



Improved .5 liter high pressure bottle base



Bill Ruehl

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Summary

This is a remix of my own design, I like this one better. Both are still pretty cool and work the same.

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[highpressureair](#)

Is it still a remix if its your own design to start with? Hmmm. I did some different negative space in this one, the initial goal was to reduce print time and material, but know I kinda like this one better. Very steady and fits great. One thing I learned during this project, when creating 3MF files with Solidworks I was getting HUGE facets, you can see them in the photos compared to the "smooth" models. Turns out, there is a setting when you save an a 3MF that allows you to use a slider to adjust the facets allowed. Jacking the value all the way yielded a MUCH better product IMHO. The true diameter of the bottle opening was more accurate, or true to size, and it just plain looks better. No more facets for me!

Printed on a mk3S+

PLA (crack resistant) 20% fill 3 perimeter walls. No supports needed.

I used a 1/4"-20 threaded knob and the hole in the boss is .201 (#7 drill bit) which is standard for the thread. Eventually I might use a nut sert, but it works fine the way it is. Be sure and put a plastic slug or something soft between the screw tip and the bottle, no sense maring up the bottle.

The file named "rev 3 w insert" is modified for a 1/4"-20 thermal threaded insert and a 6mm plastic airsoft BB. The purpose of the airsoft BB is to prevent metal on metal contact between the screw face and the aluminum bottle. If you should print this variant, do let me know how it works out for you, I'd love to hear. A screw will still work if you don't want to get some BB's but they are pretty handy, and should do well in this application.

PS - Do remember to drop the ball in the void before you do the thermal insert. It is captive at both ends.

This remix is based on

Base for
a .5 liter
High
Pressure
Air
bottle
(HPA)

Base for a .5 liter High Pressure Air bottle (HPA)

by Bill Ruehl

Model files

bottle-stand-rev-2-test.3mf

bottle-stand-rev-3-w-insert.3mf

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