

DLP=ASAP: Printing Appliances in 15 Minutes

PRINT IN A FRACTION OF THE NORMAL TIME WITH NO COMPROMISE IN ACCURACY

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KEY TAKEAWAYS

- DLP printers can print a single-quadrant appliance in 10 to 15 minutes, versus waiting 2 to 3 hours each for SLA printers
- Despite this dramatically faster turnaround, DLP appliances are just as accurate as SLA restorations
- DLP printing allows laboratories to attract new customers by offering fast turnaround
- DLP resins require no pre-heating

2018 WILL MARK the 10th anniversary of Becker Dental Lab “going digital.” Our first piece of digital equipment was a milling machine, and our latest acquisition is a digital light precision (DLP) printer: Kulzer’s new cara Print 4.0.

Our current stereolithography apparatus (SLA) printer was very affordable and is very accurate. Its only real drawback is that it takes 2 to 3 hours to print a single-quadrant appliance model, and up to 12 hours to print numerous quadrants at a time (which is normally the case). This makes next-day turnaround virtually impossible. It’s especially frustrating when we receive an emergency case after the printing has already begun; we almost always have to wait until the next day to get it into the printer, which means it takes us two days or more to get the finished appliance back to the dental practice.

Fortunately, this is no longer an issue thanks to our cara Print 4.0 3D printer. It can print a single-quadrant appliance in 10 to 15 minutes—only 5% and 12% the time it takes an SLA printer.

The cara Print 4.0 prints one complete model—one working side, one opposing side, and one die—at a time. After the model has been printed, it takes about 15 minutes to light-cure it. If we’re printing a full denture, we print the upper and lower separately; the clean-up between the printings takes about six minutes.

Currently, Kulzer offers four different resins—Print Ortho, Print Impression Blue, Print Surgical Guide, and Print Cast—which we use to print denture models, impression trays, night guards, diagnostic models, and surgical guides. Soon, Kulzer will make additional resins to make it possible to also print permanent crowns, temporary crowns, and pink denture bases in three alternative shades.

Most importantly, the accuracy of the cara Print 4.0 is every bit as impressive as with our SLA printers. One other advantage of the cara Print 4.0 is that, unlike with SLA printers, its resins do not have to be heated.

The fact that the cara Print 4.0 3D printer lets us deliver finished appliances, impression trays, guides, models, and more at least one day faster than an SLA printer is a huge competitive advantage for us. It results not only in happier customers, but more customers as well.



Manufacturer Information

Kulzer
kulzerus.com
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RSC #64