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Sewing Swimwear

Is there a difference between swimwear and beachwear?

There certainly is!

Swimwear is ment for the physical exercise of daily swimming for a longer period. The stretch fabric has to fit smoothly around the body and has a special coating to make it resistant for sea and pool water.

Beachwear is mainly for relaxing at a beach or beside a swimming pool with an occasional dip or short swim in the water.

The stretch fabric has to fit smoothly around the body and preferably keep it's colors in longterm sunlight but doesn't need a special coating.

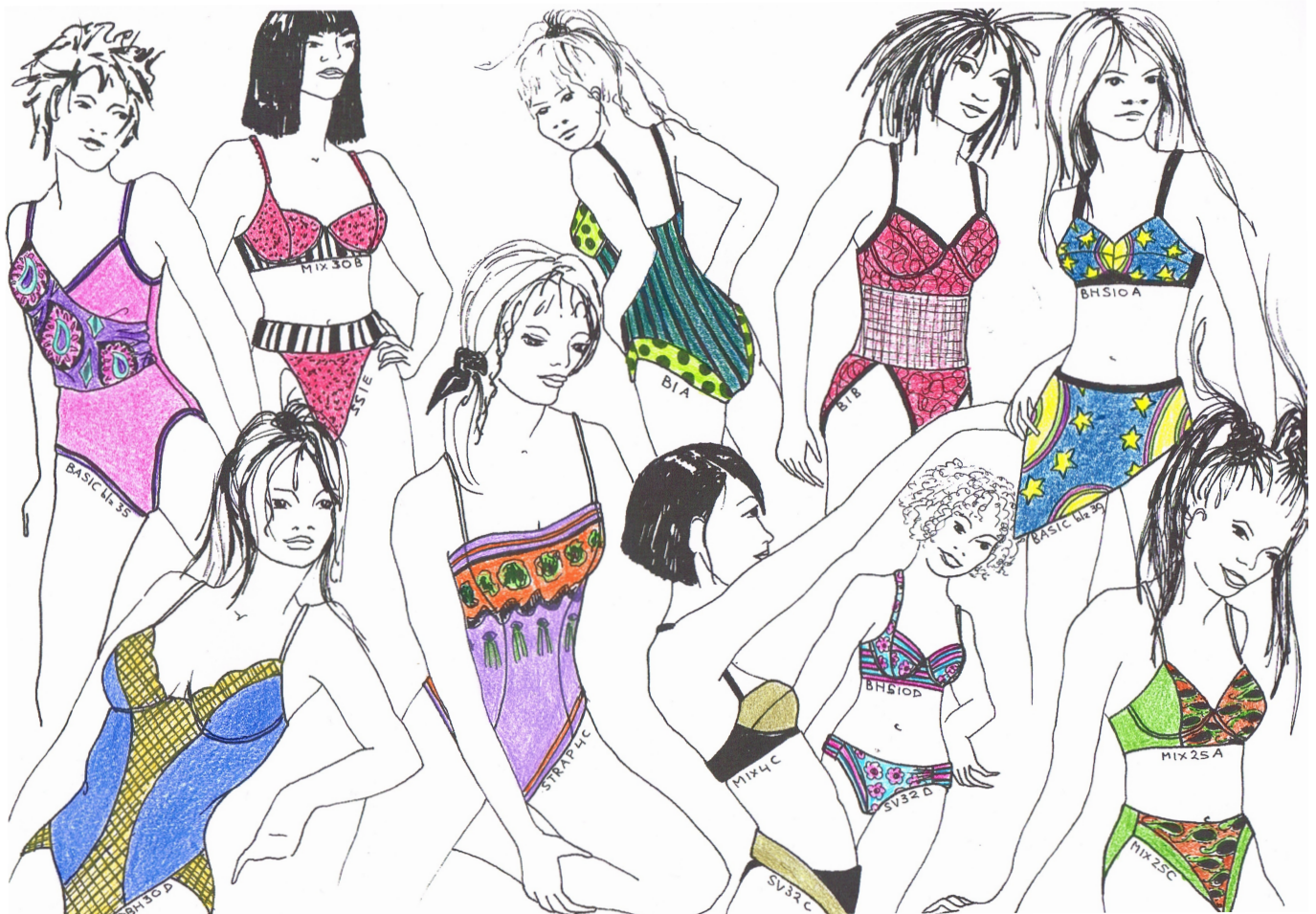
Is there a difference in sewing?

Fortunately there is no real difference in patterns, cutting and sewing.

Obviously when just for swimming one doesn't need a lot of loose decorations which will just be in the way.

For relaxing a bit of showing off and slightly impractical design should not a problem. On the contrary, this could increase the fun of making the piece!

Since for both styles the whole process is similar all the following information will be for both swimwear and beachwear.



WHAT KIND OF FABRICS CAN I USE?

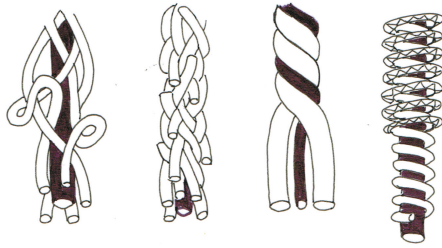
There are some fabric conditions important for swim- and beachwear. To sum them up:

Stretchability

The clothes should fit smoothly which means there has to be at least 12% of stretch yarns in the fabric, providing enough stretch in width but also in height.

Beware though; large prints can have a negative influence on the stretchability because the binders of the pigments might not stretch along. The next picture gives an impression how stretch yarns like Lycra or Spandex do the job.

YARNS combined with **ELASTHAN** the black yarn represents Elasthan the other yarns are spun around it



Fabric strength

In general fabrics are less firm when wet. For swimming it's important they don't lose strength because of:

- the water resistance when swimming
 - fabric scraping when sitting in sand or chair
- As shown in the previous picture the yarns are twined around the stretch yarns because these are quite delicate and don't take on colors.

The tighter the twining, the thinner and stronger the yarn will be.

Fabric density

Stretch fabrics are usually a very fine dense knit. The thinner the yarns, the more dense the fabric will be.

This is specially important for fabrics that will get wet. These have to be quite dense to avoid:

- **sagging** because nobody wants their nice and tight swimsuit sagging down to their knees after a swim ...
- **shining through** when wet which can be very uncomfortable and in some parts of the world even lead to a fine.

Moisture absorption

As you can imagine it's not very comfortable when the fabric stays wet for yours after a swim. A quick-dry fabric would be best.

- Most synthetic fabrics dry quickly and these days they are just as comfortable and soft as natural fabrics. And even the production is often more environmental friendly.
- Cotton fabrics tend to stay wet much longer so don't use them for crotch lining in swimwear!

Colorfastness

Swimming pool chloride and seawater can cause colors to fade, just as strong sunlight does. Choose fabrics with the color throughout, for plain colors and for prints.

If the color is only printed on the surface there is more chance the dye will clump together and nullify the stretch.

If the color is throughout and visible at both sides of the fabric the complete yarns are dyed and will keep their stretchability.

STRETCH FABRICS

4 MAIN KEYS :

- **STRETCH**
- **STRENGTH**
- **QUICK-DRY**
- **COLORFAST**

These 4 abilities are the main keys to choose the right fabric for sewing your swimwear.

That is to say; for fabrics at the **outside**. There are also fabrics at the **inside** of swimwear.

Not every piece of swimwear needs the same types of lining fabrics though. This depends on use and size.

WHICH PARTS OF SWIMWEAR NEED A LINING?

CROTCH

Every swimsuit or bikini panty needs lining for the crotch. Don't use the same stretch cotton as in lingerie though. This will stay wet longer than the swimwear itself, imagine how uncomfortable that would feel!

The main ability for crotch lining is :

quick-dry

You can use a specialized thin quality stretch fabric but just as well the same outer fabric as long as it's plain colored.

Some companies use a nude almost sheer stretch mesh but this might not avoid acid body fluids leaking through and staining the outer fabric.

TORSO

Nude stretch mesh is perfect for lining the torso parts. This is mainly used to prevent a see-through when the outer fabric gets wet, this can be the case with very light colors.

Powernet and such fabrics which provide some support are not chloride or seawater resistant and will soon lose their support abilities.

The main ability for torso lining is :

stretch

CUPS

When the swimsuit or bikini top has fitted cups for the bust (underwired or not) the cups should have a **non-stretch lining**, just as in lingerie.

Usually the same lining as for lingerie will do although some types of Charmeuse can stay wet for quite a while. You will have to do some tests to be sure the lining you have chosen will dry quickly.

You can also use foam padding for the cups to provide some more shape.

The main abilities for cup lining are :

non-stretch
quick-dry

WHAT IS PADDING?

Padding is a triple layered fabric with foam or batting in the centre and laminated with non-stretch cup lining at both sides.

Due to the glue padding will be slightly stiff.



WHERE DO I USE PADDING IN SWIMWEAR?

Padding is not a typical swimwear fabric. There are only 2 areas where it makes sense :

- **cups**

The whole cup will get some more shape and support when you decide to use padding lining. The padding with foam in between will need more time to dry than the padding with batting inbetween.

You can cut and sew the padding from the same pattern as the stretch fabric.

You could also use molded (pre-shaped) foam cups but in that case there will be no matching pattern for sewing the outer fabric.

- **straps**

You can't use padding over the whole length of the straps because there will be no stretchability. Only use it from the top of the cup to just over the shoulder so the straps won't dig into the flesh.

HOW DO I SEW PADDING IN A SWIMWEAR CUP?

Cutting

Cut the cup parts from a double layer stretch fabric and add 0,75cm seam allowance all around the pattern parts.

Cut the cup parts from a double layer padding and add 0,75cm seam allowance ONLY AT THE UNDERWIRE SEAM.

Cut 2 strips from the cup lining to cover the coupe seam stitching at 2,5cm width and the length of the cup coupe seam.

Sewing the cup coupe seam

Pin the cup stretch fabrics with the right side of the fabric together.

Stitch the coupe seam (= the seam running over the nipple) with a straight stitch.

Push both padding coupe seams against each other and stitch together with a 3steps stitching zigzag stitch.

Triple fold the strips cup lining lengthwise and place pins along the length to keep the folding in place. Pin the folded strip (raw edges downward) loosely on top of the zigzag stitches and topstitch along **both** lengths with a straight stitch. Use larger stitches than usual to avoid the padding getting stretched out.

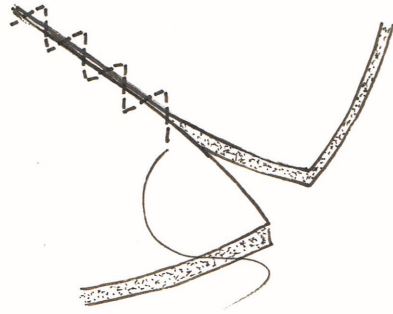
Sewing the cup top edge

Pin the top edge of the stretch fabric cups with the right side of the fabric on the wrong side of the padding cup top edge and stitch with a straight stitch at 2mm from the raw edge.

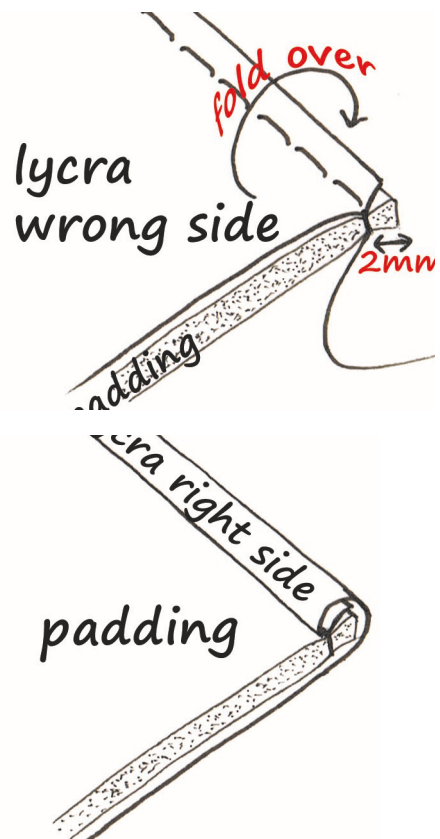
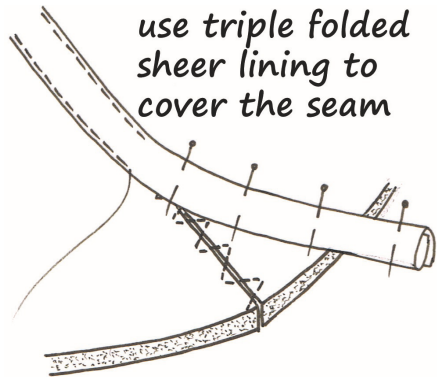
Fold the stretch fabric loosely back to the right side of the padding but be carefull **NOT** to fold the padding along.

Pin the stretch fabric smoothly over the padding and stitch around the underwire seam allowance with a zigzag stitch to avoid any movement. At the underwire seam the stretch fabric and the padding end equal but at the armhole the stretch fabric seam allowance will reach 0,75cm over the padding.

use stitching zigzag to close the seam



use triple folded sheer lining to cover the seam



HOW DO I SEW PADDED STRAPS IN SWIMWEAR?

Length measurement

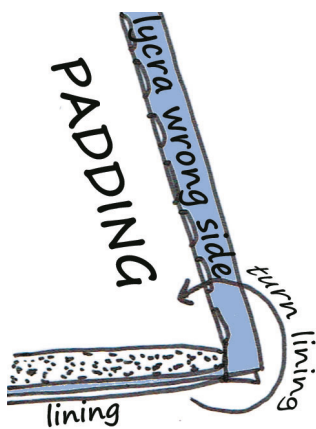
Measure from the top end of the bra cup to 5cm over the shoulder and adjust the length of this pattern at the cutting line if needed.

Cutting

Trace the pattern and add 0,75cm seam allowance all around the pattern for the fabrics but **NOT** for the padding.

Double up the lycra (spandex) and cut the strap pattern **TWICE** from the double layer lycra; once as outer layer and once as lining.

Cut the strap pattern 2x from a single layer padding.



Sewing

Pin the outer layer straps with the wrong side up on top of the lining layer.

Pin the padding straps on top of the wrong side of the outer layer, the seam allowance should be visible all around!

Stitch with a straight stitch along one length of the padding.

During stitching the sewing machine will flatten the padding, allowing some stitches to hit the padding as well.

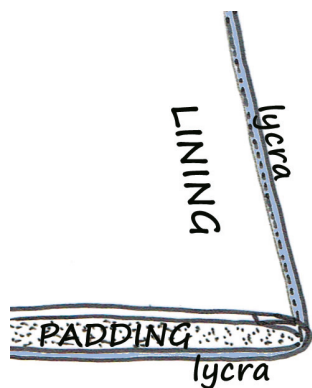
Turning the straps

Fold the lining layer back over the padding, make sure the lining is not visible at the outer lycra side.

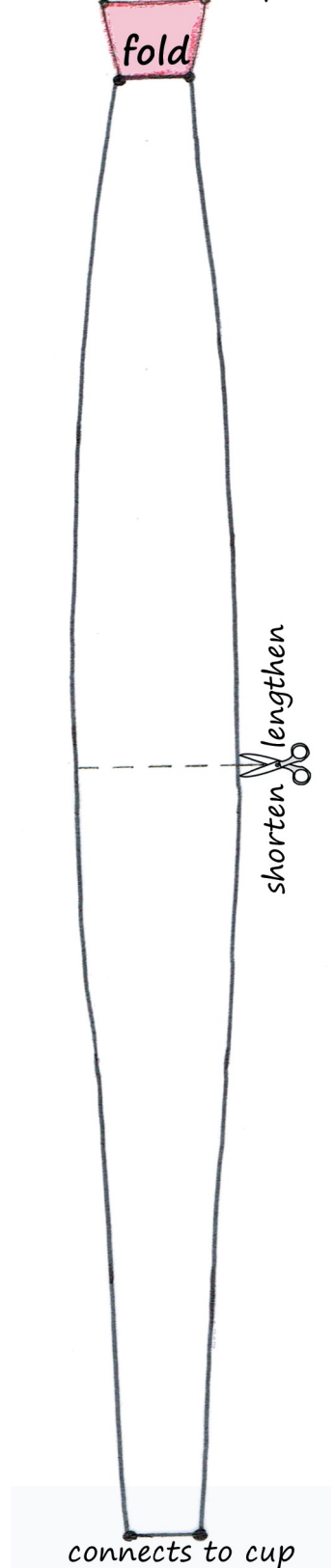
Pin all layers tight together and pin the straps **BEHIND** the bra cup.

Attach this with 2 rows of a narrow zigzag stitch, make sure the padding is stitched along as well.

This way you can finish the top edge of the band + cup armpit + straps with clear elastic all in one go.

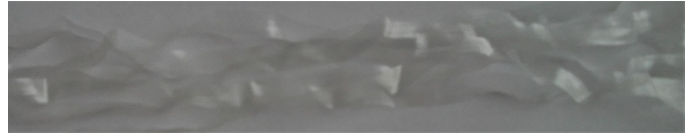


connects to straps



WHAT KIND OF ELASTIC DO I USE IN SWIMWEAR?

For swimwear you need chloride and seawater resistant elastic. The best type is clear elastic (polyuréthane) which is very thin, can stretch out at least double it's own length and doesn't rip easily.



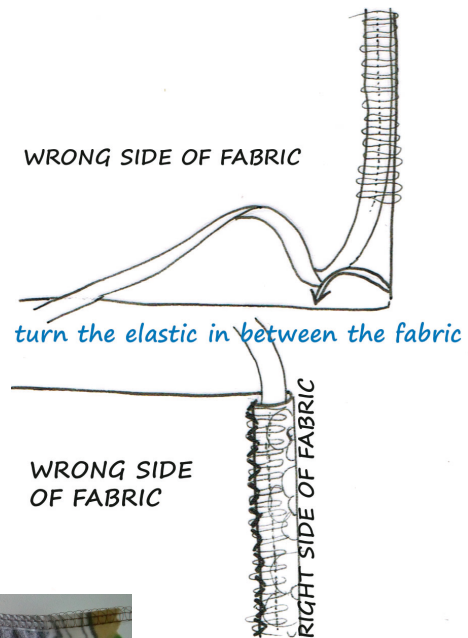
From the old days and still in use is the rubber elastic which is a natural material but thicker than clear elastic and tends to decay over time through chloride and seawater.

How do I sew clear (or rubber) elastic?

Place the elastic at the **WRONG** side of the fabric on the seam allowance and stitch with an overlock stitch, stretching the elastic slightly.

Turn the seam allowance to the wrong side of the fabric and topstitch at the outer edge with a narrow zigzag stitch.

The elastic will now be **invisible** in between the fabric.



WHAT KIND OF STRAP ELASTIC DO I USE IN SWIMWEAR?

For swimwear you need chloride and seawater resistant elastic. The regular straps elastic for lingerie don't have this ability but you can easily sew straps yourself from the same material as the swimwear.

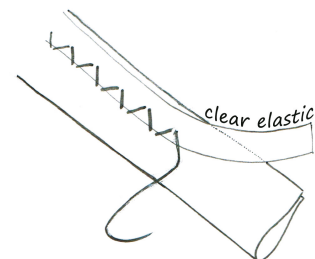
How can I sew my own straps?

Cut 2 strips of the stretch fabric, 40cm length and at least 3,5cm wide.

Fold the fabric lengthwise with the wrong side out.

Place clear elastic on the seam allowance and stitch along the length (at the inner side, **NOT** at the raw edge!) with a zigzag stitch without stretching the clear elastic.

Turn the straps inside out and use instead of straps elastic.



WHAT KIND OF HABERDASHERIES DO I USE IN SWIMWEAR?

Just like the fabrics and elastics should also closures and other haberdasheries be chloride and seawater resistant. Beside that they should not heat up in direct sunlight because this might cause skin burns. A special mixture has been developed of zinc + aluminum + copper called Zamak for metal parts in swimwear. But also Nylon and resin are very popular materials.

Underwires

For swimwear they are usually from the same metal as for lingerie because they are always safely hidden away in strong wire casing.

But still their stiffness might irritate a wet skin so specially for swimwear are Nylon underwires developed.

The sewing process is exactly the same as for metal underwires.



Bikini clips

These are used as a midback closure for bikini tops or even for swimsuits at midback because the usual hook & eye closures for lingerie will easily open up while swimming in the water.

They come in a great variety of shape and size, both in Zamak and in Nylon.



Sewing

Just slide the fabric through the side openings and stitch with a narrow zigzag stitch.

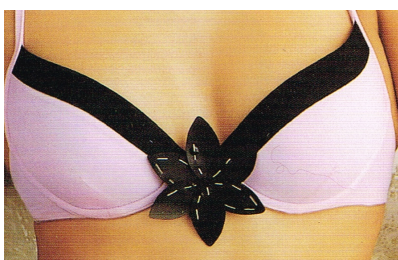
It's not a problem when the fabric is wider than the opening, just make some pleats and pull it through. You won't wear clothes over the swimwear so it doesn't need to be flat.

Decorations

For the same reason you can add all kind of decorations to your swimwear.

They may pop out in 3D and get their special place anywhere you fancy.

Just make sure all of it is also chloride and seawater resistant, won't lose color in bright sunlight and doesn't heat up burning the skin.



WHAT IS THE BEST WAY TO TAKE CARE OF MY SWIMWEAR?

Washing

Swimwear will only be used a limited amount of hours a day. It's tempting to wear it again the next day without washing first.

NOT a good idea!

Dirt and bacteria affect the lycra yarns which will cause loss of stretch sooner.

Leaving the garment in the laundry basket for several days has the same effect.

Rinse the swimwear right after wearing it.

If you have the time and energy you might even add a little hand soap at the start.

When the time has come for the washing machine use a program of maximum 30 degrees and a soft detergent.

Wash colored prints separately the first time, the colors might come off and affect the laundry.

Drying

Do NOT severely wring out the swimwear after rinsing or washing, just gently squeeze the excess water out.

Roll the swimwear in a towel and squeeze out the last drops. The towel will absorb the water and your swimwear will be almost dry after this.

All this makes the use of a dryer unnecessary and even unwanted. The high temperature will decrease the elasticity of the yarns.

For the same reason it's also better not to iron the swimwear!

Storage

Do not store the swimwear until it's completely dry, fungi affecting the stretch of the lycra yarn won't stand a chance this way.