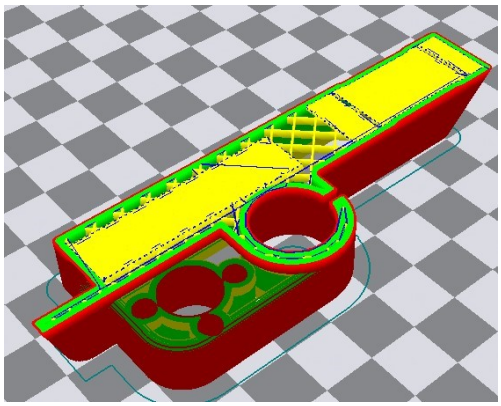
With solid infill top



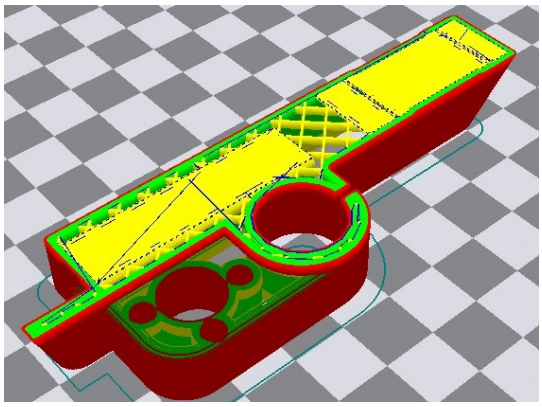
No solid infill bottom



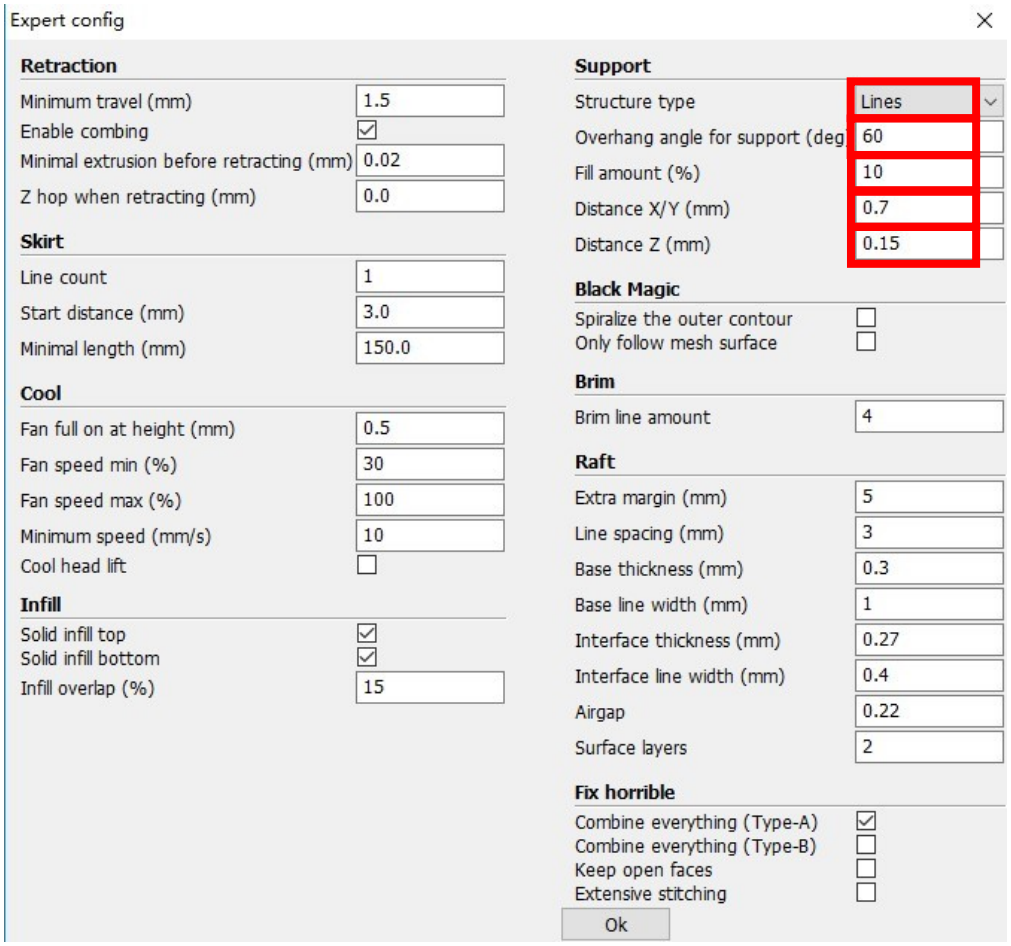
With solid infill bottom

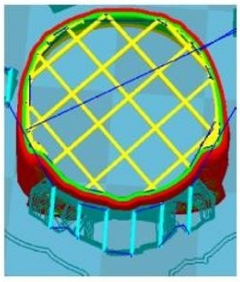


Infill coverlap: 20

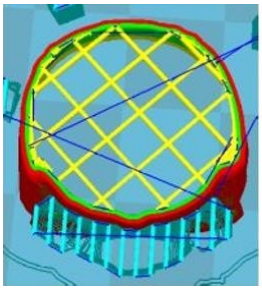


Infill coverlap: 40

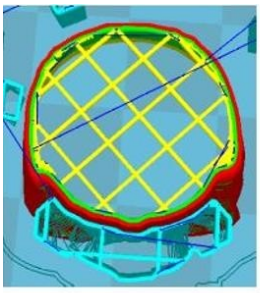




Structure types:lines
Infill covertap: 15
Distance X/Y: 0.7

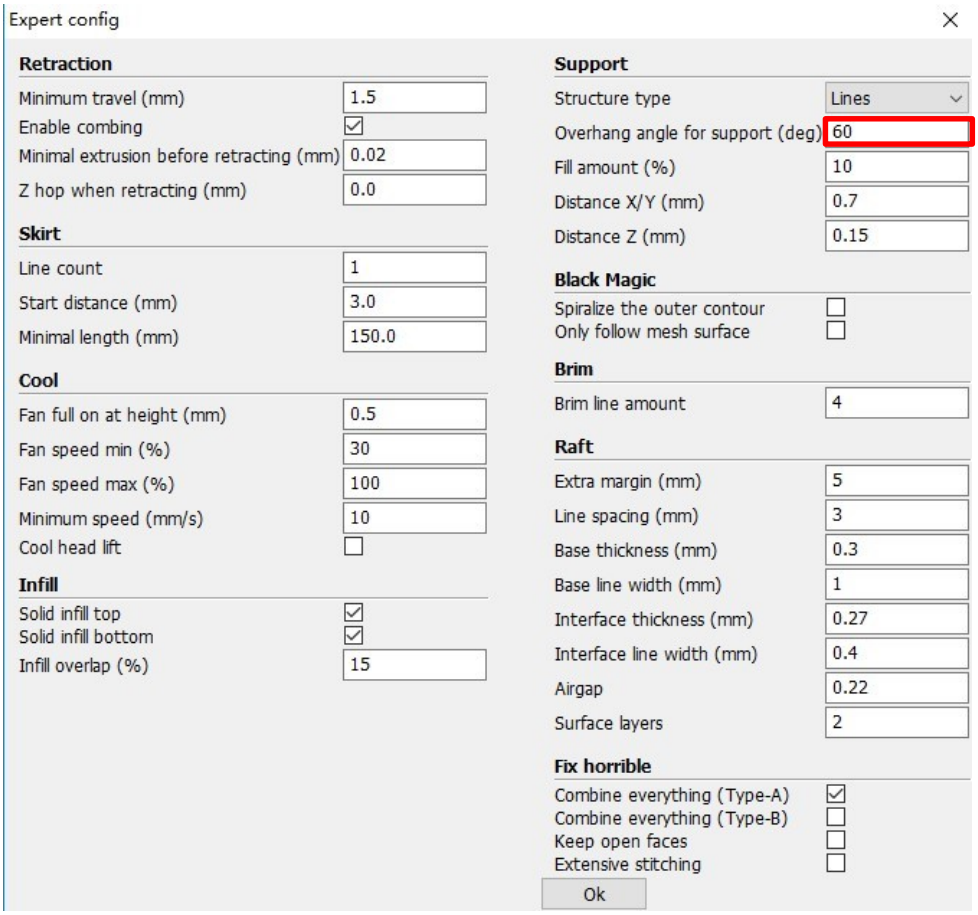


Structure types:lines
Infill covertap: 30
Distance X/Y: 0.7

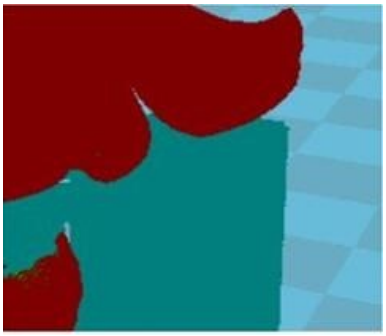


Structure types:grids
Infill covertap: 15
Distance X/Y: 0.7

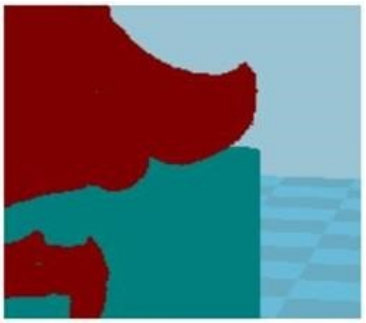
These above are examples , you can set these options according to actual requirements. The biggest progress Cura has made is the kinds of support structure types , making it easier to seperate from the model.



60°



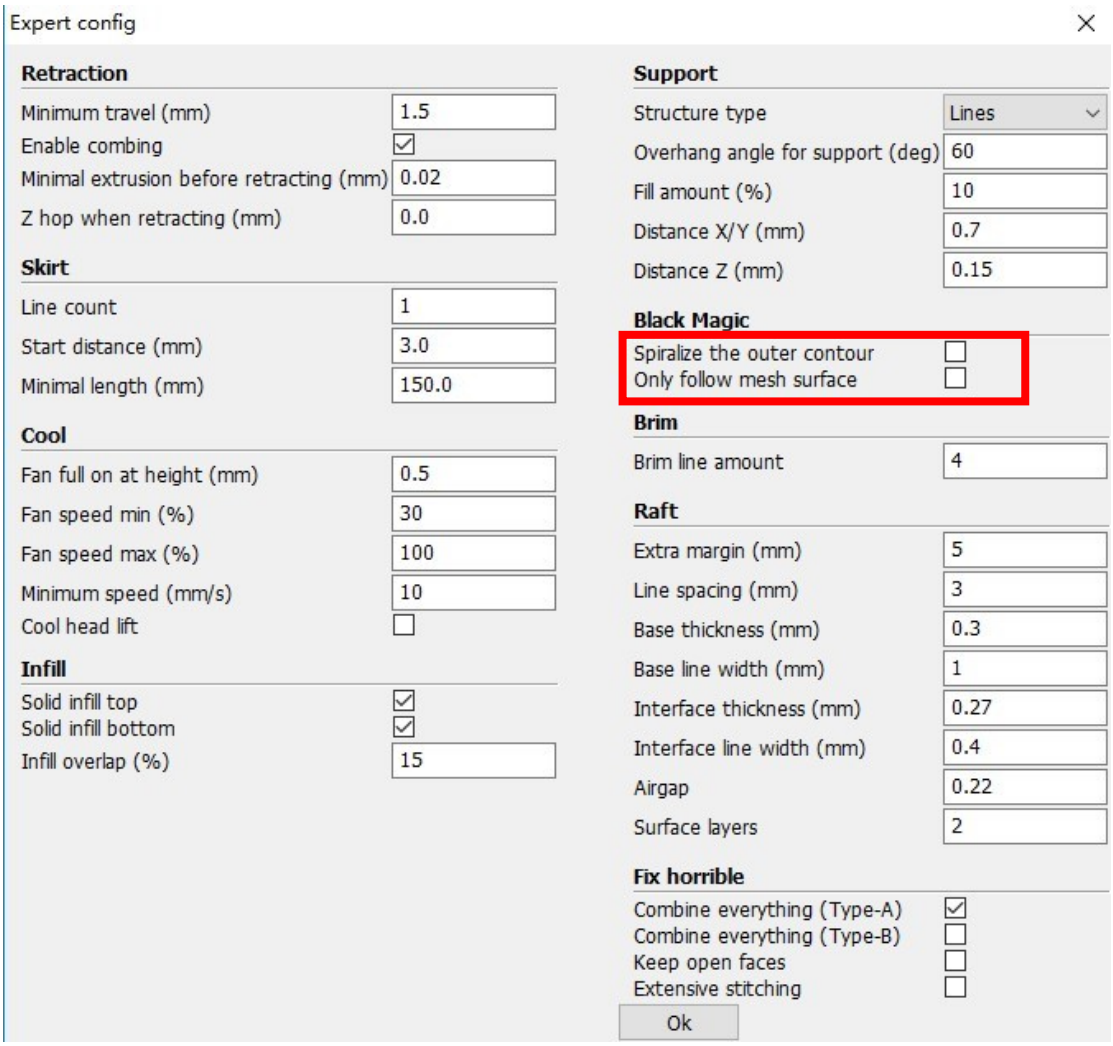
45°

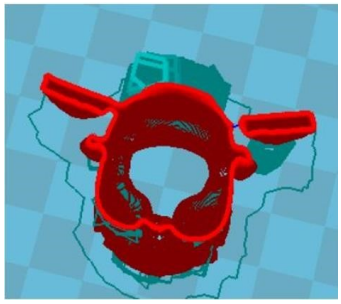


30°

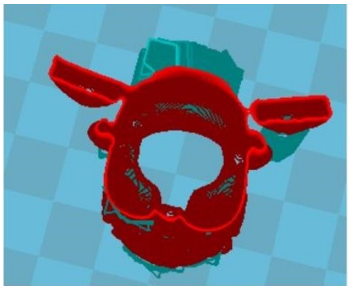
It's difficult to seperate if the distance between support and the supported place is too close; The surface will be influenced if the distance is too far.

Different angle will generate different support , you can try the examples we provide above which will have different effect.



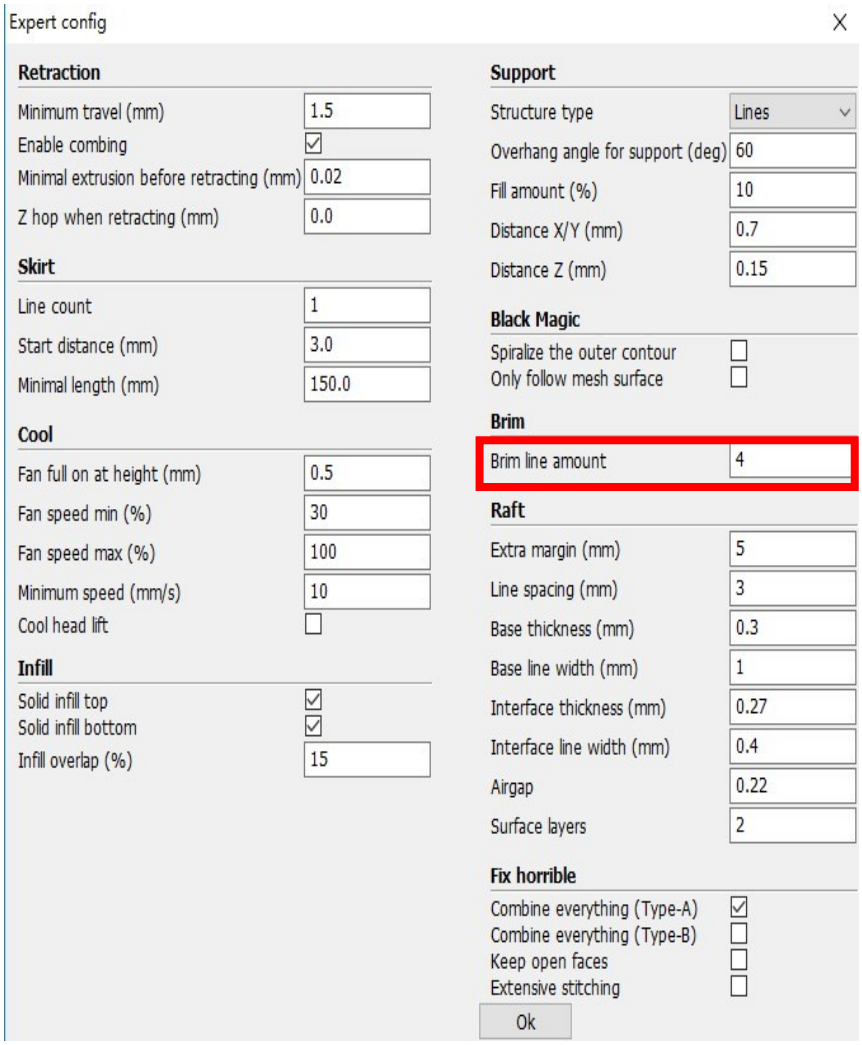


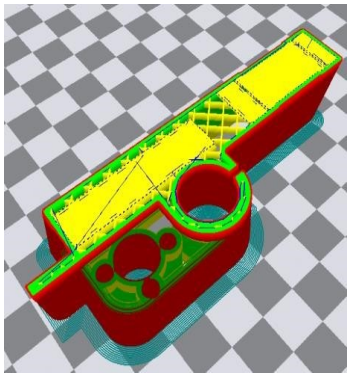
When choosing “Spiralize the outer contour” : Z axis rises while X,Y axis moves , and only a hollow bottom and a single layer of surface.



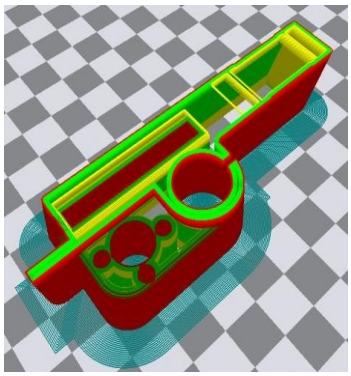
When choosing “Only follow mesh surface” : The nozzle prints along the surface.

Attention: The software defaults not open the option above , you’d better not turn it on .



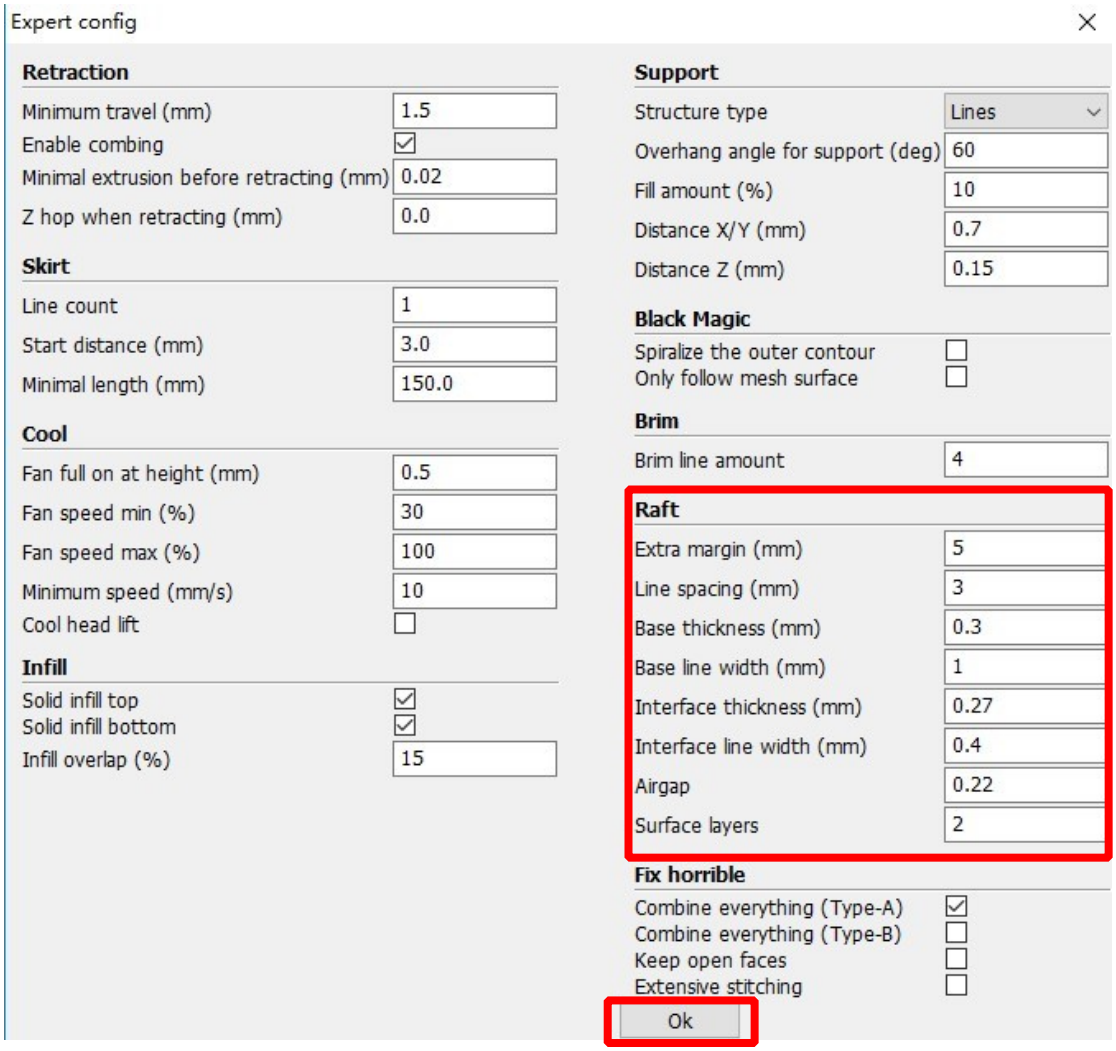


Brim line amount: 10



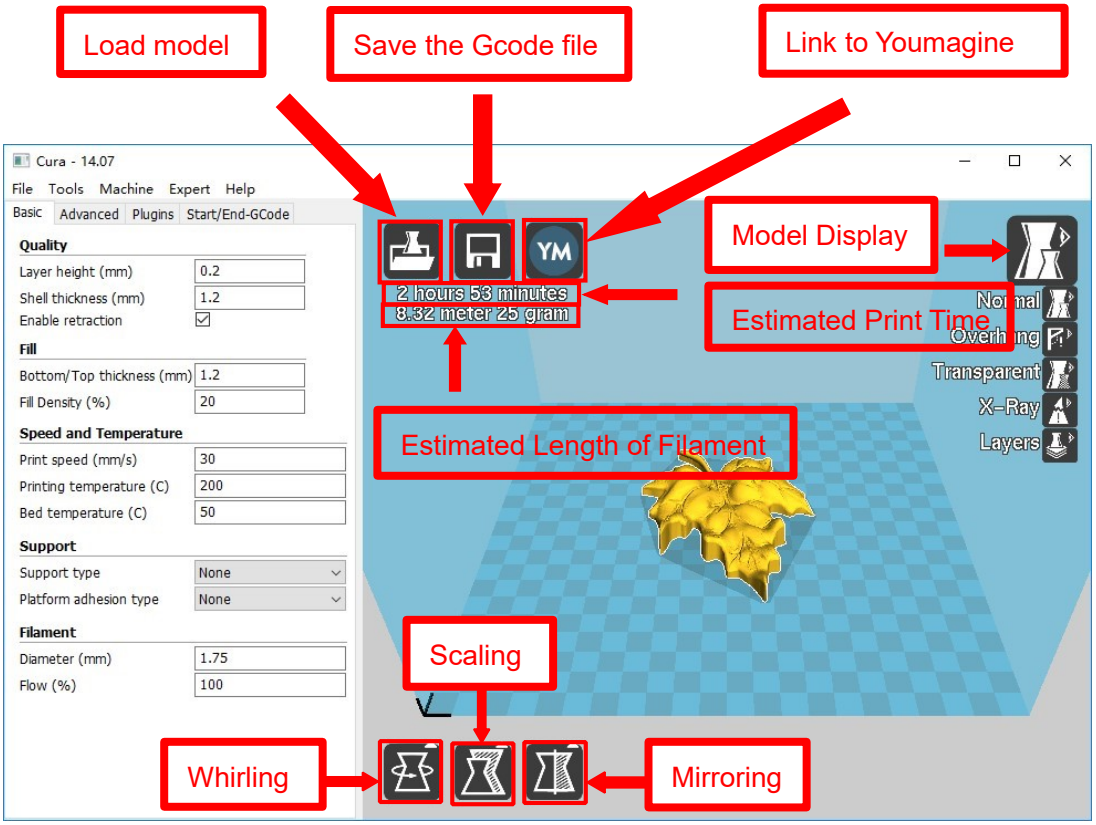
Brim line amount: 20

Guidance to use Brim if needed: Expert → Expert Settings → Support → Support Types → Birm.
The images above are only for reference , please set the parameter according to actual requirement.



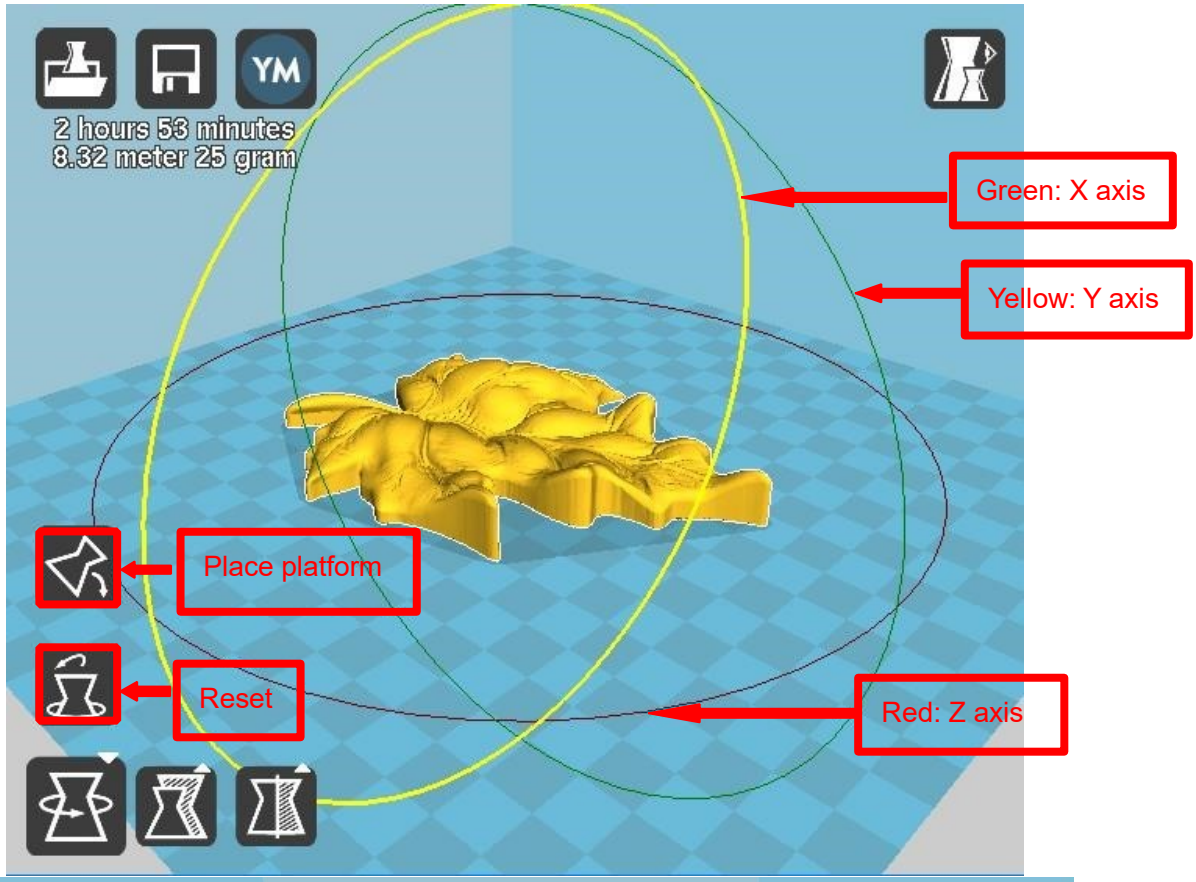
Guidance to use Raft if needed: Expert → Expert Settings → Support → Support Types → Raft.

The images above are only for reference , please set the parameter according to actual requirement.

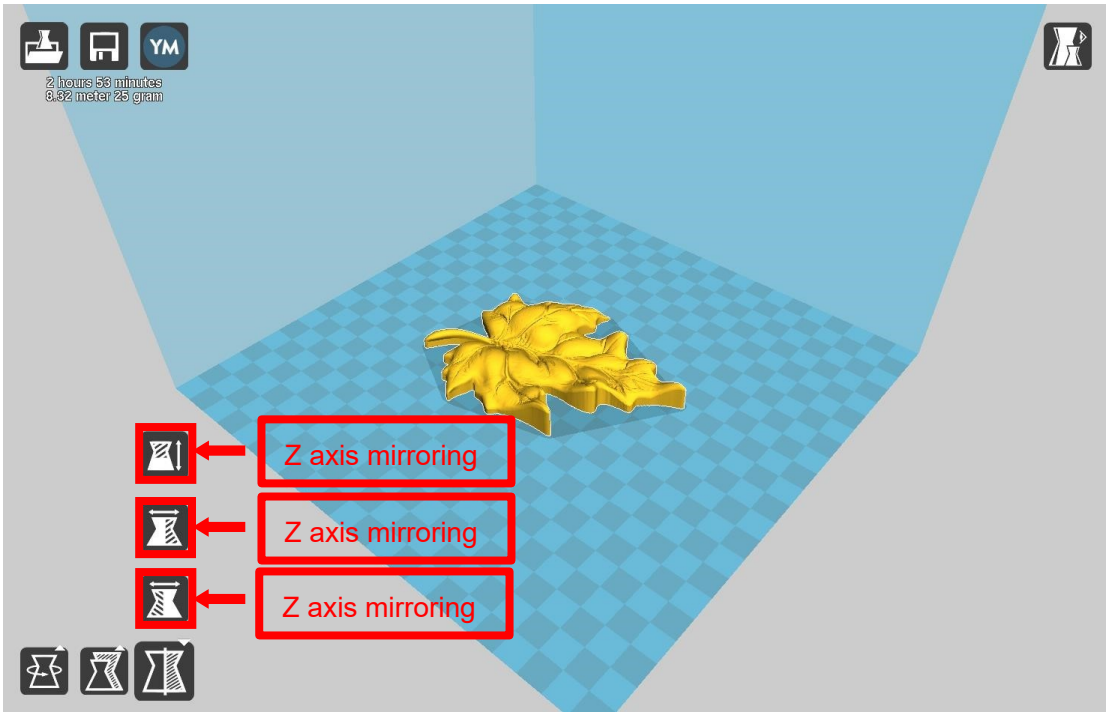


Left click the model and you will see the icon of “whirling, scaling, mirroring.

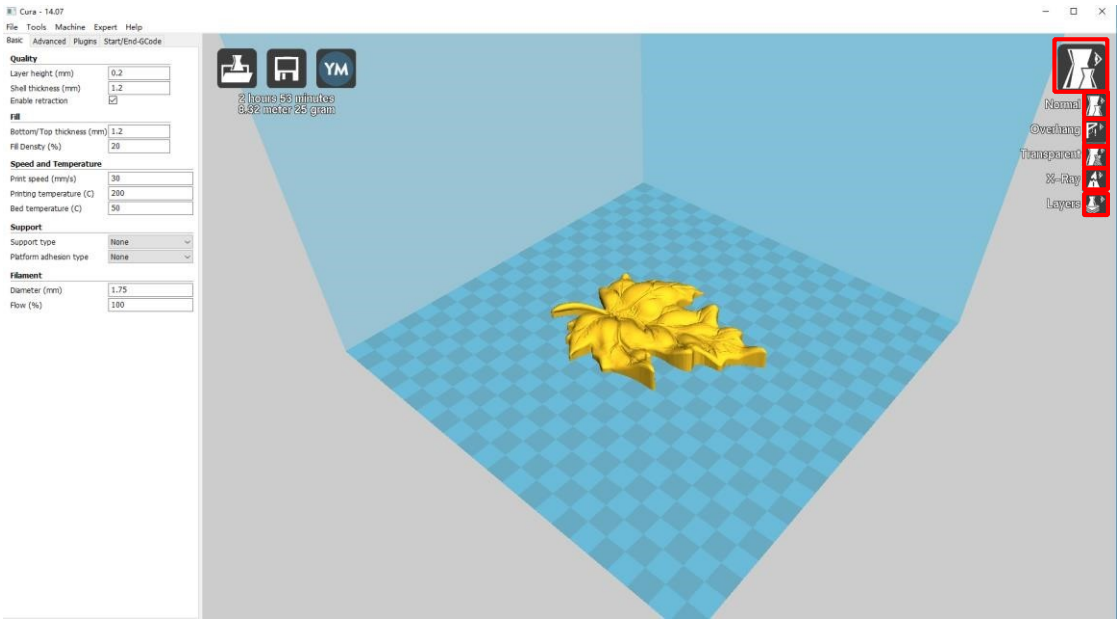
Left click to select model and move → move model.
Slide mouse wheel → scaling.
Right click to select model and move → whirling.
Shift + right click platform and move → move platform

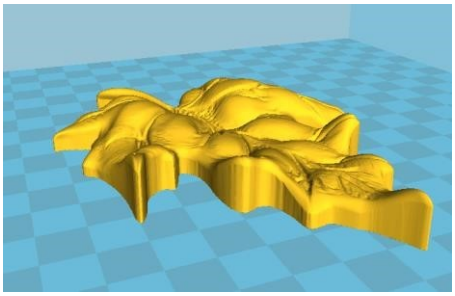

2 hours 53 minutes
8.32 meter 25 gram
Green: X axis
Yellow: Y axis
Place platform
Reset
Red: Z axis


2 hours 53 minutes
8.32 meter 25 gram
W, D, H: 84.0, 106.4, 13.9 mm
Zoom to max size
Scale X 1.0
Scale Y 1.0
Scale Z 1.0
Size X (mm) 84.0
Size Y (mm) 106.42
Size Z (mm) 13.92
Uniform scale
Scaling ratio
Modification ratio
Reset

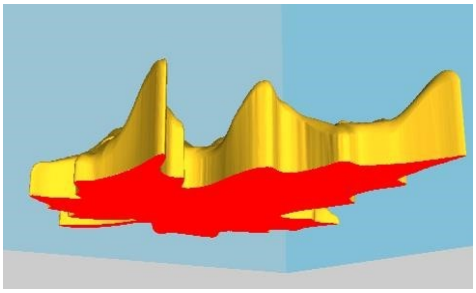


Attention: The model will be converse after mirroring.

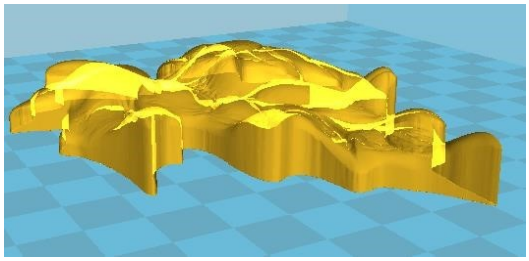




Normal: Most used.

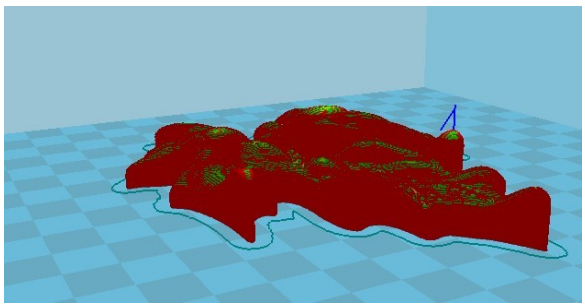


Overhang: Used to see the vacant part.

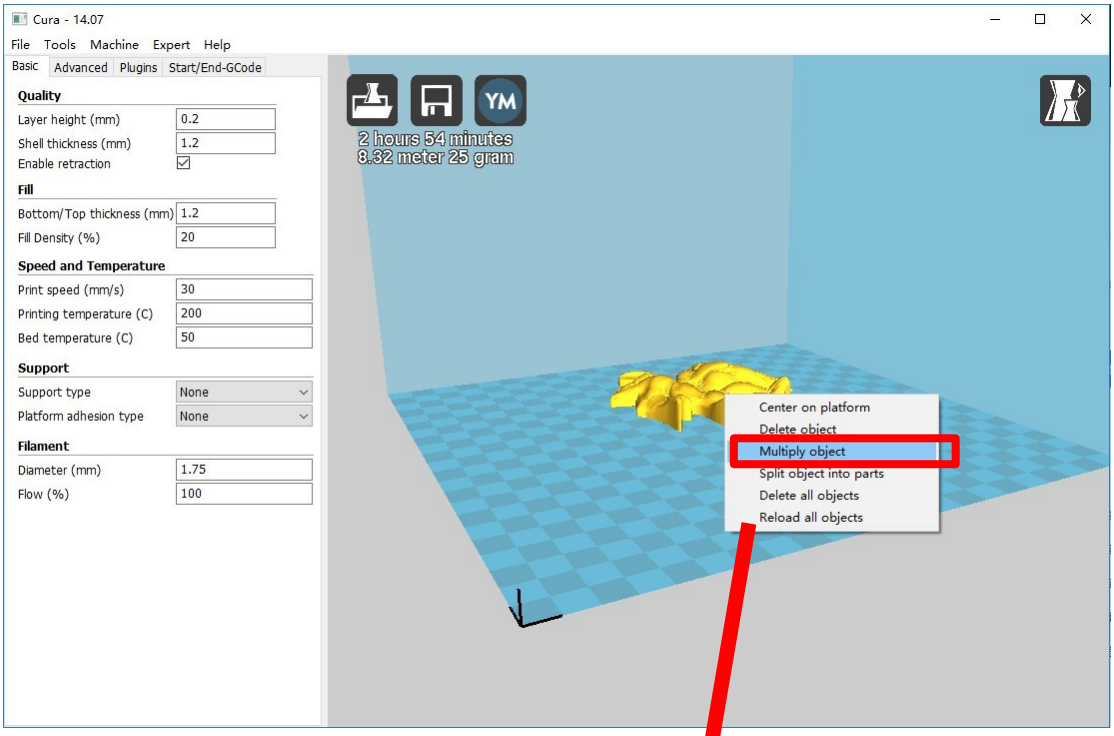


Transparent

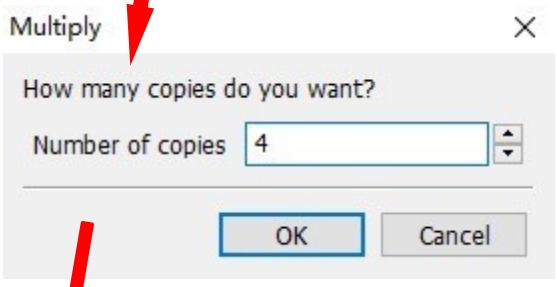
X-Ray

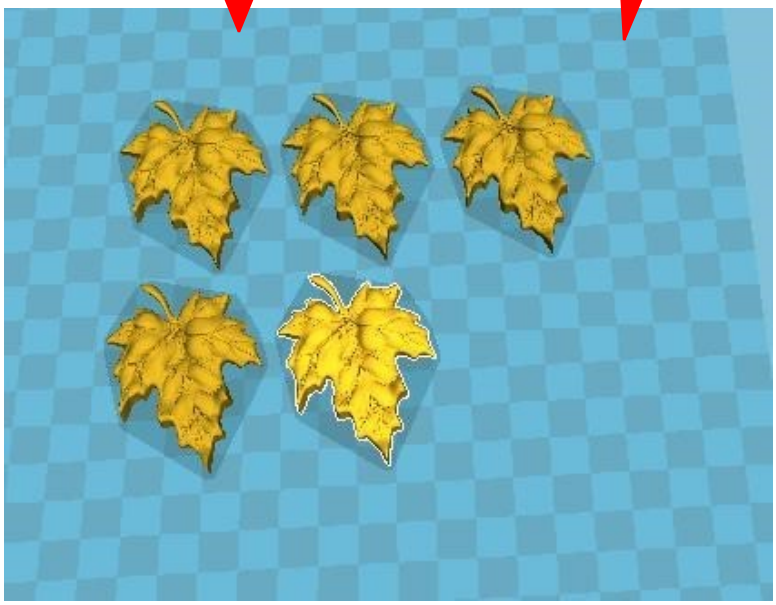


Layers:Used to simulate the effect of each layer and the path.



Right click model → Left click "Multiply object" → Example: copy 4 model



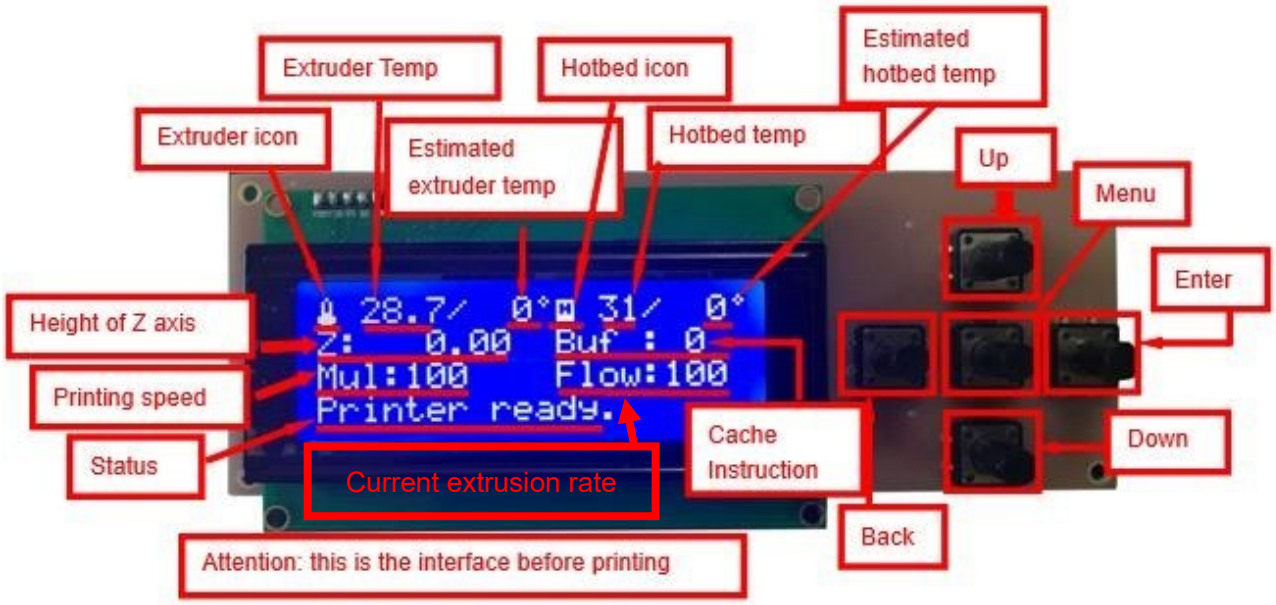


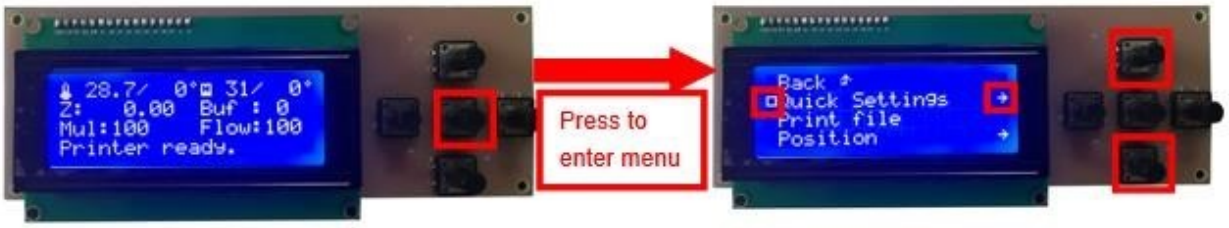
5 models in total

Attention: You can try other functions by yourself.

D. Printing Operation 1.

Introduction of Display

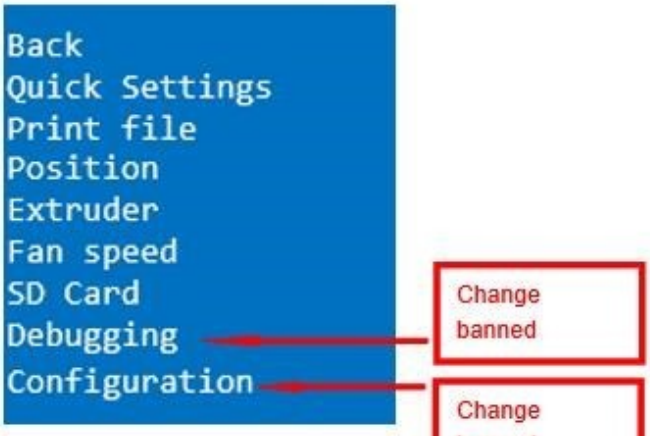




Whole interface of menu

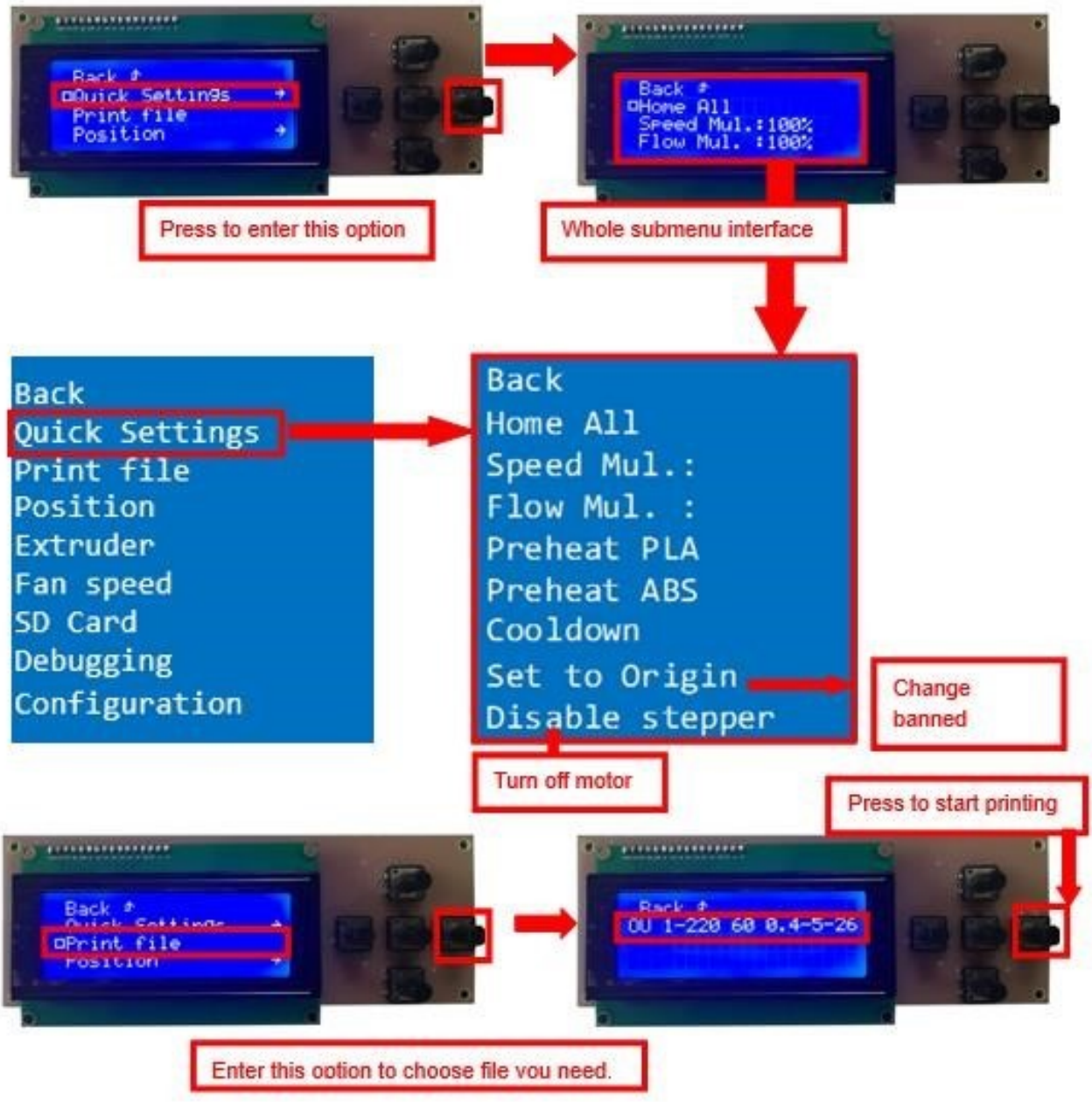
: it means you can enter this option to other settings

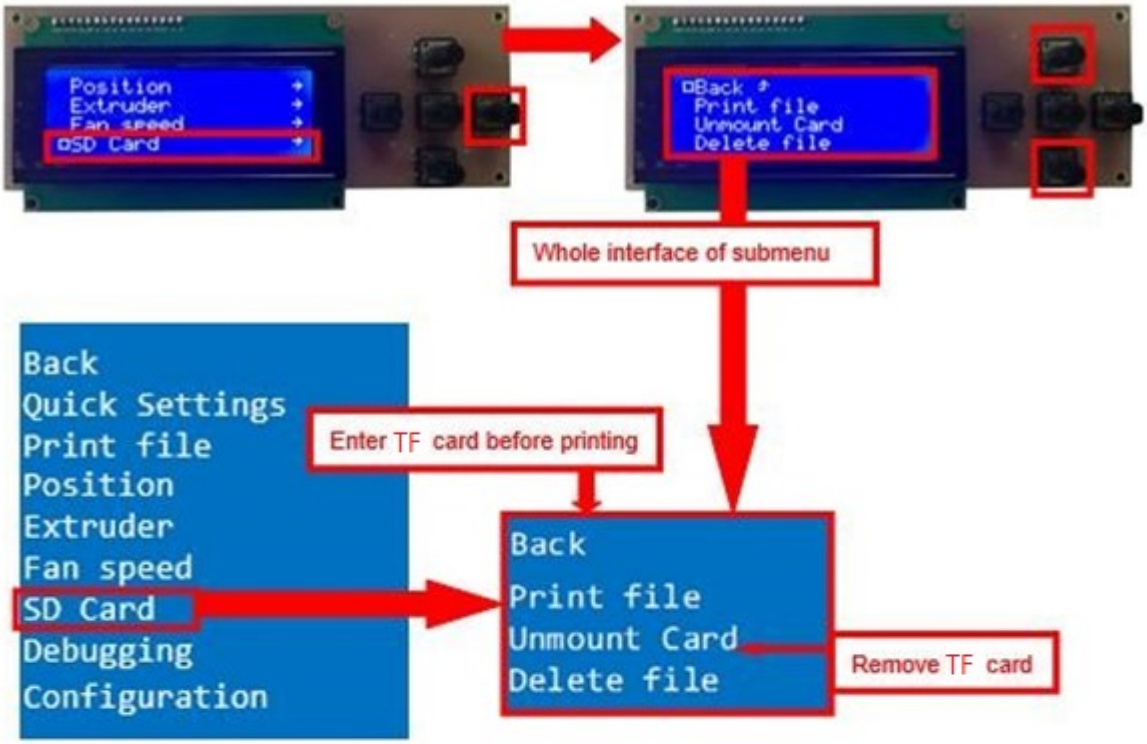
:it represents you can enter this option.

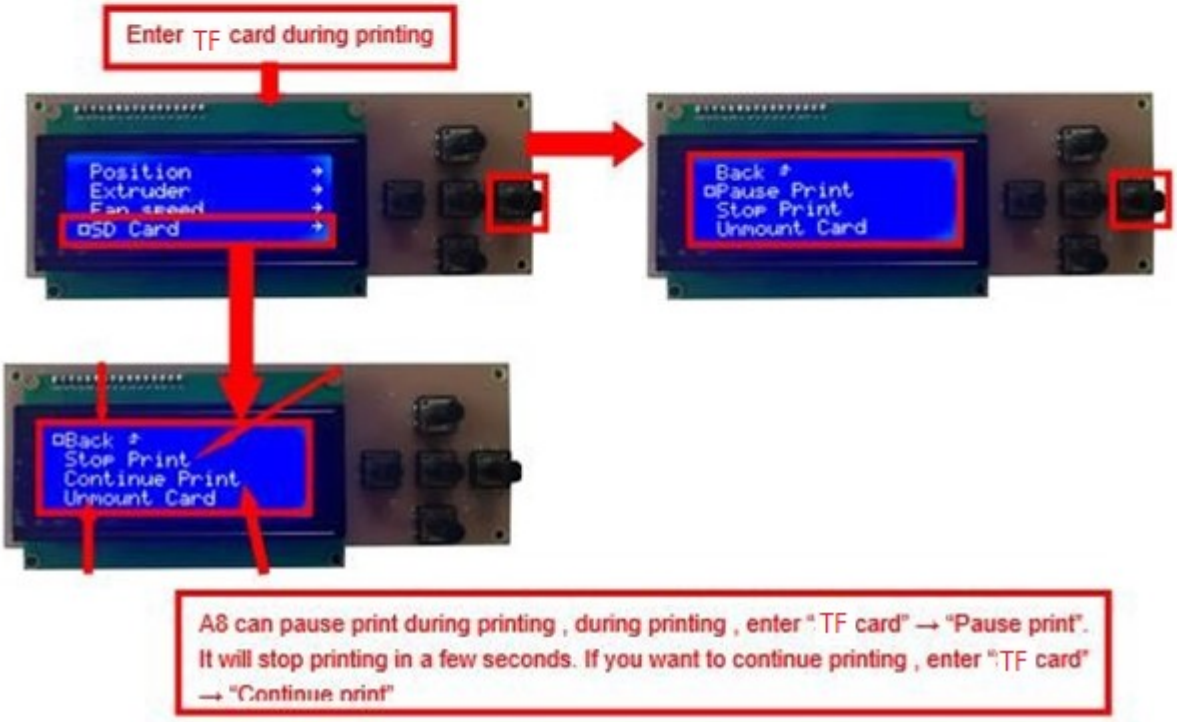


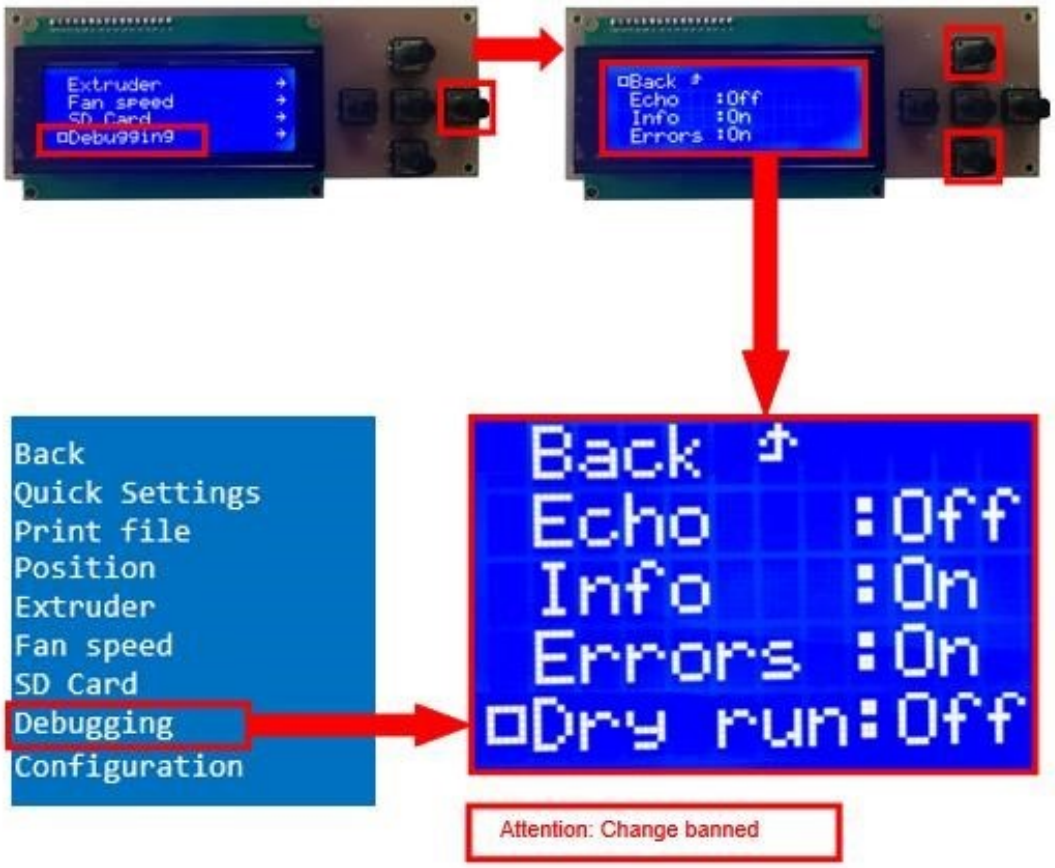
Change banned

Change banned

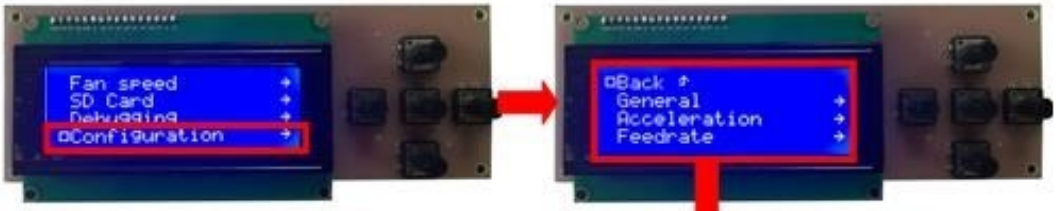

Back
Quick Settings
Print file
Position
Extruder
Fan speed
SD Card
Debugging
Configuration
Back
Home All
Speed Mul.:
Flow Mul. :
Preheat PLA
Preheat ABS
Cooldown
Set to Origin
Disable stepper
Change banned
Turn off motor
Press to start printing
Press to enter this option
Whole submenu interface
Enter this ootion to choose file vou need.

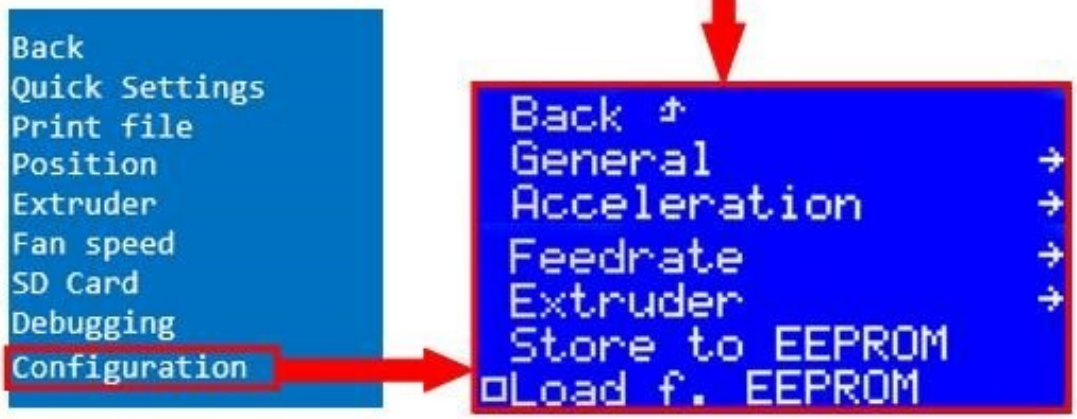

Position
Extruder
Fan speed
SD Card
Back
Print file
Unmount Card
Delete file
Whole interface of submenu
Back
Quick Settings
Print file
Position
Extruder
Fan speed
SD Card
Debugging
Configuration
Enter TF card before printing
Back
Print file
Unmount Card
Delete file
Remove TF card

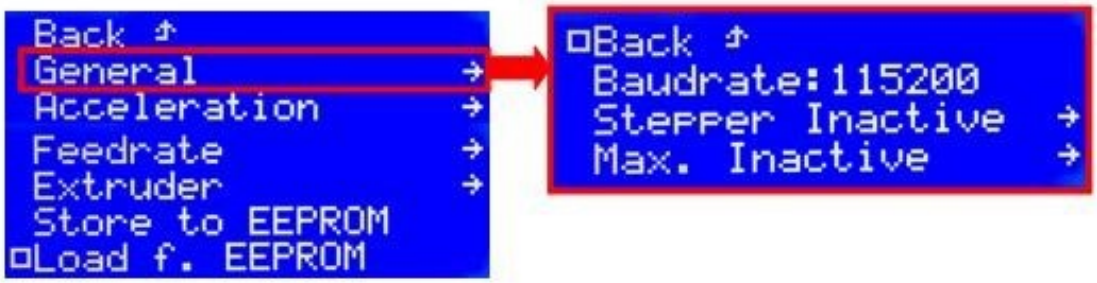

Enter TF card during printing
Position
Extruder
Fan speed
SD Card
Back
Pause Print
Stop Print
Unmount Card
Back
Stop Print
Continue Print
Unmount Card
A8 can pause print during printing , during printing , enter "TF card" → "Pause print". It will stop printing in a few seconds. If you want to continue printing , enter "TF card" → "Continue print"

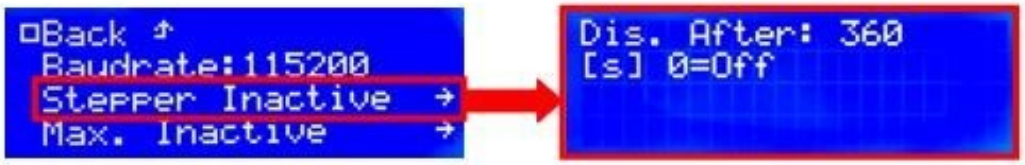

Extruder
Fan speed
SD Card
Debugging
Back
Echo :Off
Info :On
Errors :On
Back
Quick Settings
Print file
Position
Extruder
Fan speed
SD Card
Debugging
Configuration
Back
Echo :Off
Info :On
Errors :On
Dry run:Off
Attention: Change banned

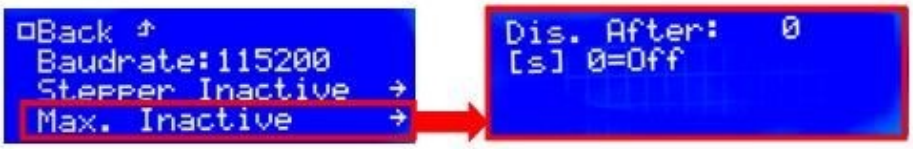
Attention: Change banned of these settings

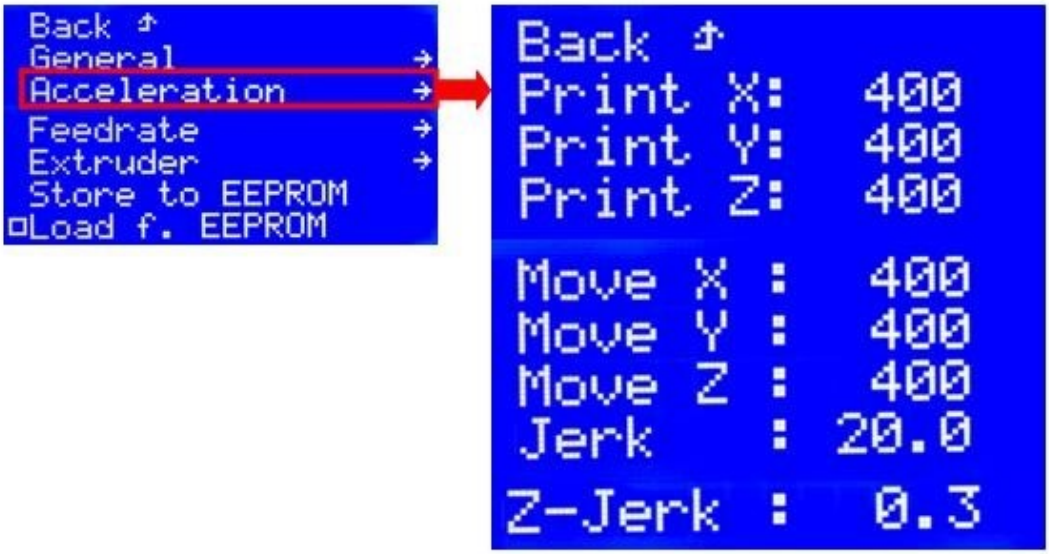


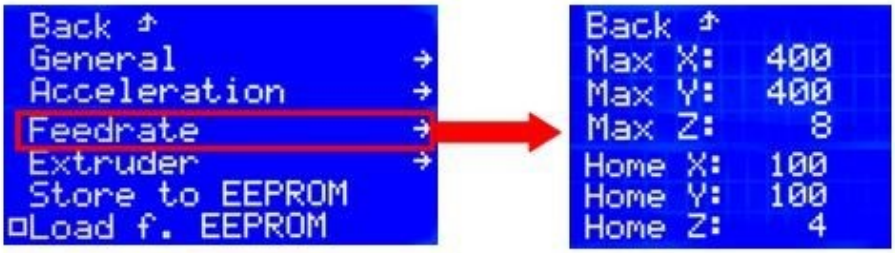




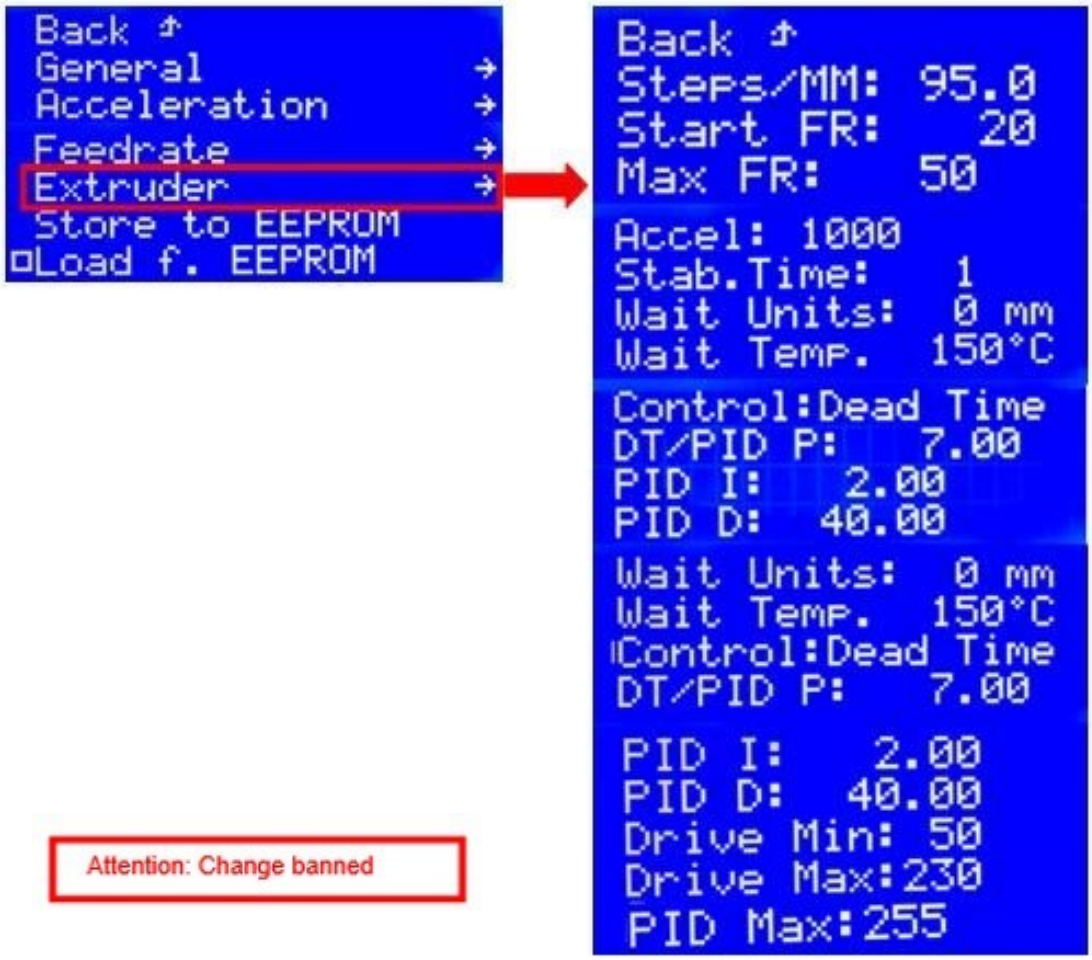


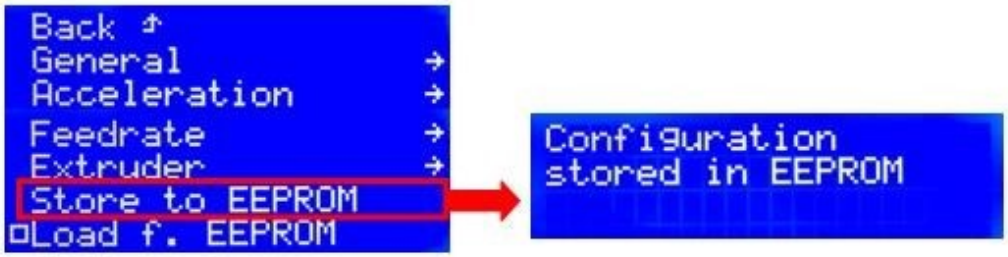


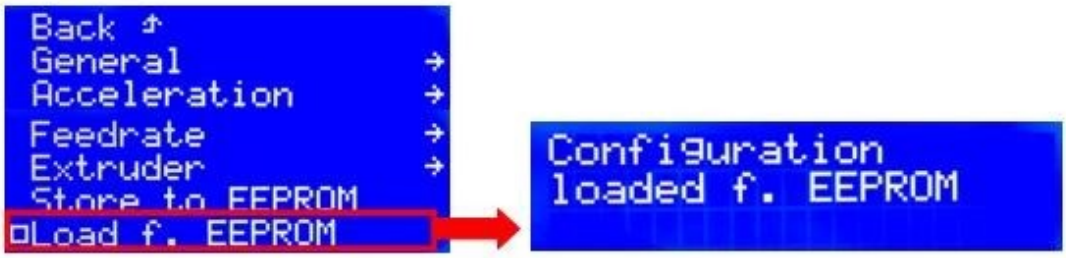




Attention: Change banned


Back
General
Acceleration
Feedrate
Extruder
Store to EEPROM
Load f. EEPROM
Back
Steps/MM: 95.0
Start FR: 20
Max FR: 50
Accel: 1000
Stab.Time: 1
Wait Units: 0 mm
Wait Temp. 150°C
Control:Dead Time
DT/PID P: 7.00
PID I: 2.00
PID D: 40.00
Wait Units: 0 mm
Wait Temp. 150°C
Control:Dead Time
DT/PID P: 7.00
PID I: 2.00
PID D: 40.00
Drive Min: 50
Drive Max:230
PID Max:255
Attention: Change banned


Back
General
Acceleration
Feedrate
Extruder
Store to EEPROM
Load f. EEPROM
Configuration
stored in EEPROM


Back
General
Acceleration
Feedrate
Extruder
Store to EEPROM
Load f. EEPROM
Configuration
loaded f. EEPROM

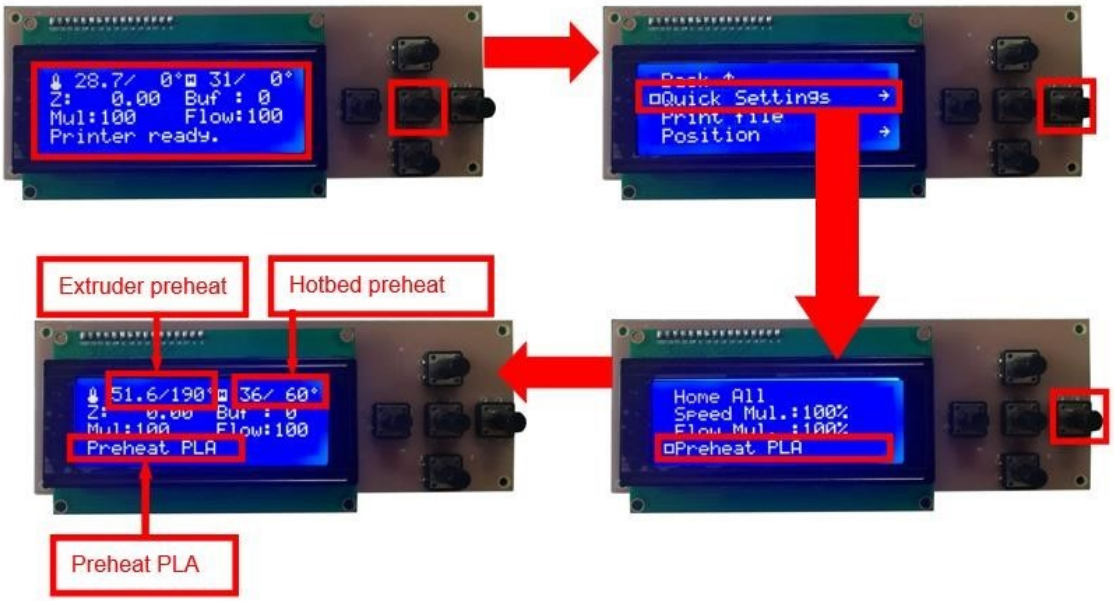

99.4/220°
41/ 50°
Z: 0.00
Buf : 0
Mul:100
Flow:100
Printing... 0%
Attention: Change banned

2.Install Filament

2.1 Set Preheat Mode

Attention: Before filament installation, you need to preheat the printer. Use PLA as reference as below:

Press Menu → Quick Settings → Preheat PLA
The printer begins to preheat (You can back to main interface to check)

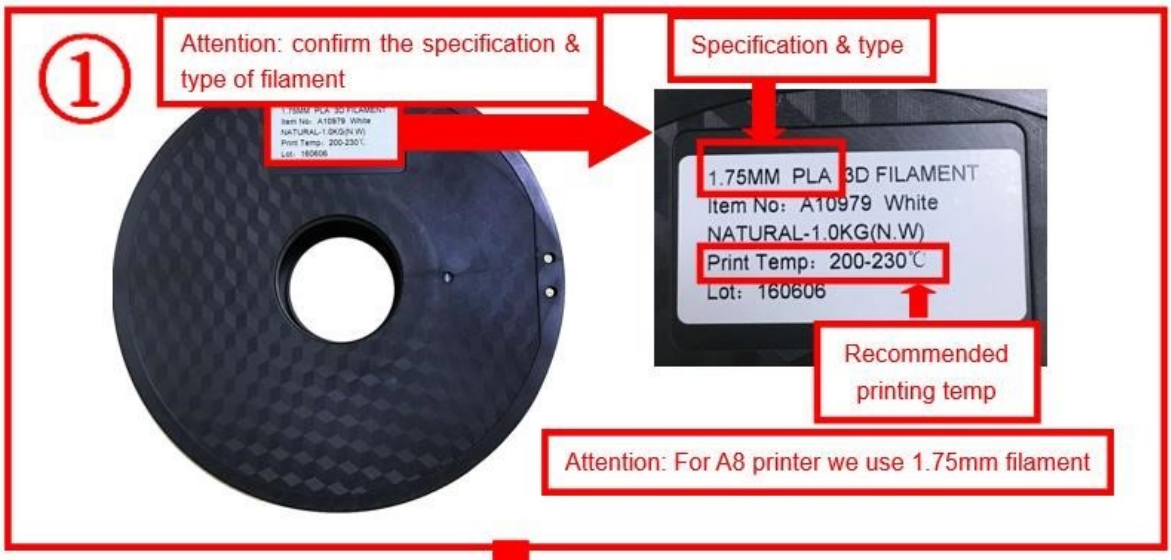


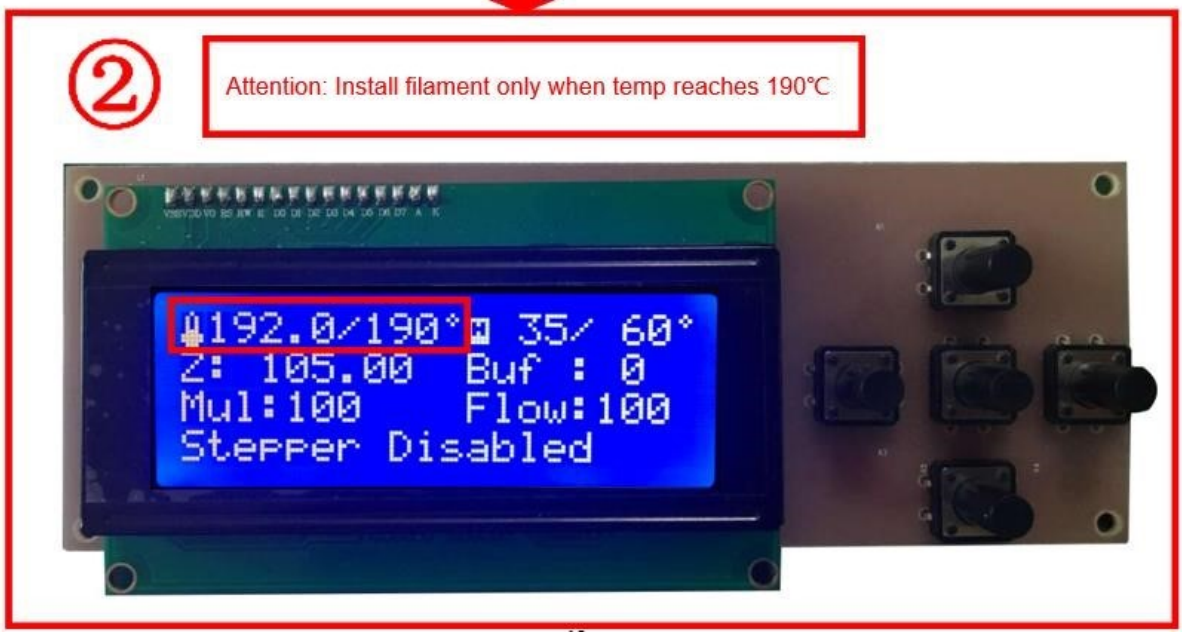
Attention: Please choose “Preheat ABS” if you want to print with ABS.

2.2 Filament Installation

Attention: Put filament into printer only when extruder temp reaches 190℃. (Use PLA as example)

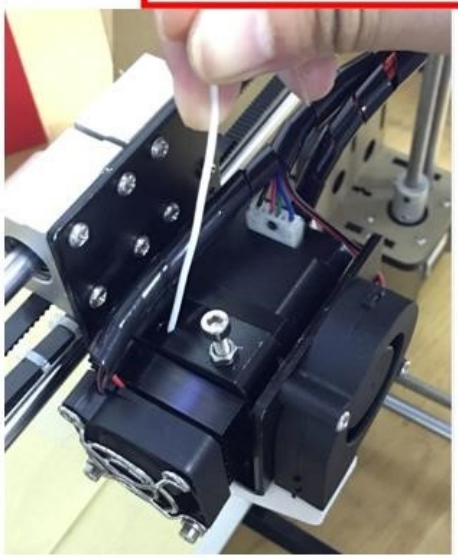
Confirm Extruder Temp has reached 190℃ → 1 roll PLA → Stroke the filament head straight → Press extruder screw.Meanwhile ,hold the white wind mouth → Meanwhile, stick filament into the extruder quickly until filament goes out from the nozzle → Filament installation succeed



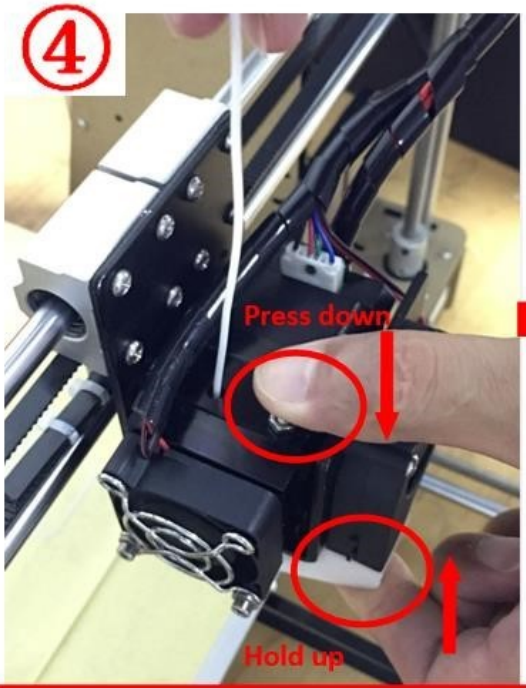


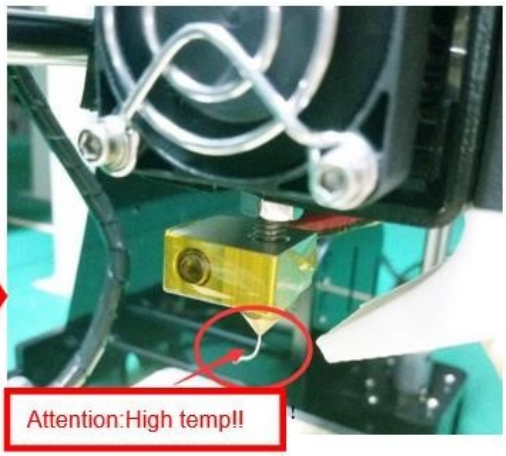
③

Stroke the filament head straight → Press extruder screw.Meanwhile ,hold the white wind mouth → Meanwhile, install filament into the extruder quickly until filament liquid goes out from the nozzle



④





Attention:High temp!!

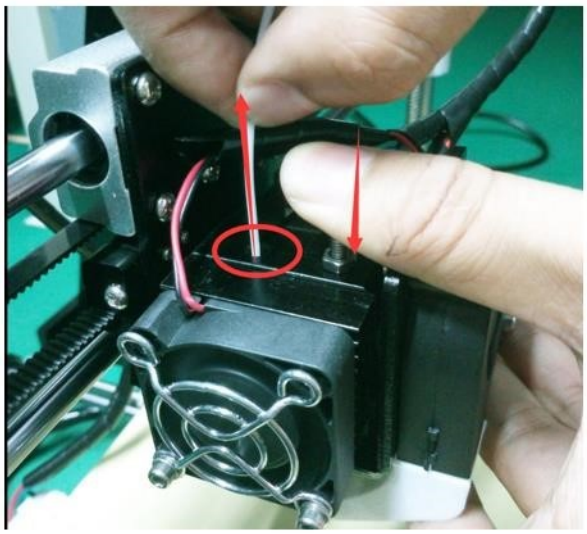
If the shape of output filament is average , means installation is good.

Press extruder screw, hold on wind mouth. Stick filament in quickly until filament goes out from extruder

Filament installation succeed

2.3 Pull out filament

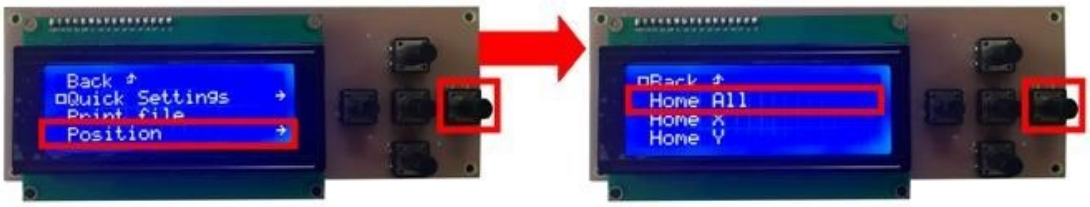
When Change filament/Long-term not in use of printer , you need to pull out filament.



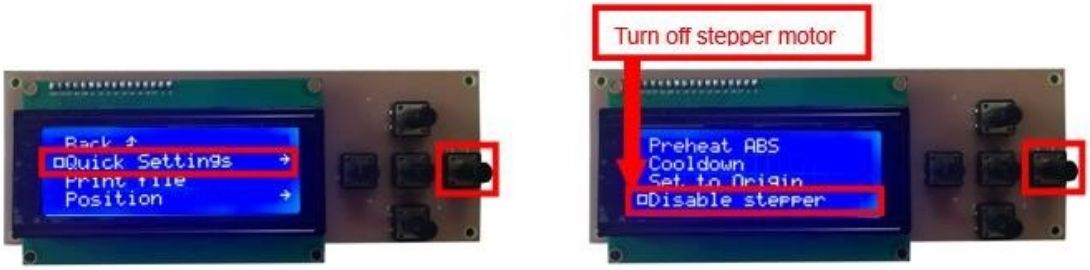
Use PLA as example
1. Preheat extruder to 190℃
2. Press extruder screw, hold wind mouth. Meanwhile, stick filament down for a few length, then pull out with average speed.

Precautions:
1. Do not stick down for long length in order to avoid failure of pulling out. Replace filament timely.
2. Please confirm you have preheated the extruder to 190℃. Do not pull out before 190℃ , or it will cause irreparable damage.

3. Platform Adjustment

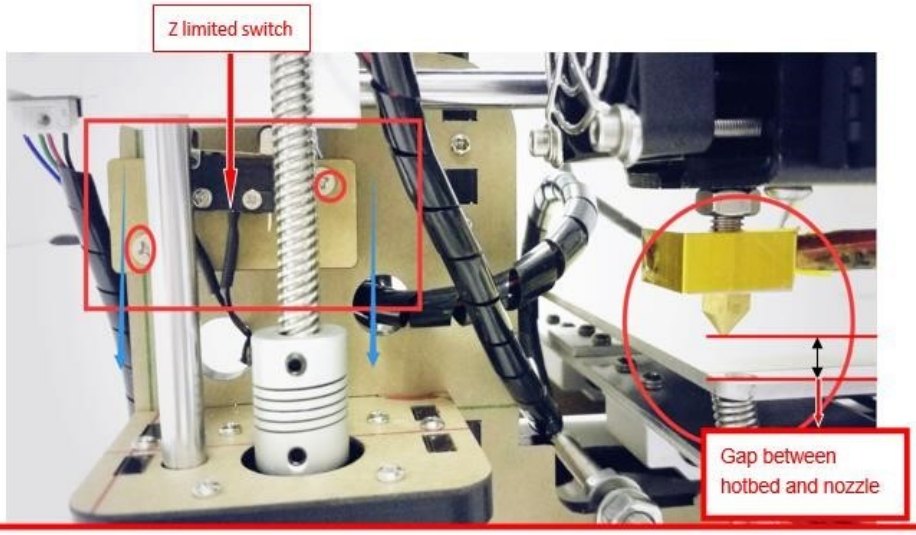


1. Choose “Position” → “Home all” , printer will move to limited switch until it stops.

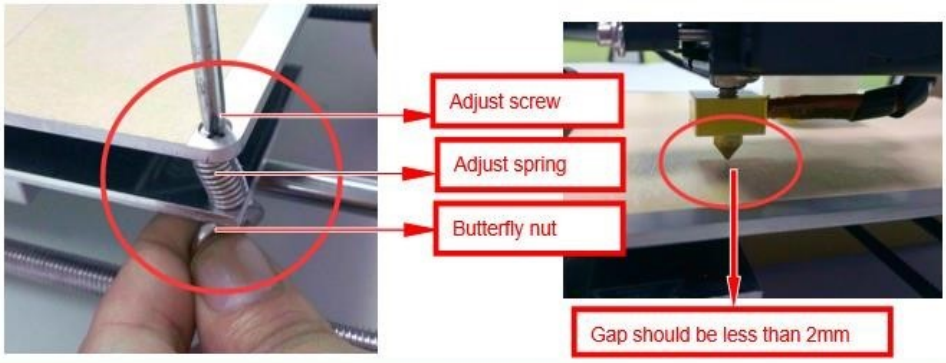


2. Turn off stepper motor: based on step 1 , enter “Quick settings” → “Disable stepper”

3. Please manually move nozzle to platform and check the gap between nozzle and platform.

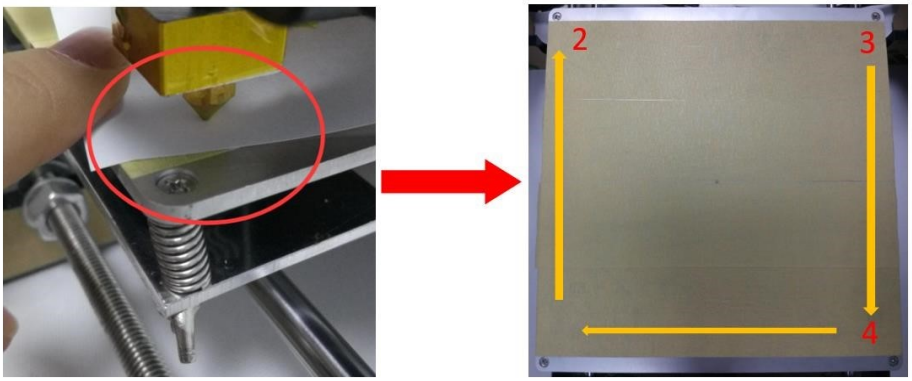


4. When the gap is more than 2mm, you need to adjust the height of Z limited switch.
Example: When the gap is 12mm , you need to adjust limited switch down by 10mm.The rest 2mm can adjust by spring on the hotbed.



After adjustment of Z limited switch, you need to reset printer and turn off stepper motor, move extruder to the center. You can check the gap better with these conditions.

5.Adjust the gap to about 0.2mm to satisfy printing needs.Move extruder to a corder of platform, adjust the springs one by one . Use 1 or 2 A4 paper to test if they can go through the gap with some resistance.



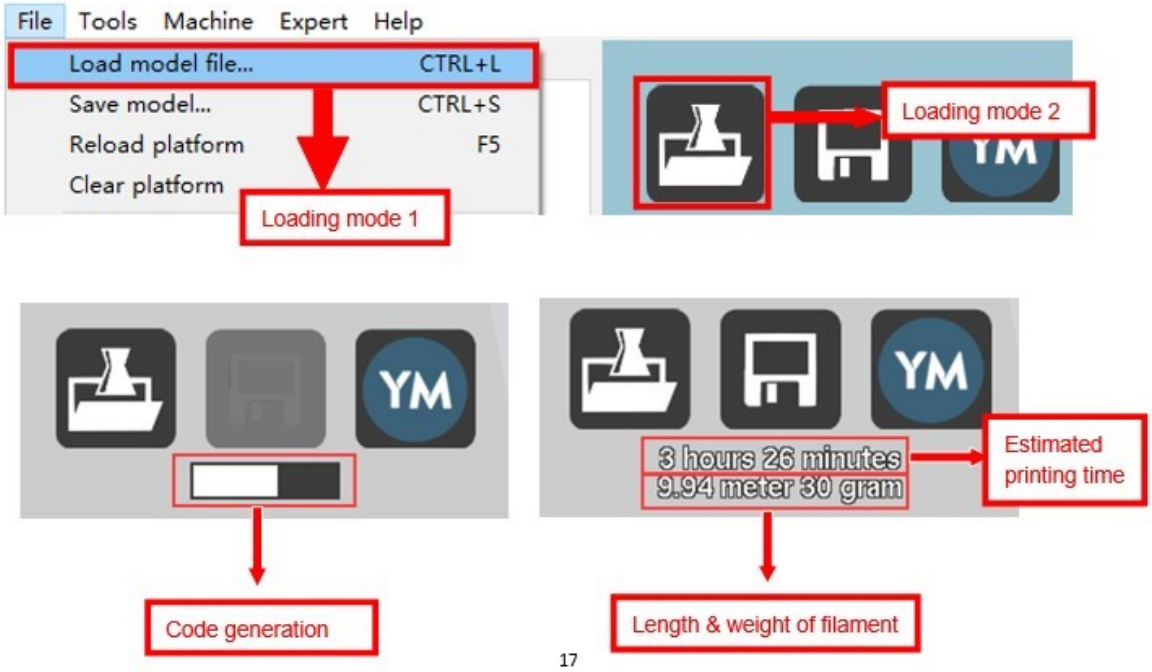
After adjustment of springs, reset printer and close stepper motor to test. Use A4 paper to test the gap.
Tips: When you are familiar with the printer with time going by, we can adjust while it's printing. It's because the printing speed is slow at the beginning so that there's enough time for adjustment. Meanwhile, the printing effect will be better.

4.Printing

1) TF Card Offline Printing a.

Loading mode

Cura supports STL file & G-code file.



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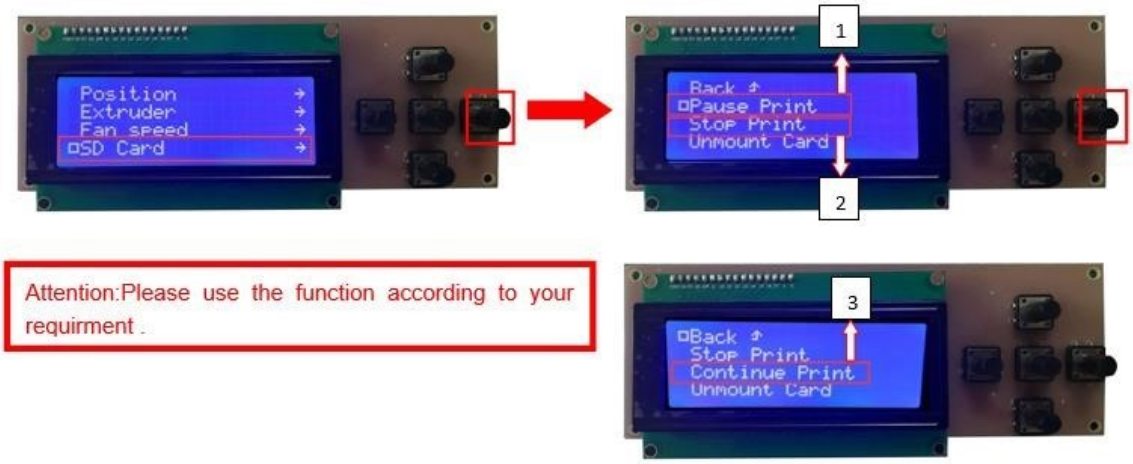
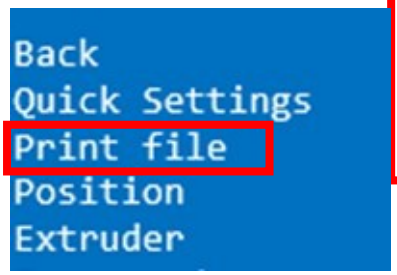
b. Code Saving

Copy file to TF card . Then connect TF card to printer, click reset. Picture below shows the location of print file , there are 2 methods to find print file.

c. Introduction of Stop print , Pause print , Continue Print:
Only when the printer is printing can we use Stop print, Pause print, Continue Print.



d. Print model

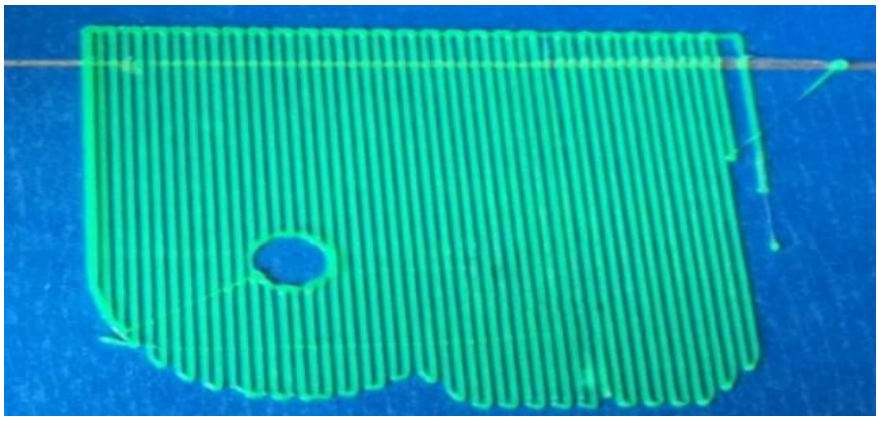


The printer will start printing automatically when the extruder & hotbed reaches estimated temp after you choose print model .

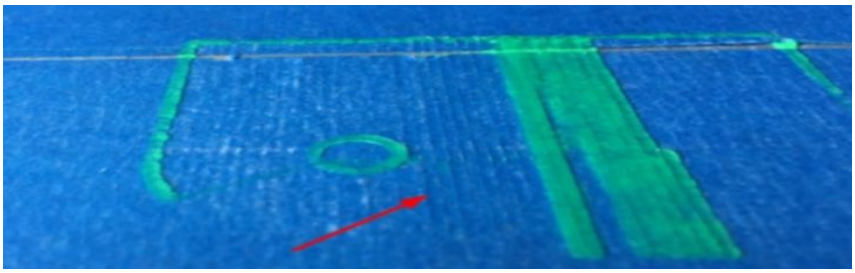
Attention: If the print bottom fails to stick to platform tight , you can adjust the platform to make it tight during printing.

e.Judgment of the gap between nozzle and platform.

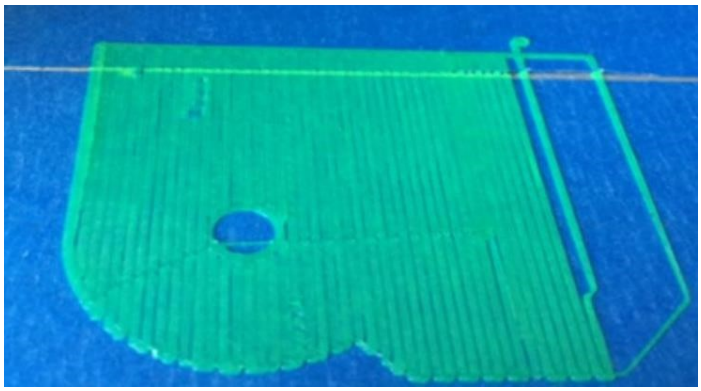
1. Too big gap: The printed model is uneven, curled with gap. It means the gap is too big for filament to reach the platform, making the printing effect so bad.



2. Too close gap: The printed model edge has irregular projections. It means the gap is too close to print normally. Sometimes it even cannot output filament



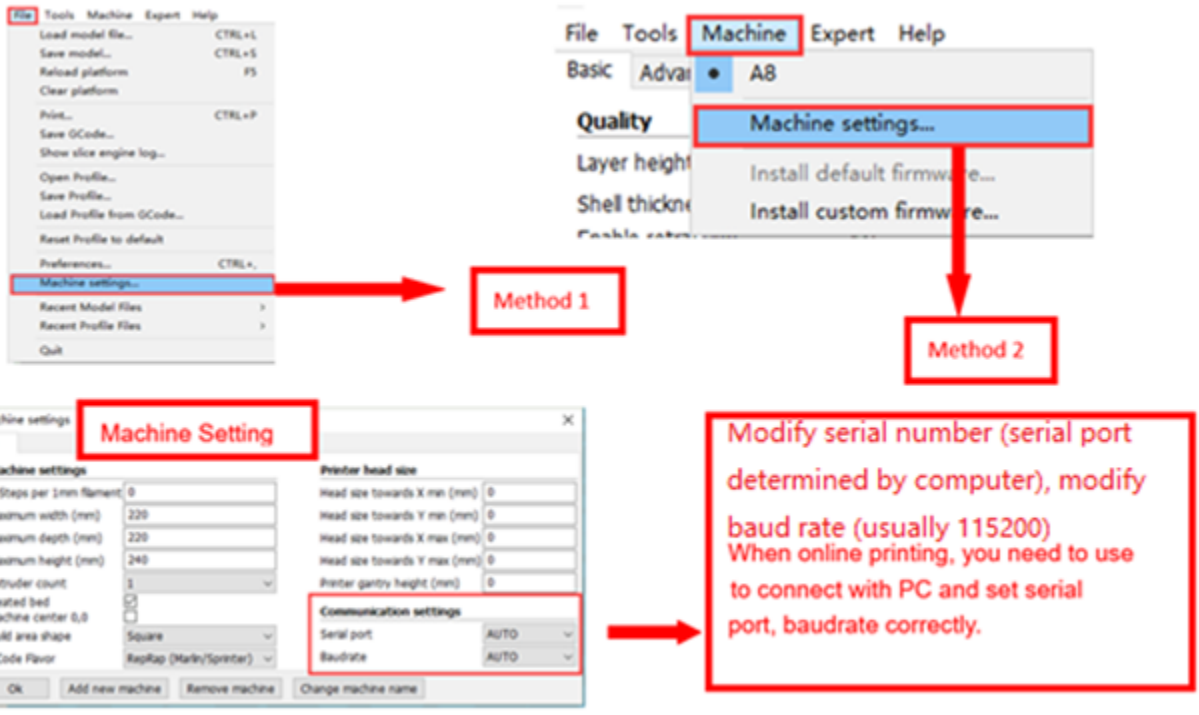
3. Appropriate distance: Printed model flat with no gap, no glitches. It means the distance is appropriate to print.



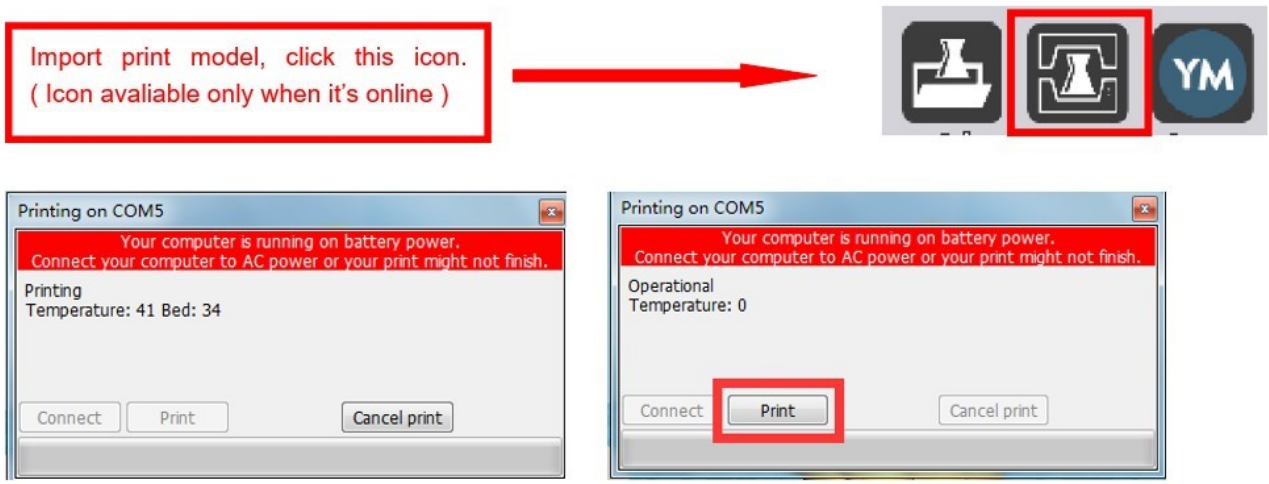
Wait to print complete after gap adjustment.

2) Online Printing

a.Machine settings (Use to connect to PC)



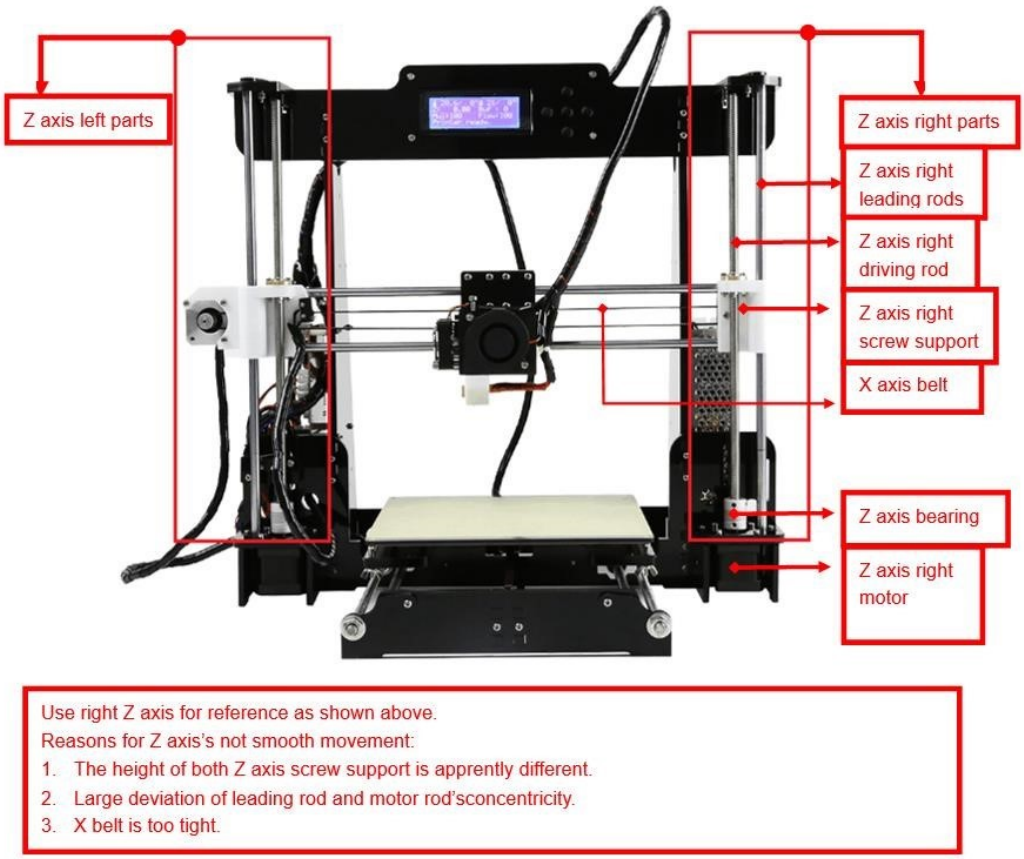
b. Online Pringting



The printer will start printing automatically when the extruder & hotbed reaches estimated temp after you choose print model. You can also modify temp in this interface.

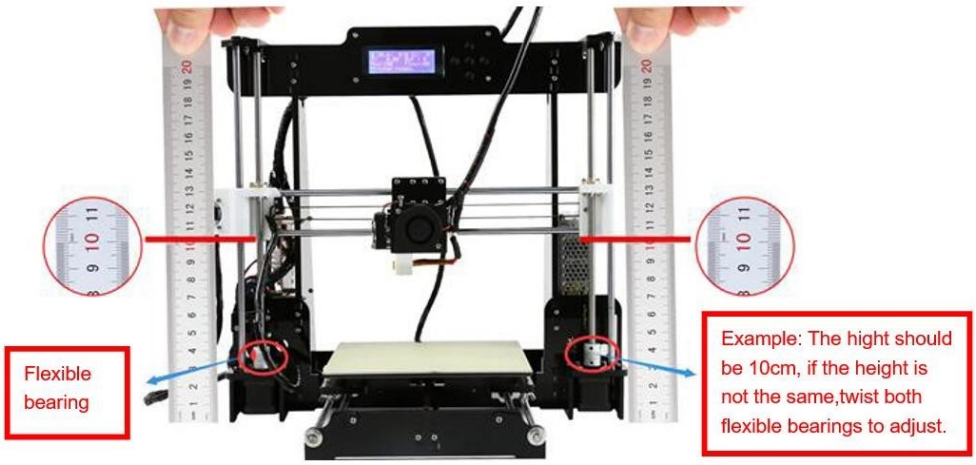
E. FAQ and Solution

1. Z Axis Ajustment



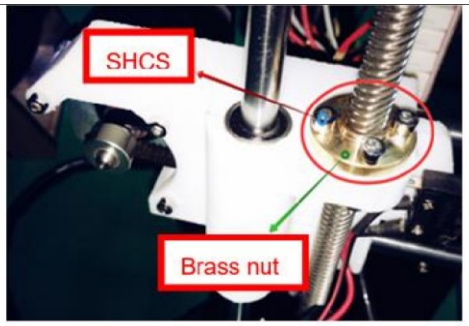
During installation, we need to test moving parts:

1. Preparation: Before Z axis moving adjustment, please confirm the height of both Z aixs screw support is the same. (Keep the same height of two white parts)

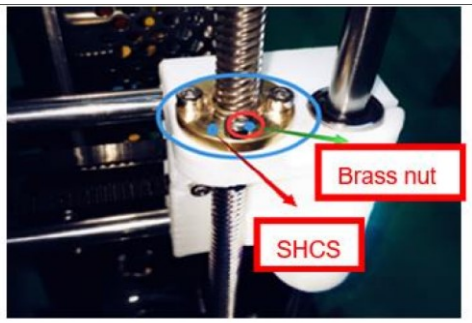


2.Ajust concentricity

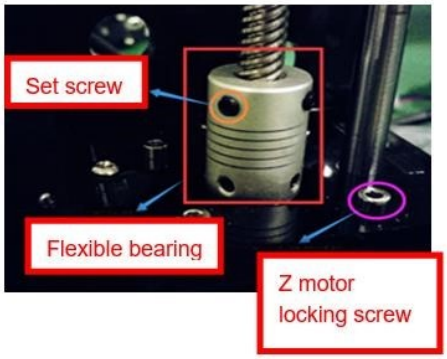
1. Click to adjust Z axis to move (Position → Z pos.Fast → +/ -) . If it cannot move smoothly, you need to adjust the unsmooth side's screw support. Try to keep them at the same height.
2. We can also tight/loose the Z motor screw according to requirments. This is to correct the deviation in the first time installation. Please take steps as follows to lock screws,



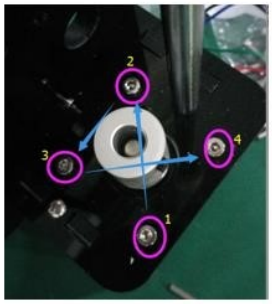
Z axis left screw support



Z axis right screw support



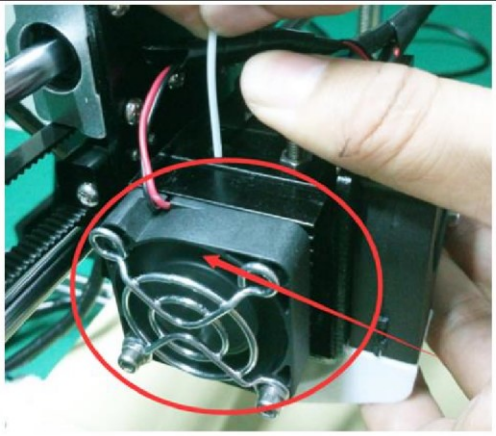
Z motor & Flexible bearing



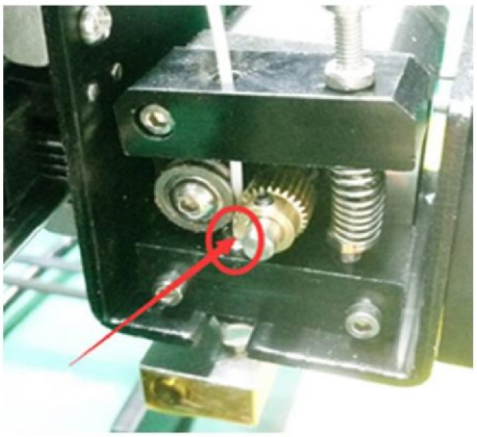
Z motor screw locking sequence

Nozzle blocking

Tips: We have removed fan to show obviously. Please cosider movement according to actual requirment.

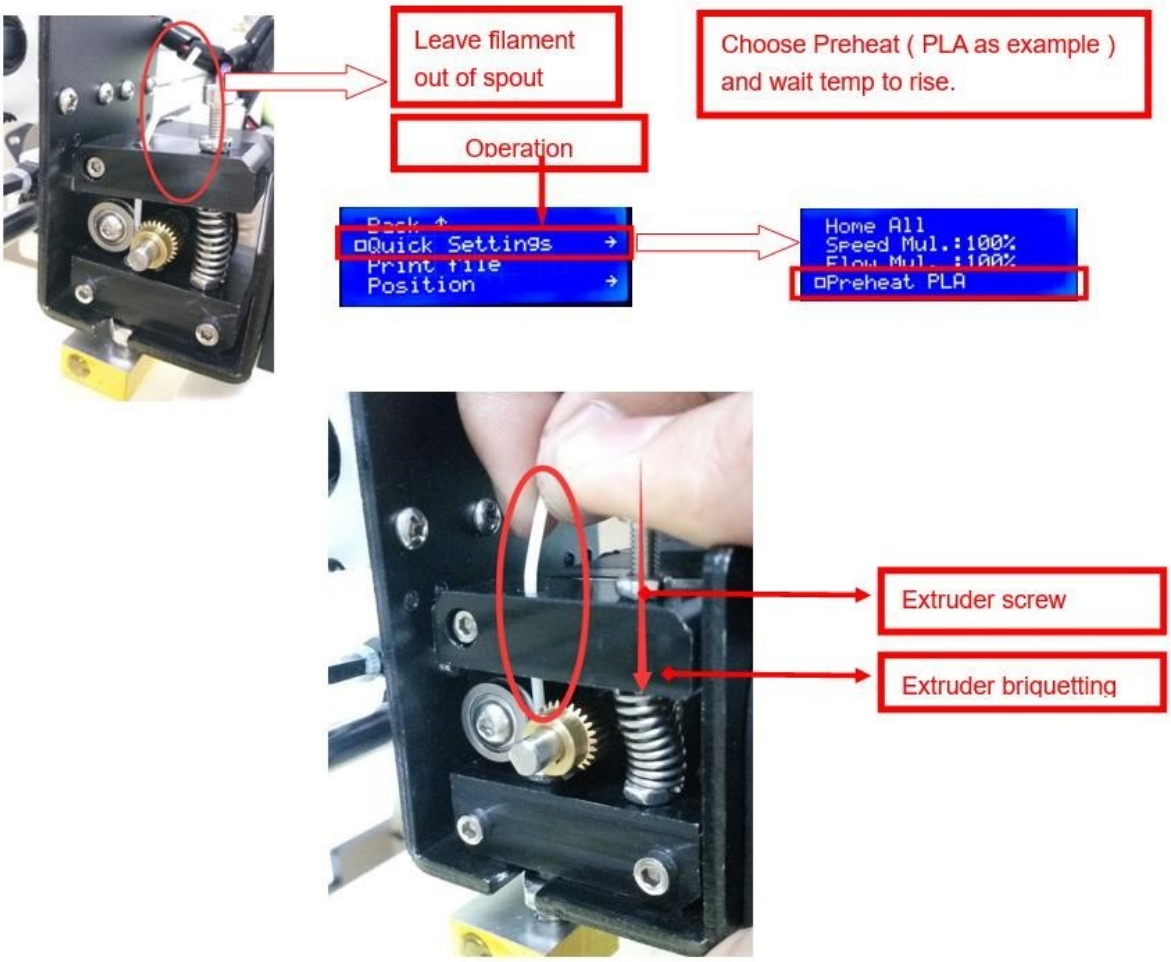


Fan

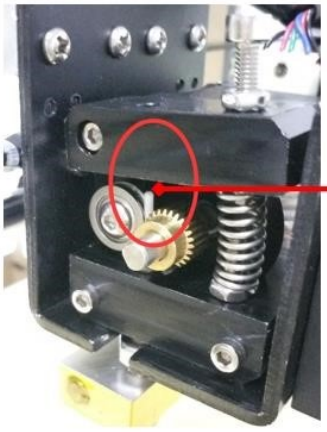


Fan removed

A. Only a little filament left in the nozzle and difficult to take out:


Leave filament
out of spout
Choose Preheat (PLA as example)
and wait temp to rise.
Operation
Back
Quick Settings
Print file
Position
Home All
Speed Mul.:100%
Preheat PLA
Extruder screw
Extruder briquetting

B. Filament full filled in spout



Leave filament in the spout

Allen wrench

Use the minimum allen wrench or some filament (1.75mm), press aligned with the remnant filament until filament comes out through nozzle.

3. FAQ

No.	Symptom	Reason	Method
1	Print model dislocation	Synchronous wheel/belt loose.	Tighten set screws or fasten belt
2	Glitch with the print model	Too high temp or slicing problem.	Extruder temp is too high and retracting speed & distanse is too small
3	Foamy print model	Low temp or not smooth filament entering.	Rise extruder temp or check if brass nut and bearing is good. Replace a nozzle if methods above can’t solve the problem.
4	Printer model is warped	Hotbed level isn’t well adjusted.	Adjust hotbed
5	Unavaliable Gcode tramsformation	Wrong setting/wrong save path	Choose right machine type and change the right path
6	Software installation failed	Different OS	Reset OS
7	Unusual temp	Broken temp sensor	Change a new one

F. Maintenance

Important maintenance tips:

1. maintenance of X,Y,Z axis: Add some lubricants on the rods to reduce friction when the machine works noisy and a little bit shake.
2. Please refer to the USER MANUAL before printing, do preparation of hot bed adjustment first.
3. When finished printing, the filament should keep sealing, avoid moisture.
4. Preheat the extruder at the beginning of 2 nd time printing, let extruder auto-push filament for a while.
5. Machine should do some regular maintenance, drop some lubricating oil on thread rod, polished rod and bearings to avoid fatigue wear.
6. Do not let the fan and air-condition blow to the hot bed when printing.
7. Keep the working condition at “Temp:10-30℃，Humidity:20-70%”.

G. Maintenance policy

1. This product executes regulations of “Product Warranty Card”.
2. Please contact supplier or customer service if the product have any problems . Do not repair it by yourself, otherwise you need to bear all the consequences.