Form Cure (2nd Generation) - Master FAQ

Technology

What are the differences between the Form Cure and Form Cure (2nd Generation)?
Form Cure (2nd Generation) is up to have an internal chamber volume that matches the capacity of Form 4 Printer. It is 3-5x faster and has stronger, more even UV light and heat exposure.

What are the differences between Fast Cure and Form Cure (2nd Generation)?
The speed between Fast Cure and Form Cure (2nd Generation) are comparable but the workflow has been redefined. With the Form Cure there is no longer the need to flip parts and will not burn your fingers when removing parts from the chamber.

How is this able to cure things faster?
The Form Cure (1st Generation) contains 13 multi-directional LEDs with an LED power of 39W and LED radiant power of 9.1W. On the Form Cure (2nd Generation), the unit contains 48 mulit-directional LEDs with LED power of 150W and LED radiant power of 50W. The increased optical power means that roughly 5 times more 405 nm photons are hitting the part causing final polymerization to take place more rapidly.

How is firmware updated when we release new materials and settings?
Firmware can be updated through the latest release of PreForm.

Are there different versions for different electrical grids?
Yes, there are 120V and 230V versions.

Can the Form Cure (2nd Generation) nitrogen cure?
Yes, the Form Cure has a port on the back of the unit. This allows for nitrogen to flow through at 1 L/min for 7min and then cure with typical cure settings, leaving the nitrogen flowing until the cure is complete.

What does Nitrogen Curing do?
During Post-curing oxygen molecules can interact with free radicals in the resin to prevent them from forming bonds and curing. This phenomenon is called oxygen inhibition, and can cause surface tackiness, and poorly cured parts. By displacing the oxygen within the Form Cure with nitrogen, users can ensure parts are fully cured. Certain resins, like elastomeric materials, are more susceptible to inhibition, which is why we recommend some of those materials to be cured while submerged in water (which also displaces oxygen). Nitrogen curing is not a required workflow for any Formlabs resin, but we want to leave the option open to users who want to try it.

Consumables

What replaceable parts are there?
The turntable, heaters with fuse, LED modules, turntable motor and coupler will all be replaceable components.

Performance

How fast is Form Cure (2nd Generation)?
The Form Cure (2nd Generation) 230V heats up to 60℃ in <90 seconds, 80℃ in <180 seconds, and 100℃ in <270 seconds. The Form Cure (2nd Generation) 120V heats up to 80℃ in <180 seconds, 80℃ in <270 seconds, and 100℃ in <270 seconds. Then once the printer is up to temperature;

Material	Time on Form Cure (1st Generation)	Time on Form Cure (2nd Generation)	Speed Increase
Grey Resin V5	5 min	1 min	5x
BioMed Amber Resin	30 min	5 min	6x
Tough 2000 Resin	60 min	7 min	8.6x
High Temp Resin	120 min	15 min	8x

Full list of cure times will be listed on the support site

Does faster curing cause parts to warp in the cure more?
The decreased time to cure on the Form Cure (2nd Generation) has been found to reduce warping compared to the previous generation. By heating up faster and spending less time at an elevated temperature, this decreases the time window where sag has occurred previously on the Form Cure (1st Generation). This has been the consistent observation in beta testing but we do not have quantitative data on this. We would be open to do a study if users express interest.

What is the purpose of the low warp settings? How does it work?
Low warp settings cure without heat on materials that are susceptible to warping. These would be materials such as: Tough 1500, 2000, Rigid 4k 10k, Durable. This reduces warping at the cost of mechanical properties vs curing at full heat. The both settings will be represented in the TDS so that users can decide which setting is best for their part and application.
Low warp settings will be available for both generations of Form Cure as well as Form Cure L.

Can I post-cure parts in water, glycerin, or other liquids inside Form Cure?

Yes, place a clear plastic or glass container in the Form Cure to hold the liquid and the suspended parts.

Cross-Compatibility

Can I use my Form Wash (1st Generation) with this?
Yes, both Form Wash 1st Generation and 2nd Generation will be fully compatible with the Form Cure (2nd Generation).

Can I use my Form 1/2/3 with this?
Yes, the Form Cure (2nd Generation) will be compatible with previous printer models.

Will resins that are sunsetted or only available on the Form 3 and older generations work on this?
Yes, the Form Cure (2nd Generation) will be cross compatible.

Future Roadmap

Will we announce a sunsetting timeline for the Form Cure (1st Generation) and Fast Cure at launch?

Is a Form Cure L (2nd Generation) coming?
Sadly, I can't speak to the product roadmap and really don’t know. We're always listening to our customers and working on improving our products. And we’re always committed to building the best large format stereolithography solutions on the market. We feel strongly that the Form Cure L is the best solution on the market for producing/curing large SLA parts in house.

We have seen the Form Wash and Cure upgraded, should we expect these changes on the Wash L and Cure L?

How does this work with Open Materials?
Yes, although we do not provide the recommended cure settings for non-Formlabs materials, you can post cure and 405 nm resins.

Cure Features

MANUFACTURING
What is the country of Origin?

- Form Cure (2nd Generation) units going to EMEA: China
- Form Cure (2nd Generation) units going to APAC: China
- Form Cure (2nd Generation) units going to AMER: China

Is Form Cure (2nd Generation) TAA compliant?
No

Is there a variation in different electrical supplies?
Yes there are 2 versions. A 110V and 220V.

Safety

Is the violet light safe to look at through the door?
Yes, Formlabs resins cure in visible light (405 nm) and any incidental UV light is filtered by a coating inside the front panel. The amount of light coming through the door meets international standards for machine safety.

I spilled/splashed solvent in the unit - will it be okay>
Yes, the unit has been tested with IPA, TPM, and Formlabs solvent spills. Wipe out the unit and proceed as usual.

Sales

What is the price of the Form Cure (2nd Generation)?
AMER: $999
EMEA: €999
APAC: USD 999

Will there be a loyalty upgrade for existing customers?
No, we will not have a loyalty upgrade offer. Loyalty upgrade offers are reserved for printers where customers expect a small discount to trade up to a new generation of hardware.

What are we doing with Form Cure/Fast Cure customers who bought their cures recently?
We are not doing anything proactive with these customers. Any customer who purchased one of these products within the last 30 days and attempts to initiate a return will be offered a $250 coupon for use on any future Formlabs purchase if they do not return.

Will the different printer packages contain From Cure (2nd Generation) at launch?
All Complete and Premium packages will be updated to include Form Cure (2nd Generation)

Continued support on Form Cure (1st Generation) and Fast Cure?
We will continue to support both products for the foreseeable future and we have a track record of supporting products for many years after they are discontinued (ex: Form 2).

How will we handle currently active quotes that have the old cure?
We will continue to sell Form Cure for the foreseeable future. Customers can purchase Form Cure at a lower price than Form Cure (2nd Generation). Existing package quotes may break due to the change of package contents.

What are the lead times in each region?
Form Cure (2nd Generation) will have a 4-week lead time when announced on March 25th.

What is the stock of the Form Cure (1st Generation)?
We have a few hundred units of Form Cure (1st Generation).

How will channel partners handle current stock of Form Cure (1st Generation)? Channel Deadstock policy?
Given the price difference, we expect sales of Form Cure (1st Generation) to continue after we launch the new version of Form Cure. We will have no proactive policy around partner inventory levels. If any partners have any exceptional scenarios, they can escalate to their channel manager to review on a case-by-case basis.