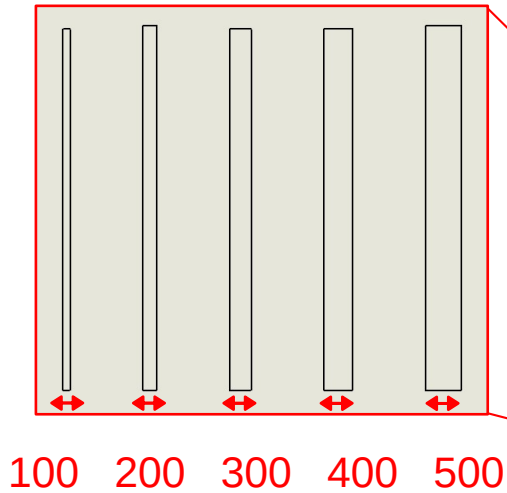


Resin Printer Comparison

(all units in micrometers)

In order to test our resin printer capabilities, this model was designed.

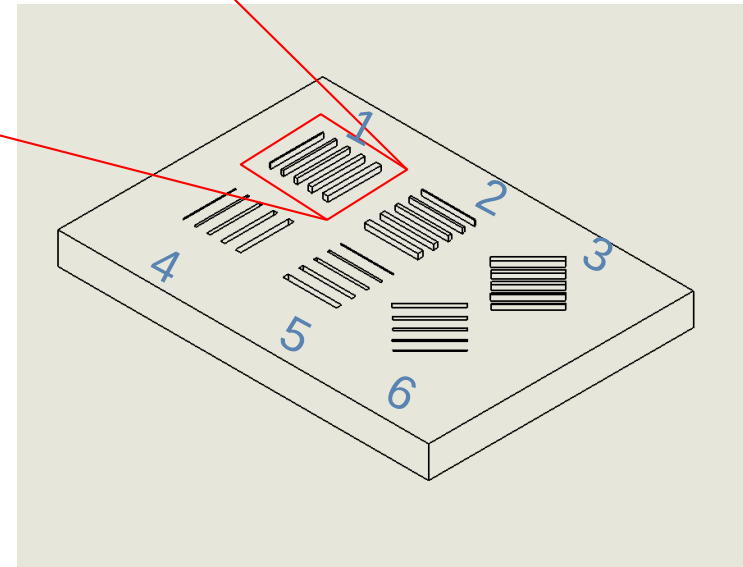
It captures minimum feature sizes for both positive and negative features, while also comparing different print orientations.



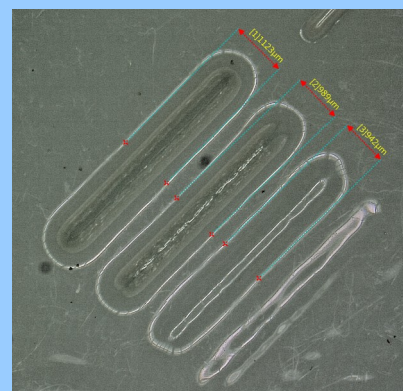
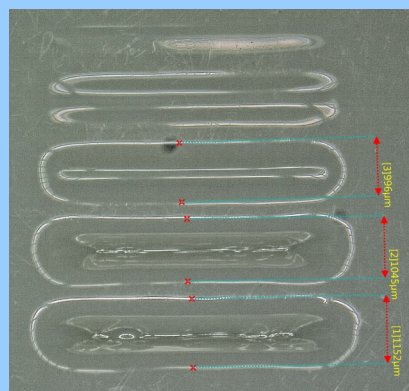
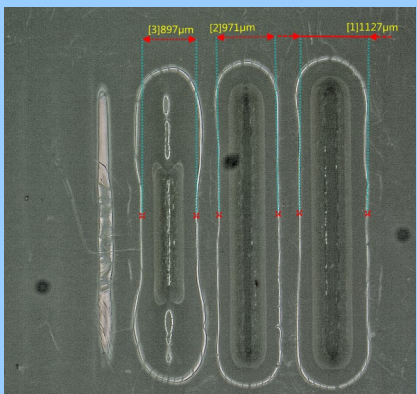
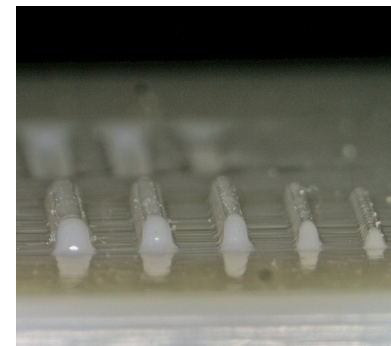
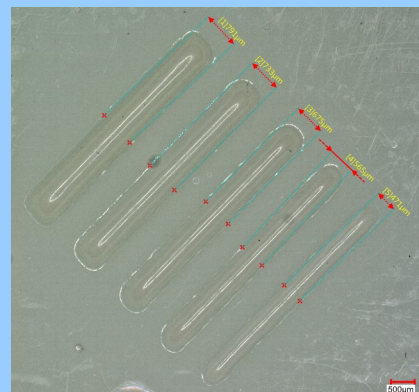
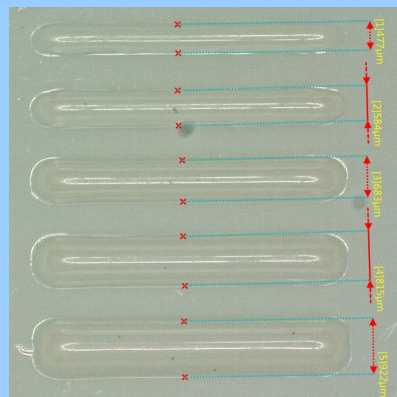
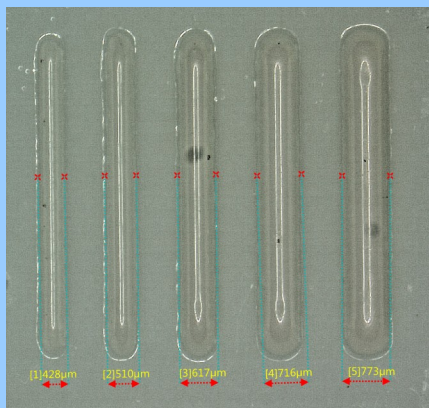
100 200 300 400 500

500 um tall
(for positive features)

500 um deep
(for negative features)



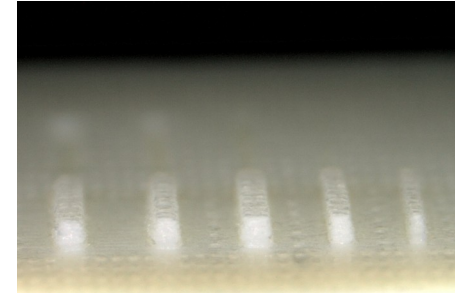
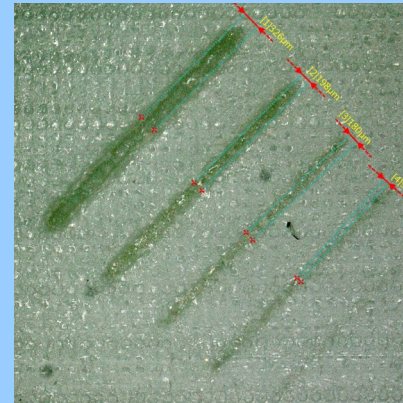
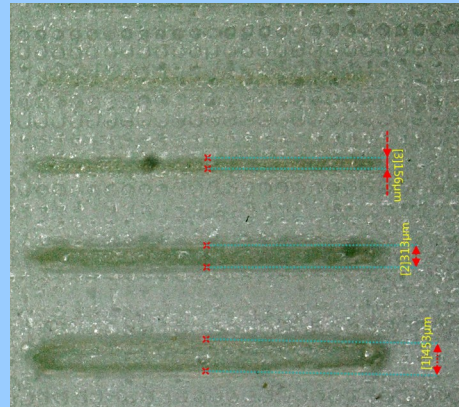
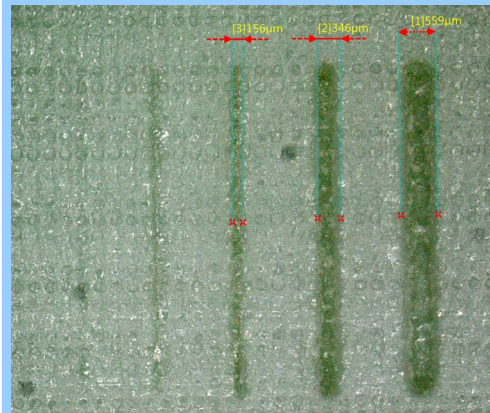
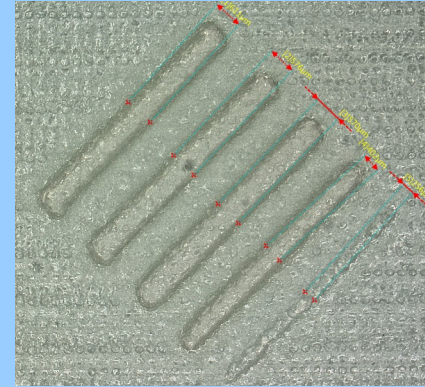
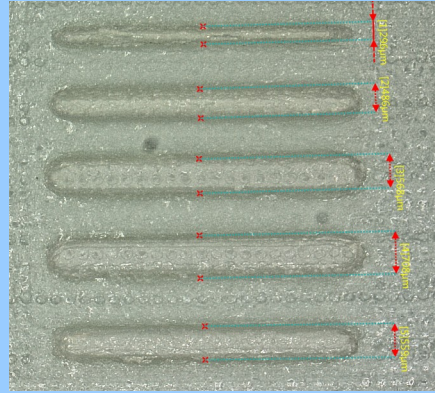
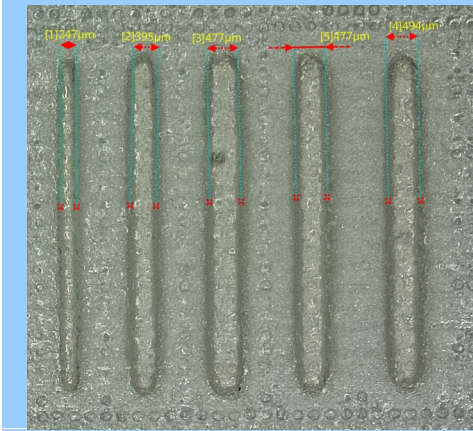
Objet30 – Glossy Mode



All features are oversized and rounded

Negative features are very poor

Objet30 – Matte Mode

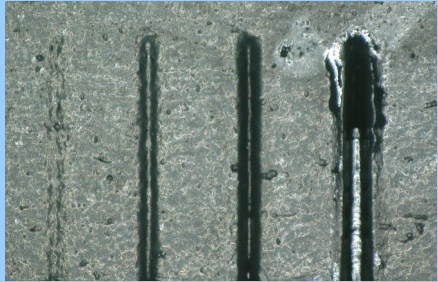
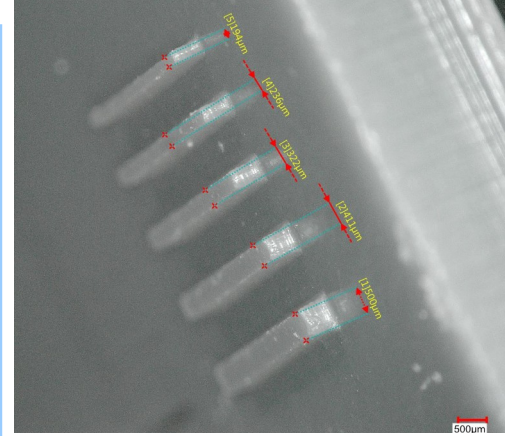
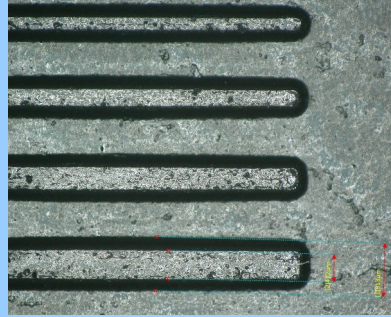
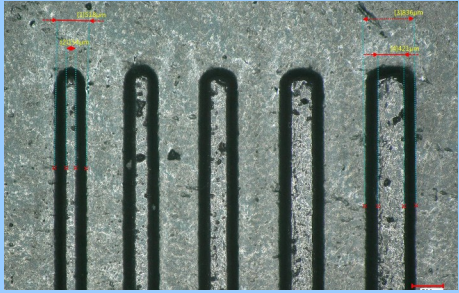


Features are slightly oversize.

Negative features are poor if smaller than 300µm.

Relatively straight side-walls

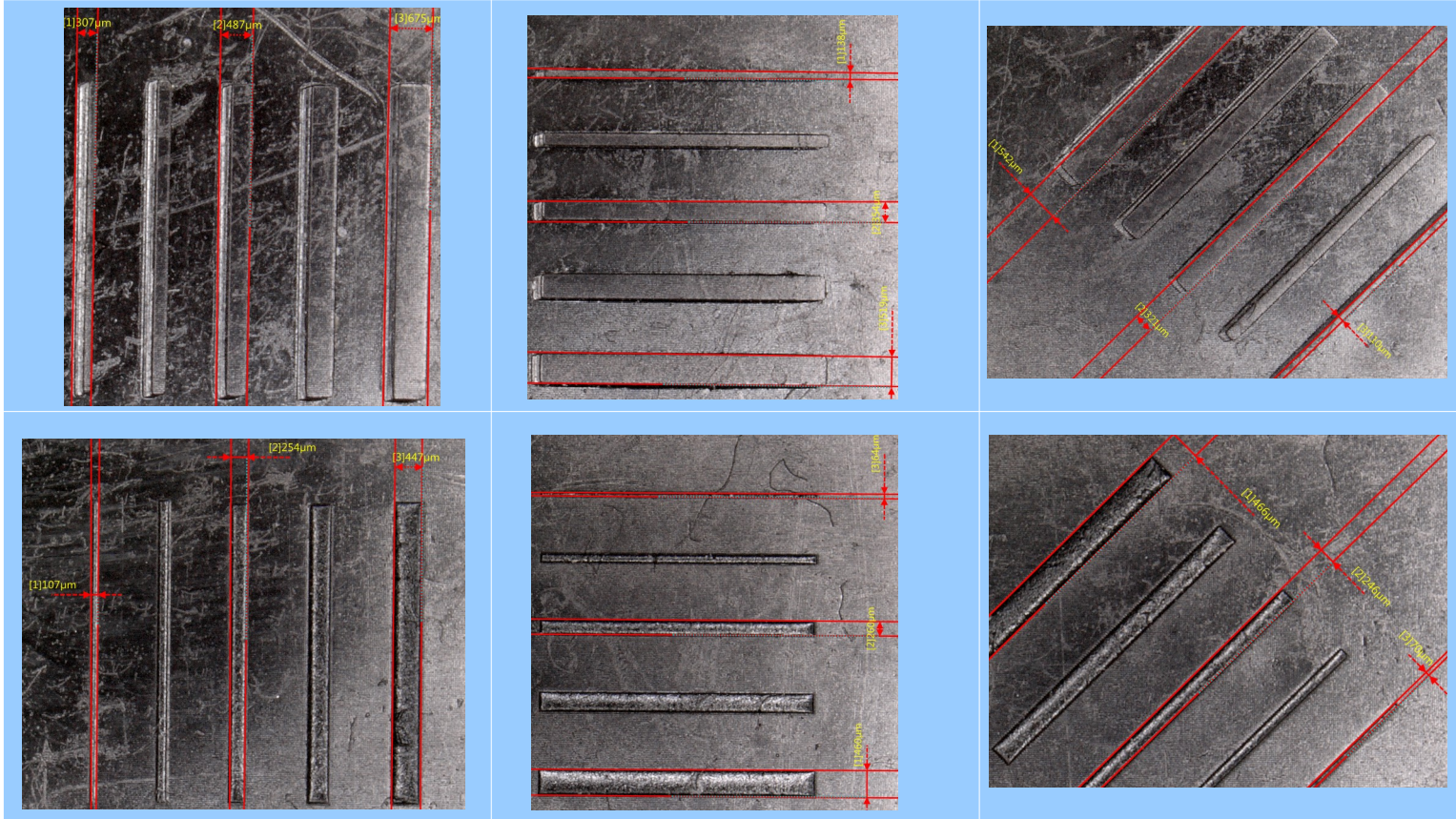
Form3 – Tough 2K (adaptive)



Excellent resolution and sidewalls for positive features.

Horrible negative features.

MiiCraft PDMS Mold Resin



Best XY resolution for both positive and negative features.

Issues with Z – all features came out about 65 μm tall. Could not image.

General Summary

- **Objet30 Glossy Mode** results in the smoothest surface finish. **Great for molds with features 500um or larger.**
- **Objet30 in Matte** results in a rougher surface, with reasonable resolution. Great for **positive and negative features larger than 300um.**
- **Form3** has the best resolution for **positive features, around 200um.**
- **MiiCraft** has the best XY resolution, but recipes are trickier and Z height may require iteration. **Great for 100um features** where height is not a critical parameter.