



Getting Started Primary Supplies

The following supplies are recommended for producing parts in MD Series:

- Personal Protective Equipment (PPE).
- Paper towels.
- Material mixing.
- Material filtering: Cone-shaped paint filter, plastic funnel, and spare material storage bottle.
- Part removal: Paint scraper.
- Washing unit.
- Washing agent: 99% isopropyl alcohol (IPA).
- Spray bottle with 99% IPA.
- Air compressor.
- Curing
- Part finishing: Snips, precision blade, or similar tool.

Design Parts

MD Series Live Build DLP is compatible with the universal .STL file format and is thus compatible with almost all dental CAD and model design software as well as digital design services. Models may be designed in-house or outsourced to a design partner. Hollow dental models printed in MD Series must have a minimum wall thickness of 3.0 mm. It is recommended to add channels or drainage holes to hollow models. This allows uncured material to drain from the hollow feature during the printing process.

Software Orient

Models Live Build DLP

Orient models in Live Build DLP software with the flat base side down, parallel with the build platform.

- Spacing: place models a minimum of 2.5 mm apart.
- Level at build platform: place unsupported models 0 mm from the build platform.
- Resolution: 100 μ m Z resolution. Ensure that the bottom surface of the model is oriented flat-to-plate and is making full contact with the build platform. An orange highlight indicates that the surface is contacting the build platform. This orange highlight must be visible all the way around.

Print Preparation

Mix Material MD Series material must be mixed in the material bottle prior to use:

1. Place the sealed material bottle on the Dual Motion Bottle Roller for a minimum of 30 minutes OR **manually shake the sealed material bottle for 1 minute.**
2. Wait for bubbles to subside before filling the material tray.
3. Mix material in the material tray before each print with the rubber spatula. The material should be a uniform color. Ensure there are no small, cured particles in the material. If found, then the material must be filtered.

Fill Material Tray

Do not overfill the material tray. Overfilling can cause the material to overflow when the build platform moves down at the start of the print job. To add more material to the printer, carefully pour material into the material tray between prints.

Print with MD Series Material

To start the print, follow instructions in the printer's Operations & Maintenance Guide. To remove the models from the build platform after the print is complete, follow instructions in the printer's Operations & Maintenance Guide.

Post-Processing

Materials Safety

Safety data sheets (SDS) for materials used in the printing process are available either from Resinify Technology or directly from suppliers. Read and understand the information provided in these documents prior to attempting to operate the printer or handle any media.

Clean Models

Always wear gloves when handling uncured material and alcohol. Important: Do not expose MD Series to alcohol for longer than five minutes. Excess exposure to alcohol may cause discoloration and warping.

1. Select the High washing program. Set the timer to 00:03:00, or three minutes. Press Start.
→ The washer begins the set washing cycle.
2. Remove the model as soon as the program is complete.
3. Spray the models with the spray bottle filled with 99% IPA.
4. Use compressed air to remove all IPA from the surface of the model as soon as possible.

Dry Models

Models must be completely dry before post curing.

1. Place the models on a clean surface lined with paper towel.
2. Leave the models to dry for 5 minutes.

Post Cure

Printed Models Post cure parts using one of the following curing options:

1. Place the models in the curing unit with as much space between the models as possible. Models should never touch one another while curing.
2. Cure the models for 2 minutes at 20° C and 100% power.
3. When the cycle ends, let the models cool completely before handling.
4. Repeat Steps 2-3. Flip the models between cycles for an even cure.