ZLYLODENT QUICK START GUIDE

CONTENTS

BEFORE WE START

To ensure you have ideal results and a smooth printing experience with ZyloDent, it is required to follow the following recommendations:

- Place ZyloDent in a dry, ventilated, flat surface.
- Avoid direct sunlight getting to ZyloDent.
- Wear gloves, masks, protective goggles, and long-sleeved clothing when handling resins or washing materials.
- Make sure there are no possible sources of flame or sparks near ZyloDent or the alcohol operation area.
- Make sure to handle the wooden box with caution to avoid splints and dispose of it properly.

WHAT'S IN THE BOX

After unboxing your ZyloDent, you will find the following contents to assist with your ZyloDent operation:

- Warranty Card
- A pair of Gloves
- AC Power Cable
- Ethernet Cable
- Plastic Funnel
- Metal Scraper
- Plastic Spatula
- Allen Wrenches
- Digital Caliper
- Build platform brush
- Washing tank brush
- Hose cleaning brush
- Oil lubricant
- Draining reservoir
- Z-axis Calibration sheet

SYSTEM SPECIFCATIONS

ZYLODENT

1. **Technology**: Resin 3D Printer - DLP Type
2. **Light Source**: Digital Light Processing engine (Projector)
3. **XY Resolution** (50 um)
4. **Layer Thickness** (0.05) – (0.1) mm
5. **Average Printing Speed** 45mm / hr. on 100 um layer thickness
6. **Resin Heating** Automatic Resin Heating
7. **Compatible File Format** (STL)
8. **Power Requirement** 100-240 VAC: 50-60HZ
9. **Printer Control** Interactive 7" inch touchscreen
10. **Connectivity** LAN/Wi-Fi
11. **Built-in Memory** (30) GB

12. **Printer Size** ()x() x() cm
13. **Printing Volume** (125) x (70)x(100) mm
14. **Printer Weight** (50) kg

WASHING UNIT:

1. **Cleaning Method:** Bubbles generator [Zylo 3D Washing method]
2. **Solvent:** IPA 99%
3. **Cleaning Tank Size:** X: 160 mm, Y: 90 mm, Z: 100 mm

POST CURING UNIT

1. **Curing UV Technology:** LED
2. **Wavelength:** 405 nm
3. **Curing Chamber Size:** X: 165 mm, Y: 150 mm, Z: 85 mm
4. **Number of LEDs:** 30
5. **LED Output Power:** 3W
6. **Irradiance per PCU side:** 55 mW/cm2
7. **Temperature Control:** True

SOFTWARE:

1. **Software**: DentPrint [Zylo 3D CAM software]
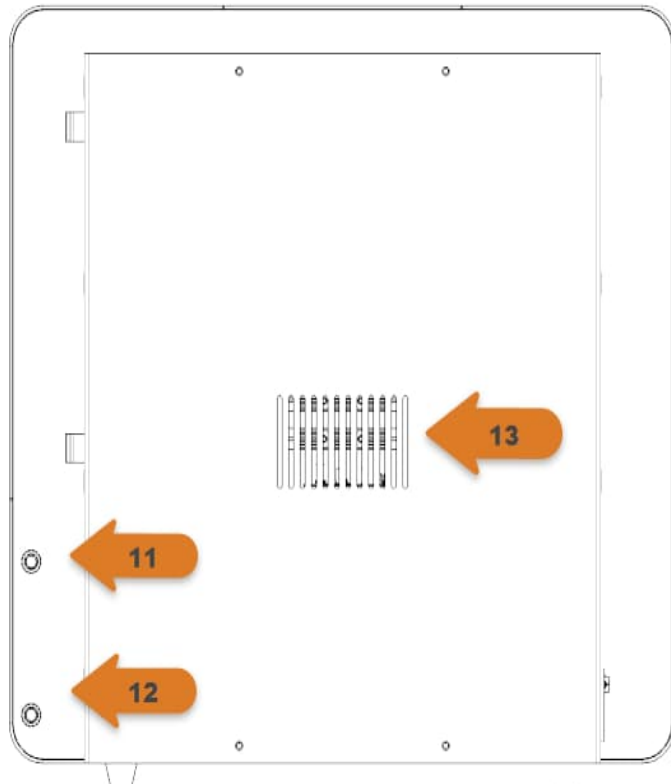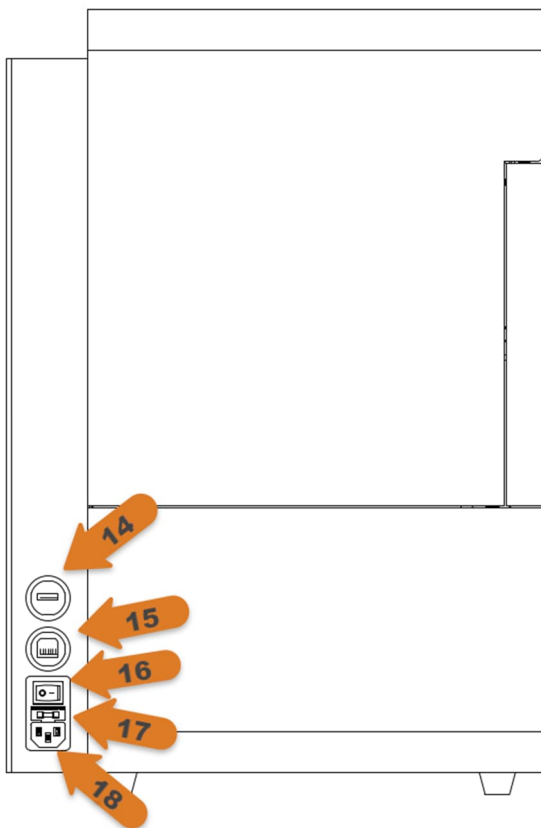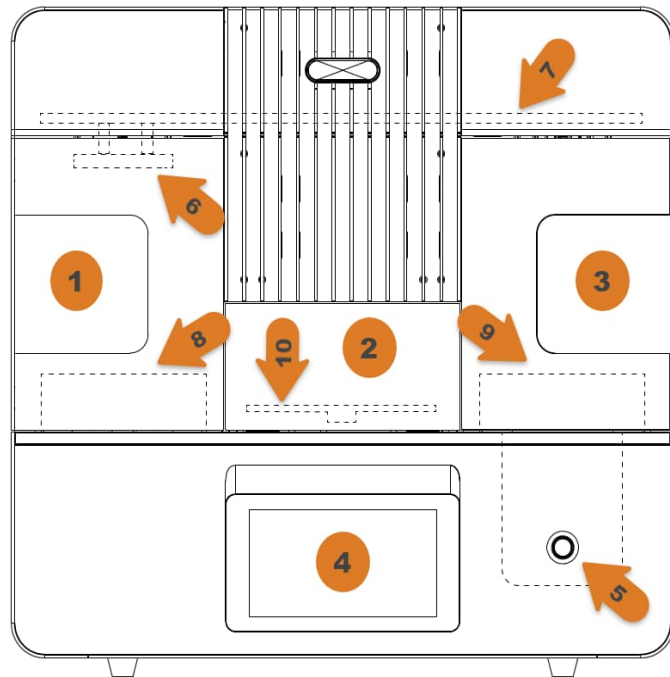2. **User Interface:** 7-inch touchscreen, PC interface with LAN and Wi-Fi connectivity

Disclaimer:

* All specifications were tested in a laboratory and are subject to change without prior notice. For the latest update, please refer to Zylo 3D's official website.

GETTING TO KNOW YOUR ZYLODENT

In this section we will go over the anatomy of your ZyloDent to get you familiar with its parts

1. Printing area Door
2. Post curing area Drawer
3. Washing area Door
4. Touch Panel
5. Standby button
6. Build Plate
7. Gantry
8. Resin Vat
9. Washing Basin
10. Post curing rotating disk
11. Overflow Draining Port
12. Alcohol Draining Port
13. Ventilation Grill
14. USB Port
15. Ethernet port
16. Power Switch
17. Fuse (10A)
18. Power Socket

PREPARE YOUR ZYLODENT

Now that you are familiar with the printer parts and have the ideal workspace ready, let's prepare the printer for use following these steps:

1. Connect the power cable to the printer, switch ON the printer by toggling the rocker switch to ON position and then press the standby button on the front panel
2. Connect the printer to your network by going to Settings > wifi > Select your network name > Enter network password
3. Make sure the Resin vat is installed properly and remove the foam sheet or any packaging materials
4. Place the alcohol draining reservoir in a lower altitude with respect to ZyloDent bottom line.
5. connect the alcohol draining hose to the alcohol draining reservoir.
6. Perform the necessary checks before the first print

RECOMMENDED CHECKS BEFORE THE FIRST PRINT

Build Plate Orientation Check: to make sure the build plate orientation is not affected from shipping.

More details on the Steps to perform this check can be found on Zylo3d's Website
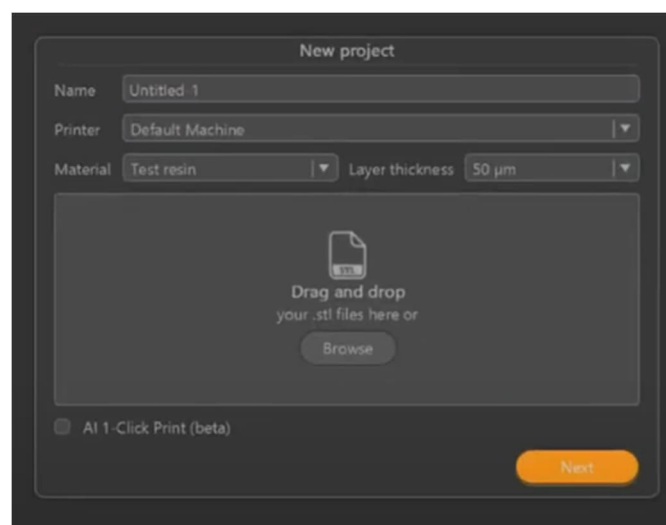
Print Dimension Check: to make sure the produced pixel size is calibrated and produced print results are accurate.

More details on the Steps to perform this check can be found on Zylo3D's website
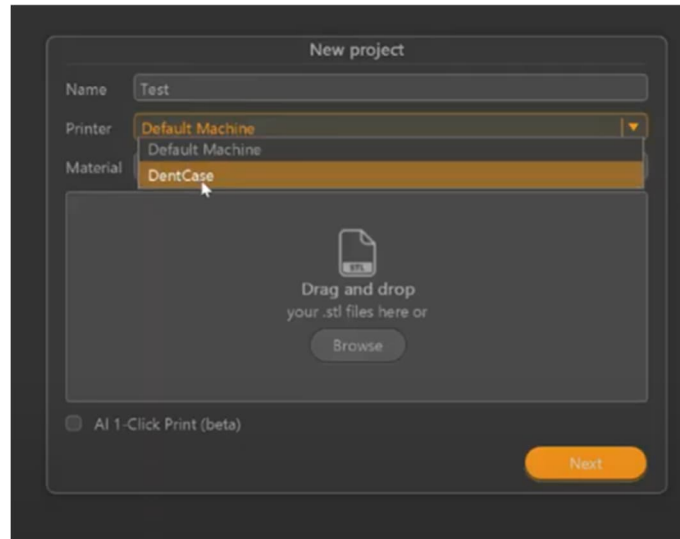
PREPARE YOUR PRINT FILE

Now that the printer is ready and the checks are done, let's prepare the print file!

1. Download DentPrint from our official website and follow the installation wizard to get it installed on your device.
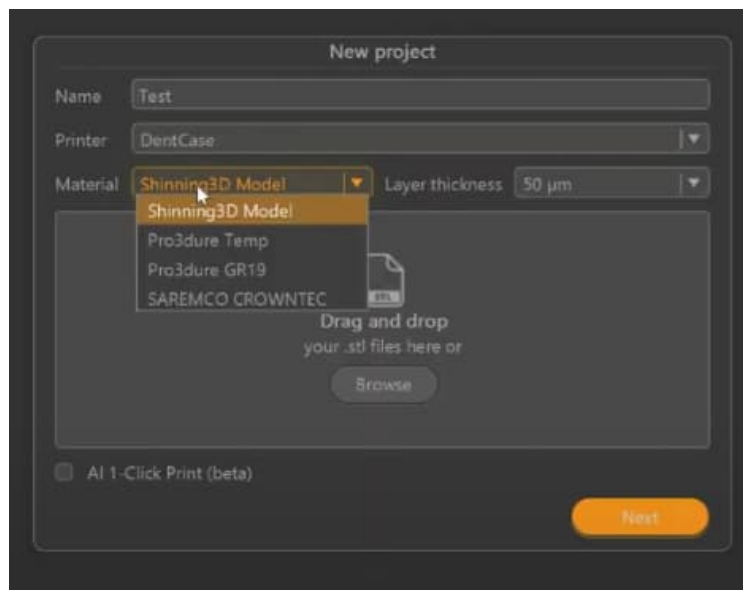2. Open DenPrint, the new project screen will be opened

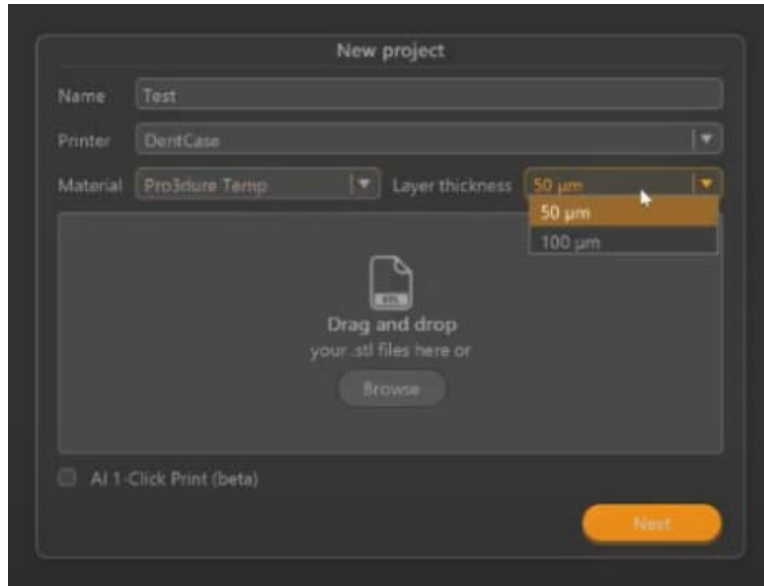3. Define the name of the project, Printer to be used

*You can use the option "default machine" for test prints without being uploaded to ZyloDent

4. Select the desired resin material to print from the listed materials
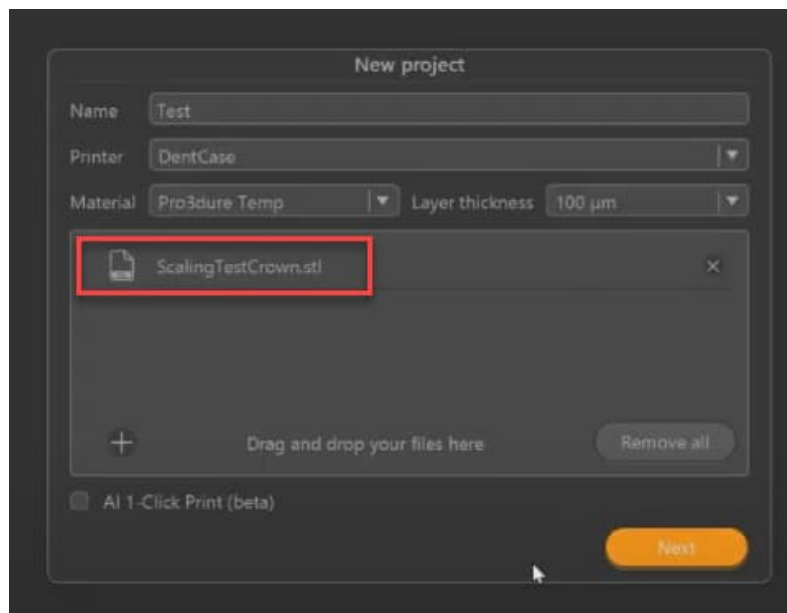

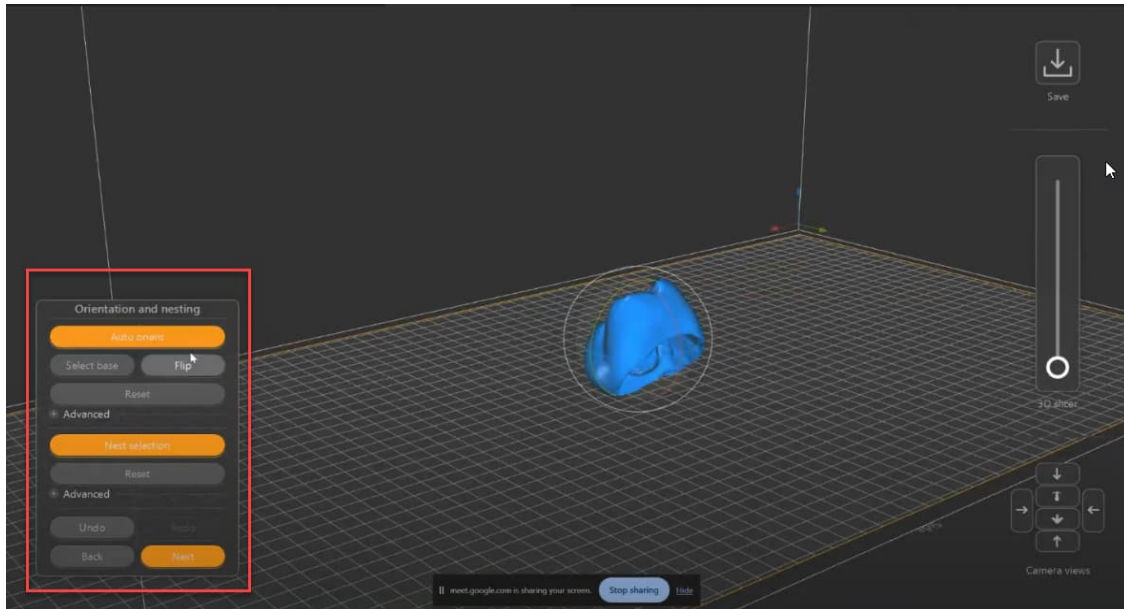*New Materials can be added by visiting Zylo3D's Website

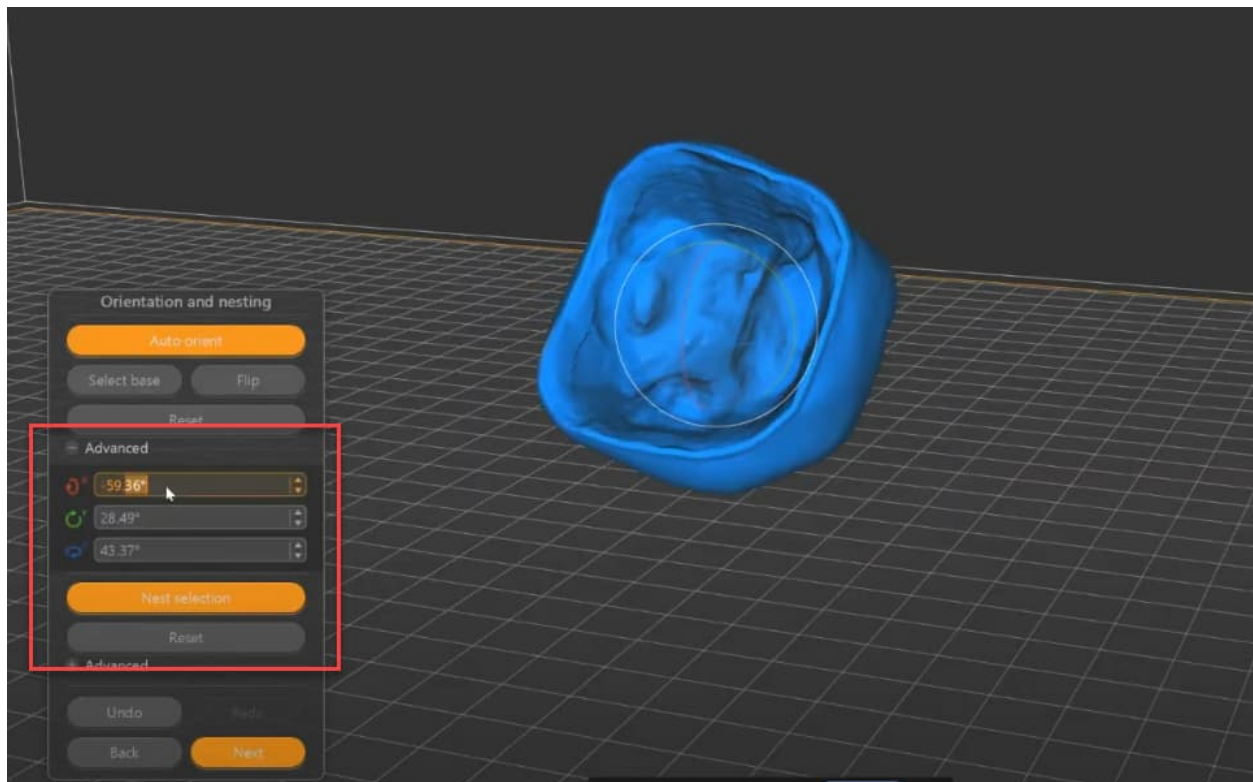5. Select the desired layer thickness

6. To add an STL file you can either:
   - Browse to select the file
   - Drag and drop the file in new project area
   - Drag and drop the file on the build plate

7. Click Next
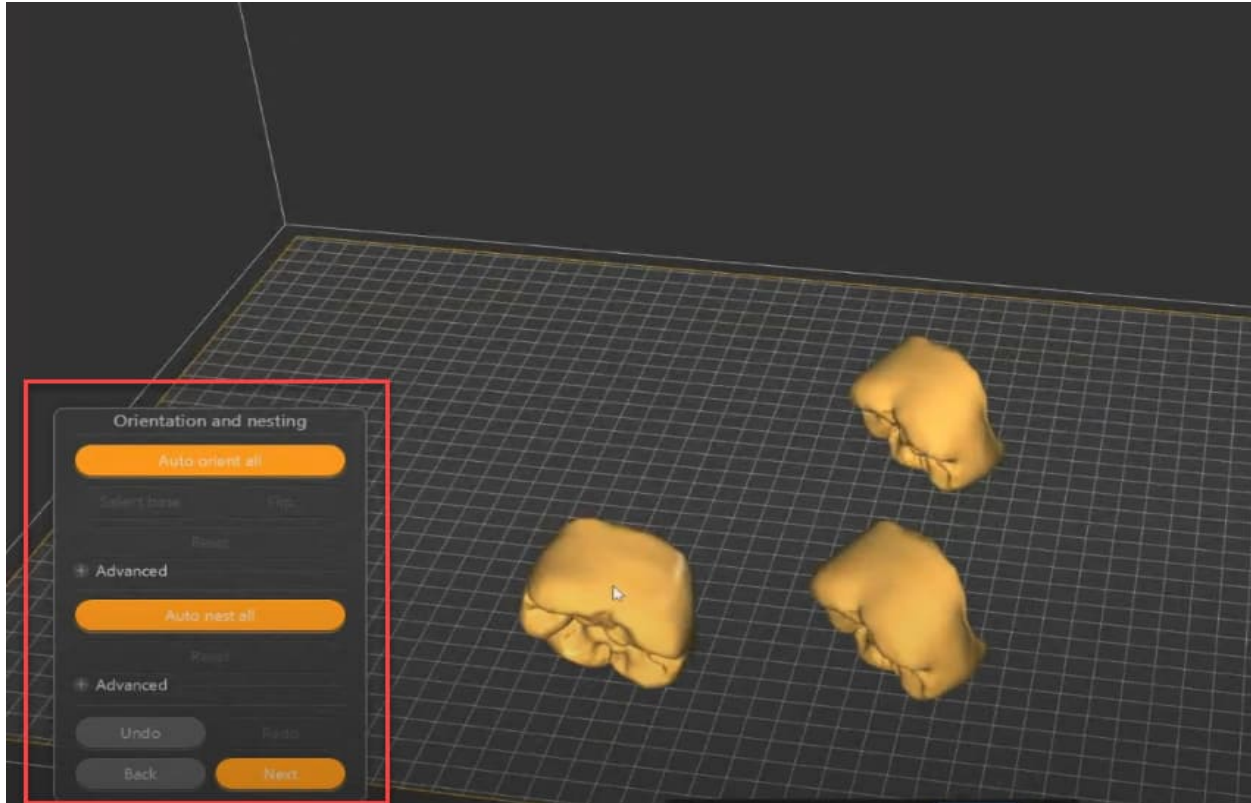8. Edit the part(s) orientation and nesting using the options in DentPrint using the auto nest and auto orient options for a quick and easy print preparation

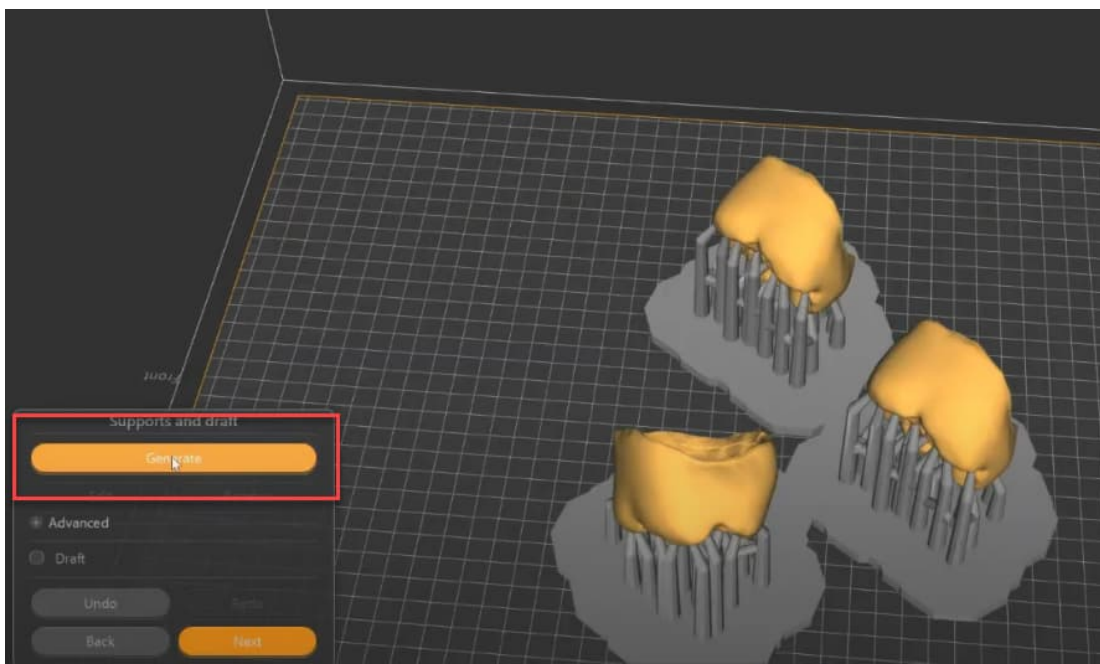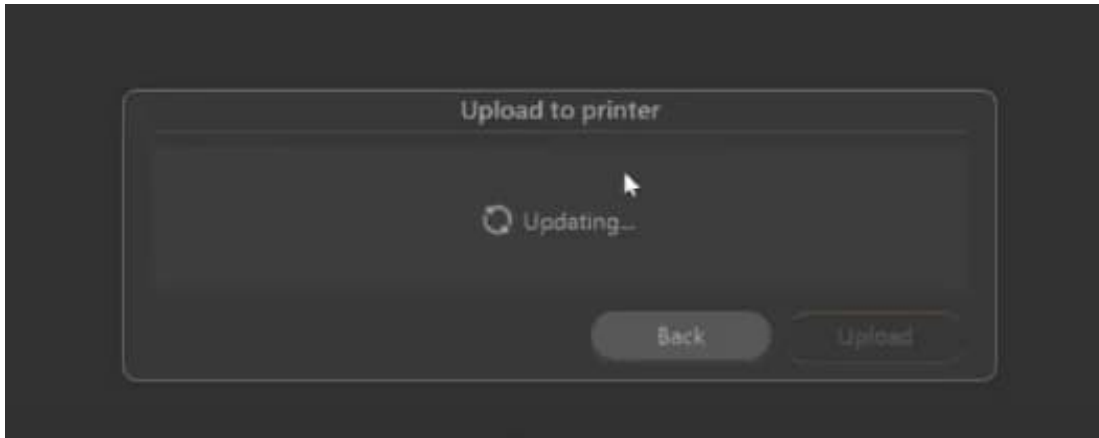9. You can also use the manual options for precise orientation and nesting positioning

10. You can also drag and drop multiple parts on the build plate to directly nest together using our auto orient all and auto nest all options

11. Click next to continue to the support generation phase

12. Here you may generate automatically the supports using DentPrint's auto generate feature for all parts at once

13. Click next to upload the file to the printer and start your print!

STARTING YOUR FIRST PRINT

Now that everything is ready let's start our first print keeping in mind the following:

- Make sure the screws on your resin vat are tight.
- Make sure the build plate and resin vat are clean from any debris.
- Make sure the washing basin is full of alcohol and not exceeding the maximum mark
- Shake the resin bottle for 1 minute. Pour the resin into the vat without exceeding the maximum mark.
- Go to the printer screen to select the file uploaded from the machine's firmware "Dentware", select it and press on print.
- While printing, please keep the door closed to prevent light exposure that may affect your prints.
- Once printing and washing are complete, carefully remove the build plate and use the metal scraper to carefully remove your print.
- Make sure the print is fully dry before proceeding to post curing.
- Place the printed objects on the rotating disk of the post curing unit and choose the curing profile from the machine firmware "Dentware" then Start.

PLEASE CONTACT US IF YOU HAVE ANY FURTHER INQUIRIES

FCC Statement:
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
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 thise quipment 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.
Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
This equipment should be installed and operated with minimum distance 20cm between the radiator&your body.