

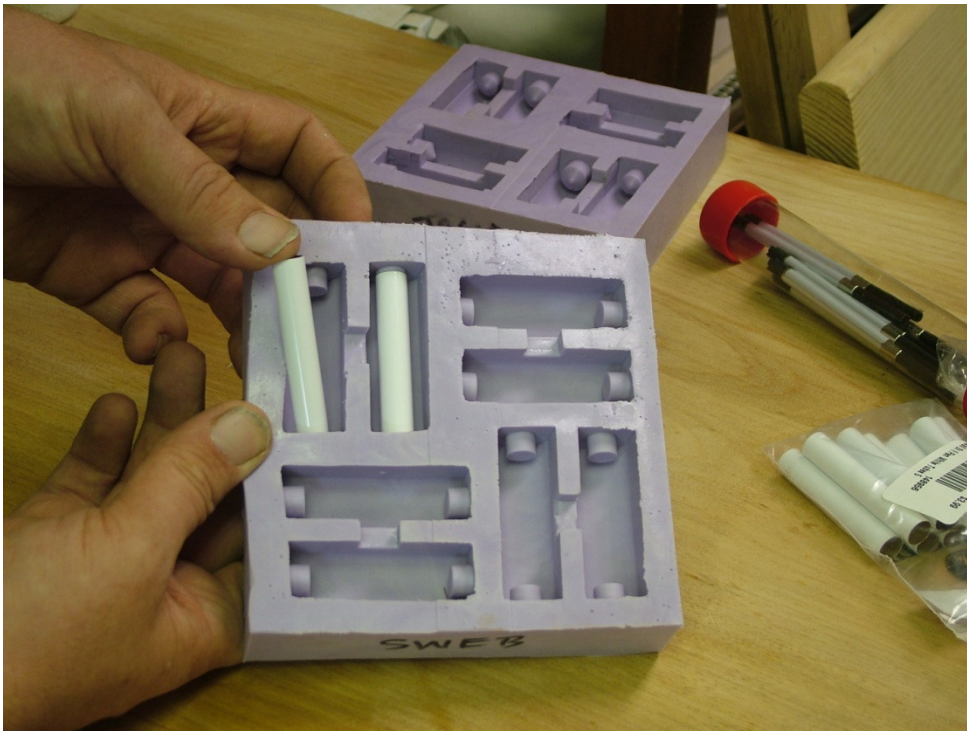
## Frequently Asked Questions About the ResinSaver Molds



Q. Have these questions really been asked frequently, or did you just make them up?

A. Shut up.

Q. What is a ResinSaver Mold?



A. I'm glad you asked!

The ResinSaver was born out of frustration. I was trying to learn label casting and reading as many tutorials as I could find. I was watching videos on YouTube. I was asking questions. But I'm the type of person who needs to make his own mistakes, not learn from other's mistakes. So I spent lots of time and money getting failed casts.

One of the first things I realized is that casting mistakes can cost a LOT of money! I had boxes of discarded blanks that had tubes full of resin, tubes with labels half on, half off. Lots of labels that had smeared inks, white spots, air bubbles, tubes sticking up out of the resin .. you name it.

It occurred to me that there was resin in all sorts of places where resin just had no reason to be. And that resin costs money. It's about 20 times as expensive as gasoline.. and I was going through just about as much. (at least it seemed that way)

After trying to get mold containers as close to the finished size as possible, it came to me that I could probably make my own container easily enough, and even shape it so I could save some money in resin.

I decided to use silicone and a shaped mold. I included the stoppers right in the mold itself, saving me the trouble of gluing in corks (which sometimes failed) and if the stoppers were part of the mold itself, then I also could eliminate the wooden standoffs that hold the tubes up off of the bottom, and also hold them below the resin surface. That eliminated the step of filling the tubes with BB's for weight.

By making the mold specific to the pen tubes, there's no wasted resin for extra length or width.

Q. Which mold do I need to get?

A. It depends on which type of pen you are making. Molds are specific to tube sizes.

The SWEB mold stands for Sierra, Wall St (II) and Elegant Beauty. Other pen types may be able to use this mold, but only if the tubes are the same size. There is some leeway in tube length, as the stoppers are approximately ¼" long. As long as the tubes will fit, you should be able to use the mold.

The JRGSR mold stands for the Jr. Gent (II), Jr. Statesman and Jr Retro pens. As with other molds, any other kit that uses the same tubes can be used for this mold, such as the Jr Emperor and Jr Majestic.

BNST stands for the Baron, Navigator, Sedona and Tycoon pens.

MAJSQ stands for the Majestic Squire pen

GENT stands for the full Gent or Statesman pens

CIGAR is for the cigar pens. Other names are Big, Big Ben, Big Samoan, Magnum and others, but we all know them as the cigar. Sometimes a cigar is just a cigar.

Q. How much resin does a ResinSaver mold actually save?

A. It depends on what you were using for a mold before you got smart and purchased the ResinSaver mold. I was using a Tupperware container, wood blocks, corks, BB's etc. and using about 10-14 ounces of resin to get four pens. I might have found different containers to use and be able to save some more resin, but I started making the molds instead.

On average, a pen now uses approximately 1 ounce of resin, sometimes less.

Q. Can I use vacuum with the ResinSaver molds?

A. Probably not. I haven't tested it, but vacuum will remove the air from inside of the tubes. If the air pressure (vacuum) changes once the tubes are in resin, this change will cause the resin to flood the tubes, since they are now under liquid. So unless your vacuum pump and pressure pot are 100% sealed and leak free, you will probably lose your tubes and your resin.

Q. Can I use my pressure pot with the ResinSaver molds?

A. Yes, but not high pressure. Since the silicone is soft, it can be compressed. Pressures above 20-25psi might cause the resin to be forced past the rubber stoppers and into the tubes. Some people have successfully used higher pressure than that, but I don't push it.

Q. Then how do I get the air bubbles out of my resin?

A. It is best to avoid getting them in the resin in the first place. But if that isn't avoidable, then helping the bubbles to clear as quickly as possible is the next best thing. There are several articles in the IAP library about casting, and one in particular deals with pressure free casting.

Don Ward's article outlines the procedure he uses and if you've seen his snake skin blanks, you'll know there's no point in arguing with success.

[http://content.penturners.org/articles/2009/casting\\_bubble\\_free.pdf](http://content.penturners.org/articles/2009/casting_bubble_free.pdf)

You can use an ultrasonic cleaner to help clear the bubbles out of the resin before you pour it. Warming the resin also helps immensely, as the warm resin is thinner and this allows the bubbles to float to the top much more quickly. De-gassing with vacuum before mixing the resin also helps the bubbles not to form. Stirring the resin without lifting your mixing stick will help, too. When you lift the stir stick, you can introduce air into the mix.

Q. Can I use the ResinSaver mold with epoxy resin?

A. I suppose you could, but it doesn't work very well for pens.

Q. Why is the mold cavity longer than my pen tubes? Is this a mistake?

A. No. The cavity is approximately 5mm longer than the tube because many people will use them for polyester resins which can shrink. When they shrink, the tube ends become exposed and you would need to re-cast your blanks. The original ResinSaver molds had cavities that were exactly the length of the tubes and when tested they worked just fine. But they had been tested with Alumilite, which has little or no shrinkage. Oddly enough, the original ResinSaver molds could take higher pressure and even vacuum, since the exact length of the cavity gave the mold extra surfaces to block resin migration.

If you use PR with the mold, the shrinkage should not be enough to expose the tubes. If you are using Alumilite you can use the end mill or sander to remove the excess resin.

Q. Can I make Plexitone blanks with the Resinsaver molds?

A. Yes.

Q. Really?

A. No.

Q. Then why did you just say that I could?

A. Because this is my FAQ and I can do what I want.

Q. How do I clean my ResinSaver molds?

A. You can wash them with dish soap, rinse well and let them dry thoroughly. You can also wipe them out with acetone or denatured alcohol. In fact, since they are made with tin cured silicone, a denatured alcohol wipe or wash is a good idea before casting polyester resins.

Q. Do I need to use a mold release?

A. While not strictly necessary, it is a good idea. Your blanks will pop out nicely with no release at all. However, using a release will extend the life of the molds. I use a mix of 90% mineral spirits and 10% melted Vaseline. I mix them and pour into a spray bottle for use. If you can find it, silicone oil works very well and helps recondition the mold. You can get silicone oil from resin distributors. Two types I know of are Dow Corning 200 Fluid and Smooth-On.

Q. Can I modify the mold? I want to block up that little bridge between the tubes.

A. Yes, you can. But make sure you can get your fingers in there to insert and remove the tubes before you make any modifications.

Q. I tore one of the cavities in the mold. How do I fix this?

A. You can make repairs with any silicone. You can use caulking or bathroom sealer, as long as it is 100% silicone (not 'siliconized') it will adhere to the mold permanently. Be sure to shape and smooth before it cures because you won't be able to remove it later.

Q. There is a tiny hole under one of the stoppers in my mold. Can I send the mold back to you for repair?

A. Yes.

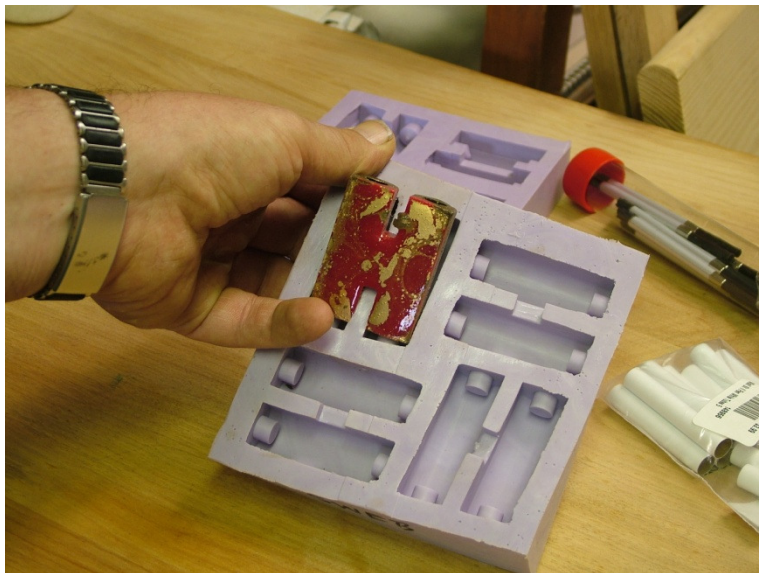
This is an air bubble that got caught in the master while curing. You can return it and I'll put some silicone sealer in the hole. You can also do this if you want. It is a quick repair. Hold up the stopper with your finger and put a small dab of silicone on the end of a popsicle stick and apply it to the hole. This will fill it in. A couple more swipes with the stick will shape it.

Q. What if I don't want to cast labels? Can I use the ResinSaver molds for something else?



A. I'm glad you asked.

While the molds were originally made for label casting, people have told me that they use them for casting colored resins with the tubes already in them. This eliminates the drilling and gluing of tubes, as well as saving the resin that would normally have to be drilled out of the center of the tubes. Other turners have used them to “re-cast” damaged or blown out blanks. By repairing the damaged blank and then putting it into the mold, they can now cast it in clear resin, turn and sand/polish. This gives you a clear resin finish.



Blanks that have been turned too far (over-turned) and are now smaller than the pen parts can be re-cast to build back up the width. Turn, sand and polish.

With some imagination, you can likely find more uses such as power carving or engraving your blanks and then casting with another color before turning. This will ‘reveal’ the engraving when you turn it down to size.

Some people use them to cast translucent resins. When you can see through the blank, you can see the unsightly glue sticking to the tube. To avoid this, you'd need to paint the tubes but that will change the color of your blank. But by pouring your resin directly in the mold with the tube already in place, you won't see any sanding marks (no sanding needed) or any glue lines when you look through the resin.

You can also pour resins impregnated with powdered stone, porcelain or other media.

Q. Can I "post cure" my blanks while still in the mold?

A. Yes. The molds will be fine in a warm oven while your resin post cures. The silicone can likely take higher heat than the resin can. Do not exceed 450F.

Q. Can I stack my molds in the pressure pot?



A. Yes, provided you don't completely block the cavities. A piece of plywood between the molds should suffice. Tilt it at an angle to make sure it doesn't block the mold underneath it.



