Creating a top with pockets for breast forms

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Follow the instructions here

Here is a top I made using this pattern and process, paired with a corset and gloves:



Figure 1: img

Part 1: Introduction

I've been searching for the perfect latex catsuit that has pockets to hold silicone breast forms. You can buy catsuits like this from a variety of sellers but they all have their disadvantages. Some have just pockets on the back of the latex which have trouble with the weight of large forms. Some don't do made to measure or have fixed breast form pocket sizes. Others take many months for delivery and returns are impossible. Some are expensive (and more expensive suits are not always the best).

So can we come up with a design that takes the all the best design ideas, make it fairly simple to pattern and construct, and then make the pattern available for all?

Kigurumi skinsuits (hadatai) have internal vests made of a less stretchy mesh

material. Breast forms then can be backed with velcro and attach to the mesh. In that way you end up with the weight of the forms being taken over the shoulders and around the back rather than causing the thin lycra to sag. We can emulate that with a thicker latex panel behind the breast cups that is attached over the shoulders, perhaps with a halter-neck.

I made my first pattern based on some duct tape pulls, looking at some existing catsuits I own, and a bit of trial and error. I made the pattern in inkscape which worked out okay, but wasn't great at making sure curves were the right length or making alignment marks. Other latex patterns, specifically ones by "Mr Doo" used Seamly2D, proper pattern making software, and this allows us to change the pattern for different bodies and breastforms. I converted the pattern from inkscape to Seamly2D and tried as much as possible to make it use formulae so the pattern auto adjusts itself for different sizes.

To save latex and construction time the first outfits I make will be just long tops. It will have a high neck and full sleeves, but no leggings. I can wear this with separate leggings and a corset and you won't see the seam, it also means for testing I can get away making it pull-on without a rear zip, and I don't need to make and join the front and back panels (instead of 4 pieces across the width of the waist/body we can make it in 2). It also makes it much easier if you also have hip pads to place as you can deal with that half first before adding the top. I like items without zips as they stretch vertically much better, and in theory you could make this pattern into a neck entry catsuit if you are willing to struggle getting all the hips and forms into it.

I used the Seamly2D pattern to make a second top, this time using different sized forms, and it worked amazingly well. The only part that I'd say could be tweaked to be a little better are the shoulders, I think I just have my shoulder measurement a few cm too big.

So if you fancy making one yourself or are just interested in my process, follow along! Note that although it may seem much cheaper to make one yourself, by the time you have invested in the sheeting, tools, proper glue and thinner, and not forgetting your time, you'll wonder how any of the latex clothing companies make any profits at all!

Here's what I needed for making a top:

- 0.4mm latex in black. I ended up using about 1.3m in length, although if you have a waist greater than around 36 inches you may need to move one of the pieces and it'll be more like 1.5 or 1.6m
- 0.6mm latex in any colour. You only need a small section for this, just the size of the breast pockets and strap. If you don't have any spare you can just use two bits of 0.4mm stuck together (see later)
- The proper glue and thinner and all the accessories you'd usually use to make later (see later)

And here's how long it took:

- Final pattern tweaking, printing it, cutting it out: 2 hours
- Transferring to latex, cutting it out: 2 hours
- Latex assembly: 5 hours

Now on to part 2, downloading and adjusting the pattern

Part 2: Download and alter the pattern

This is my first time using Seamly2D for making my own pattern so it's a little rough. My initial pattern was based on looking at some latex items that fit me well as well as some duct tape patterns for other pieces. I've tried to make everything in the pattern based on a formula so it can be altered to your size, but you do need to carefully look at it and do some adjustments of some lines. I'll explain those steps here.

First download the pattern and sample measurements from the files in the src directory

The "val" file is the main pattern, and the "vit" file contains my measurements (you'll alter these next).

Your measurements

Open Seamly2D open the "vat" file and edit the measurements. Take the measurements the pattern needs and enter ones to match you. Latex is forgiving a little, but you must use your exact measurements, don't pull the tapemeasure tight or have it loose. The pattern is designed to reduce the measurements to ensure a nice tight fit. I've seen friends get bad fitting made to measure latex because they assumed they needed to adjust the measurements to make things tight themselves.

The variables

As well as the measurements there are some things to tweak in the variables table, specifically for the forms you wish to use with the top. Open the variables table. The variables you need to adjust are described. You'll need measurements from the forms you wish to use. The rest shouldn't need editing unless the pattern looks wrong.

Eyeball the pattern

Go to the 'draw' section in Seamly2D.

At this stage the pattern should adjust itself to your measurements. Take a look and compare it to mine to see if it looks vaugely correct. Some of the curves may have not worked right, and we'll deal with those next.

Name		Full name	Calculated value (mm)
1	waist_circ	Waist circumference	900
2	arm_wrist_circ	Arm: Wrist circumference	160
3	arm_lower_circ	Arm: Lower Arm circumference	260
4	arm_upper_circ	Arm: Upper Arm circumference	350
5	arm_shoulder_tip_to_wrist	Arm: Shoulder Tip to Wrist	650
6	arm_shoulder_tip_to_elbow	Arm: Shoulder Tip to Elbow	335
7	hip_circ	Hip circumference	1,040
8	neck_circ	Neck circumference	390
9	neck_mid_circ	Neck circumference, midsection	380
10	neck_front_to_waist_flat_f	Neck Front to Waist Front flat	380
11	armpit_to_waist_side	Armpit to Waist Side	235
12	shoulder_length	Shoulder length	148
13	neck_back_to_waist_b	Neck Back to Waist Back	410
14	across_back_b	Across Back	400
15	waist_to_hip_f	Waist Front to Hip Front	204
16	@nippletowaist	Nipple to Waist vertical	186
17	@ChestatNipple	Chest at Nipple Height circumference	1,040
18	@nippletohip		390

Figure 2: Measurements

Name	The calculated value (mm)
#ActualBreastFormOver	350
#ActualBreastFormWidth	200
#GapBetweenForms	22
#SeamAllowanceCup	10
#SeamAllowanceSide	7
#HeightOfCollarAtFront	91
#HorizonalEase	0.9

Figure 3: Measurements

Some of the pieces we join together have curves, and those curves are different on the two pieces, but the lengths of the curves have to be the same. Latex doesn't look good if you end up having one piece more stretched than another. Because we can't have this work automatically we have the concept of "pattern zeros". What we do is take away the difference between the length of the two curves of the pieces being joined and show a line with ten times the length. If your pattern is correct then all those pattern zeros will be either in the same position, or no more than 10mm (which is 1mm in reality) different from each other. If they are not, don't worry, we'll adjust them now.

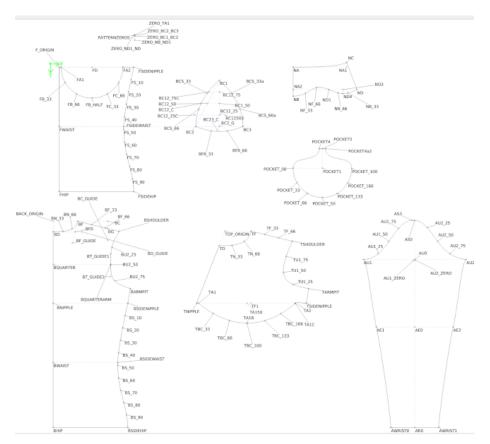


Figure 4: Pattern

Adjusting the curves

First let's sort the collar. We have to match the front neck curve (TD to TF) with the collar part (NB to ND1). Adjust the curve of the NB to ND1 until the ZERO_NB_ND1 line is close to zero. Anything under 10mm for that line is great. Now do the same with the back neck curve (BD to BF) matching

ND1 to ND using the line ZERO_ND_ND1. If you can't get them anywhere close then you may have got a measurement wrong. Double check your vertical measurements. If it still is far out you may have to adjust the neck in the pattern, there are a few control points you can move manually. Or drop me an email and we can figure out how to fix the formula.

Okay, next lets get the arm holes right. On the arm piece you can see AU1_ZERO and AU2_ZERO which are affected by the AU1 curve (front) and AU2 curve (back). If they are close you can just tweak the curves a little. If they are far off make sure your arm_upper_circ measurement is correct, or adjust it (this affects the width at AU1). You could also try moving AU0 which is just a fixed length in my pattern.

That just leaves us with the breast pocket. Each pocket is made of two pieces that join together. The front piece semi-circle length needs to match twice the length of the curve from BC2 to BC3. BC23_C is a guide point, you should be close to it, but don't worry if the curve doesn't go right through it. Adjust this curve until ZERO BC2 BC3 is as small as possible.

Next, the length BC1 to BC2 is designed to match a measurement over the breast form you took. Alter this curve, or the corresponding curve from TA1 to TA2 so that ZERO_BC1_BC2 is small as possible. The curve BC1 BC3 will change itself to match.

Note I made the seams slightly bigger on the breast pocket, up from 7mm to 10mm. This is just because it looks a bit better, but feel free to adjust them in the variables table.

Print the pattern and cut it out

Okay, that's our pattern done and ready to print.

Go to the 'Details' section in Seamly2D. You can export this now as a SVG file. I imported it to Inkscape, drew a grid over it for alignment, then poster printed it onto separate A4 sheets, cutting and sticking them together.

Label the pattern

It's also worth now labeling the pattern; the breast pocket parts need to be the right way up as all the sides are not the same length, and you don't want to end up cutting latex down a line which is actually a fold line (like on the front, collar and back pieces). Notch the alignment marks, it'll help transfer them to the pattern. I use this device which creates nice alignment notches: https://www.amazon.co.uk/Professional-Garment-Pattern-Stainless-Designer/dp/B07FKQNMWM/

Printing the pattern takes much longer than you expect, it's likely to be over an hour.

Now on to part 3: transfer pattern and cut the latex

Part 3: Transfer and cut the pattern

So now you have a paper pattern cut out and ready to transfer to latex.

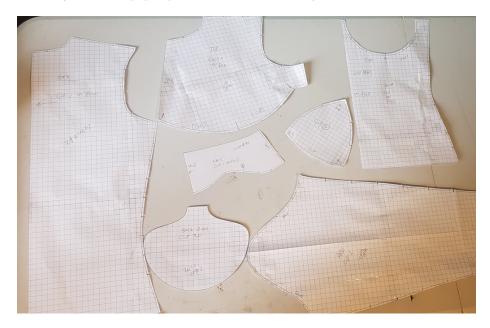


Figure 5: Paper

You now need to transfer that onto the latex sheet, being careful not to stretch the sheet. Four pieces of the pattern are actually folded on the centre line, so when you transfer it to latex be sure to flip it and not cut down that centre line:

- The back piece: You could leave it as two pieces and add a back zip if you prefer.
- The top piece: note the angle will look a little odd, but this is designed so it pull nicely over the teardrop forms
- The front piece: again if you want to extend this and make it say into a catsuit you'd put a seam here instead. But since this is just a top you can flip it and use a single piece
- The collar: it becomes a single piece that has a seam at the back

The other pieces are:

- The arms. Transfer this piece twice, but remember to flip it (the left and right are not the same)
- The breast cup leaves. You need 4 of these

- The back of the breast cup. I used 0.6mm latex for this, you need two of them
- A section of 4cm by about 53cm of thicker 0.6mm latex, this is for the halter neck strap
- Two strips of 15mm by about 400mm which we'll use to reinforce the inside of the breast cups
- Some small scraps (around 30mm square) to reinforce the armpits

Note that if you don't have access to any 0.6mm latex it's not really worth buying a sheet; you could just laminate two sheets of 0.4mm together. You don't have to do a perfect job joining two sheets together (my attempts at this are aways terrible) or use any colour as it's not visible.

I don't usually add any trim to the edges (at the wrists of hip) if the item is just for me, but you can instead add little squares if you want to help stop any peeling of the seams through repeated wear.

Do make sure that you label the pieces and transfer the registration marks. Note the breast cup have one side different to the other two (and that is the "bottom") so make sure to label that.

Now you have a pile of latex ready to assemble. Relax and have a nice cup of tea. At this point I usually just end up putting it all in a bag ready to assemble on another day as cutting the latex is time consuming.

Now on to part 4: construction

Part 4: Construction

I'm not going to cover how to make latex items here. Check out this primer and video

I started with the breast cups joining two of the longer sides together (BC1 to BC2 or BC1 to BC3). I made one side the mirror of the other so that the seams "face" in to each other.

Next attach those to the front, this is the BC2 to BC3 part of the breast cups. Try to keep a consistent overlap, and I tried to make them around a 10mm seam, thicker than you'd usually do, it looked nice that way.

Okay, now add the top part to the top of those breast pieces.

That's the front done, and probably one of the trickiest bits. Next I joined the front and back sections just at the shoulder line

So let's add the collar next. I stretched this over a sphere to get a nice neat curved seam here.

Now the arms, it's easier to add these before you connect the sides together. Make sure to use your alignment marks so you don't get to the end of the curve



Figure 6: Cut out



Figure 7: img



Figure 8: img



Figure 9: img



Figure 10: img 12



Figure 11: img 13

and have too much or too little latex left.

Before joining the sides I put in the breast pockets. First glue on the back pieces with a nice thick and consistent seam. You really need to be careful here as if you end up going over the seam line into the inside of the pocket it'll look uneven when the form is inside.

So in theory the latex is nice and strong and can hold the forms, but on my first top I found I was worrying about the back pocket pealing away. I have a friend with a catsuit where the pocket flaps came loose. So this time I turned the pocket inside out and added a reinforcing strip all the way around. You need to be really careful with this or it'll look bad from the outside. I ended up stretching it over a roll of sticky tape and doing it a bit at a time, with the reinforcement strip glued with cling film over it as the method Mr Doo suggests in the link at the start of this page.

And then added a strap.

Lastly the sides were glued together, starting at the wrist all the way down to the hip. Finally adding small reinforcement patches at the parts which are most likely to fail, under the armpit.

And you're done. At this point if you rollered your seams the item is pretty much at full strength so you can try it. This is when any bad seams come to light and you can fix them. I normally then leave it overnight before washing off the marks and shining, just in case theres something you need to adjust.

Now on to part 5: finished and tips

Part 5: Finished

Here is the first top I made, paired with a corset and skirt:

Here is the second top for a much larger set of forms (this is the pattern you'll see if you open up the default).

Yui's final tips:

- I usually transfer the alignment marks to the good side of the latex (the outside) and do the construction with the outside out, just so you can see how good the seam will look. I've done it the other way before and not noticed a puckered bit of latex seam which is pain to fix. A slight pucker on the inside isn't noticable (there's one on my suit here).
- I tend to add a thicker seam of glue to the dull (inside) of the latex, using a 12mm glue brush, but a thinner and neater seam of glue to the outside (where it will end up showing), using a cut down 9mm glue brush. This way when you stick the seam together from the outside as long as the outside glue is showing you know the inside will be overlapped too



Figure 12: img



Figure 13: img 16



Figure 14: img

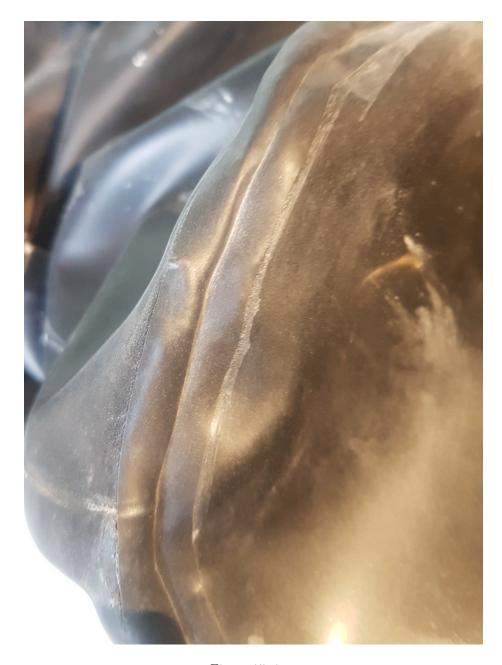


Figure 15: img



Figure 16: img



Figure 17: img



Figure 18: img

- I check every seam while the glue is drying before sticking the pieces together. So many times my seam slightly ran out of glue at the edge and I didn't notice, and these are the seams that'll peel apart when you wear it.
- Resist the temptation to stretch one piece when you come close to the alignment mark and you're not in alignment. Just pull back and redo that section, or accept that alignment marks are not going to be perfect, don't worry if you're 1-2mm away because you can slightly adjust for that over the next section.
- Keep well ventilated. I use a large fan to pull the fumes away from the work area.
- Keep your glue pot closed at all times to stop the solvent evaporating and making your glue gloopy. Don't be afraid to throw away gloopy glue and pour some new fresh glue, even if you've only got the last 10cm to stick

And how to wear it:

- You'll need plenty of dressing aid or talc on the arms, slip it onto both arms and over your head. The collar makes this bit harder than it would otherwise be. Make sure the halter strap is behind your head (although it is possible but a struggle to fix this later
- Position the top and then insert the breast forms through the neck, letting them slip into place (the talc/aid helps here!). A little adjustment from



Figure 19: img

- the front and you're done.
- Getting out is pretty much the reverse, push the forms up and out through the neck before removing the top
- Or, just, add a back zip instead. I didn't find I needed one and a zipper is even harder to do by yourself.

Did you make one? If you altered anything in the pattern or this guide please submit an issue or pull request here so we can alter the pattern for everyone. I'd also love to see anything you make from this guide.