



Saturn 2 / Saturn 3 (ultra) vat storage system

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updated 3. 4. 2024 | published 3. 4. 2024

Summary

A top and bottom cover for the Saturn 2 vat, protecting it from light, which makes the vats also stackable.

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UPDATE: The regular Saturn 3 uses the same resin tank as the Saturn 2, therefore this storage system should be compatible with both. Thanks to Droom Vos for confirming that also the Saturn 3 Ultra resin tank fits.

UPDATE: I added version for large printers (build plate of at least 300 mm width), which saves you most of the glueing.

A top and bottom cover for the Saturn 2 vat, protecting it from light, which makes the vats also stackable. The bottom cover can be also used as base for the vat elevate the PFA more than just a few mm like the vat by itself does.

A single vat or two vats stacked on top of each other fit perfectly into an airtight Sistema klip it 7L container. Keeping the fumes in and also forming a truly closed containment for the resin.

The Saturn 2 vat is too large to print single piece covers so these covers come in parts. Two main parts per cover and a connector piece preventing sunlight coming through the gap. The bottom cover additionally has some

corner pieces which enable the stackability when added.

All parts need to be glued together with super glue. I sanded the contact points of the frame halves a bit to ensure they areas in contact with the vat are continuig smoothly across the joining of both halves.

The models are designed in a way that with my Prusa they have a light press fit, so keep on even when not actively holding them. This relies heavily on tolerances and shrinkage of your material of use. If you see that things are too tight, either sand down the frame a bit or increase xy dimensions by 100 µm or as needed.

Important: These covers only protect from light but don't shut the vat tight, so always keep the vats horizontal when moving them even with lid on.

Material (updated):

I recommend printing this in **PCTG**, alternatively **PETG** should work too. I tested a previous version also in **Formfutura TitanX** which worked fine as well but has lower impact resistance, layer adhesion and chemical resistance. All of those are not prone to warping, which is important.

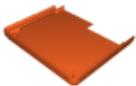
Model files



saturn2vatbase-top-v10a.3mf



saturn2vatbase-top-v10b.3mf



2xsaturn2vatbase-v8-bottom_a.3mf



saturn2vatbase-v8-bottom_b.3mf

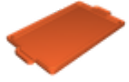


saturn2vatbase-bottom-singlepiece-part1.stl

☐ For printers of build plates wider than 280 mm



saturn2vatbase-bottom_singlepiece-part2.3mf



saturn2vatbase-top-singlepiece.stl

☐ For printers of build plates wider than 300 mm

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