# How to make your fursuit in English





# Experience of making a fursuit

- \* It's not manufacturing, it's just like handiwork while
- summer vacation.
- \* It often fails when you do this 1st time.

  \* Actually drawing this (14~18 pages) spent more time with me than making a fursuit.
- \* It cost about 4~50000 yen. 7~80000 yen if making a wig. \* We can buy fake fur at Okadaya in Shinjuku (http://www.okadaya.co.jp/)
- or Tomato in Nippori (http://www.nippori-tomato.com/)
- \* And we can buy other stuff at Tokyu Hands (http://www.tokyu-hands.co.jp/) or other home center.
- \* How to use Sewing machine? Check yourself!
- or you can sew by hand!
- \* It's more difficult that drawing than making this.

# 1.Design your own fursuit

First, we need to decide what kind of fursuit you want to make. A easy way to Distinguish, there are two kind of fursuits - half suit, or full suit. If you choose full suit, how to build your looks of body type it's very important. (according to more or less)





Half suit means only make head and hands & legs, then put your clothes on. Head's size is always large, so choose your clothes wisely. Half suit is easy to carry and maintain. We usually dress fursuit at offline meeting, so it's important for carrying yeasily.

Full suit means Whole body suit, we also call it "kigurumi". It has great touching if you build the body with more cotton, but it will be difficult to carry.

We will teach you how to make a "Full suit" here.





\* Design the character Even though you refer the same animal or picture to design, it will change because different looks.

By using more white color,it will look bigger, decide which style do you like and use it.

Keep drawing on the sketch book IN 10 DAYS. Do not forget that you are going to MAKE IT REAL. so don't let it too complicated (looks or body type) Think several times before you make it.

# EXTRA: Material of a fursuit & where to buy main materail

# \*Fake fur (2500~3500 yen /meter)

Made of acrylic fiber, looks like fur. You can buy it at Tomato in Nippori or Okadaya in Shinjuku.

You can choose it by "colors", "long or short" and "luster".
For example, a man's height is 170cm, you can buy the fur you wanna make, and the TOTAL LENGTH ARE 9 METERS

# If you want to dyeing it you can use acrylic colors. Keep away from heat.

\*Urethan form (1500 yen/one)

#### Sponge. Use at head or building the body. You can buy it at Tokyu Hands, a little harder and bigger one is better. Buy about three to seven.

\*Stone powder clay (500 yen/one) Alhigh grade paper clay, let it air-dry and it will become hard as stone. Use at head (clay type).

It's recommended to use PADICO Premier (http://www.padico.co.jp/products/en/product/clay1.html#pos2) It's also used at the phototype of head, so we need about 20. You can buy it online because it's so heavy!

\*Wigs (3000 yen/one) Use at hear or mane, we need about 4 wigs. If you want make some curls, remember to buy heat-resistant wigs. You can buy at MAPLE WIG (http://www.maple-wig.com/)

#### Where to buy material

\*Okadaya (fake fur. ribbon, special shaped botton, needle, special color zipper) A handicraft shop between Shinjuku station east exit & Shibu Shinjuku station.

It has many kinds of zipper, tape, beads, you can buy everything you need there.

#### \*Tomato (fake fur, enamel fabric etc.) A cloth shop at Nippori. There're many kinds of fur, and cheap too.

But you need to buy at least 1m. And there are some kinds of rare fur that might be sold out next time, so buy a little more is better.

Tokyu Hands (urethan form, stone powder clay, EVA sheet, paint, glue etc.) A DIY shop that has a lot of stuff. You can buy everything there. Especially EVA sheet.

I can't find it at other shop. You can buy sandals for kigurumi boots here too. You can also buy things at their online store, but take 2~3 hours at this shop and just " windows shopping" is fun too.

Handicraft shop (needle, thread, zipper, velcro, fabric for Anko, felt fabric, cotton etc.) If you think Okadaya is too far, you can go to a handicraft shop near your home. Only buy things that you can't find at handicraft shop at Okadaya.

\*Home center (PVC plate, window film, adhesive, hard felt, tablecloth etc.) If you think Tokyu Hands is too far, how about going to a home center? Maybe you can find everything only except fur.

2100 yen shop(dress form, bamboo skewers, accessories, felt, cutting mat etc.) You can sometimes find good stuff even at this kind of shop. But remember don't buy

#### clay or cloth fabric things here. \*Car shop(window film, microfiber towel)

You can buy black window film here, and you can buy microfiber towel for cars. Use this to wipe eye parts.

#### 2:Bodv

Basically you can refer to this picture, and make the paper pattern.





#### \* Paper pattern

Paper pattern is used as making the shape of cloth or fur, we can use color pencil to draw the line on it. And don't forget to leave 1cm width at the side of paper pattern. (seam allowances)

Draw the half side then make it upside down to draw the other side, and the dotted line on the pic will be the center.





There is a way to take a shirt or jumpsuit apart to make paper pattern, but there are always wrinkles on clothes, so we use a way called "draping". First we put plastic bags or garbage bags on our body, build the shape you want with newspaper, then wrap it on your body by using the gum tape. And then use marker to draw the FIRST LINE of picture upside, take it off, using scissor to cut along the line, as the phototype of paper pattern.

\*\*CAUTION\*\*

1. When you do this alone, remember once a part (like hand,body,leg, etc.)

your hands when you put fursuit on. 3.It will be VERY HOT when you makle this, so

remember to turn on the air-conditioner if it's summer or hot days.

SAMPLE OF PAPER PATTERN

Paper pattern will become many parts. so remember to write "fur direction". 'part's name", and "fur color" on all the paper pattern parts when you still remember.



fur direction part's name ur color

# \* When sewing fur



Remember PUT THE FUR SIDE together and sew it. \* PAY ATTENTION ON THE FUR DIRECTION.

(If you put one of them upside down, you need to restart again :P)

\* How to cut the fur fabric

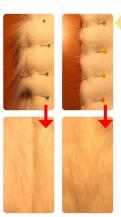
Put the paper pattern on the fur fabric's backside and draw along the paper by color pencil, then use sharp cutter to cut it down. Keep the cutter always sharp or it will brake easily.

(Remember to write "A part". "B part" on the fur









\* Sewina

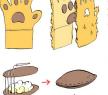
To avoid not to sew the fur, push the fur inside the fur fabric and use pins to fix it. If we don't do this well, we'll see stitch on it.





Do most part with a sewing machine, with zig zag stitch, then sew the detail with hands. If you finished sewing, use a pet brush to comb fur.

# Furry hands



Sew two fur fabrics together, and sew the pads from inside. It's a very meticulous work so we only sew it with our hands. It usually takes 2~3 days to make hands. It has many kinds of ways to make this, so let's see how other people did and learn from them :P

\*Claw We have to wash the fursuit, so we need something that water-resist. When I made Tirol, I bought Claw-type beads and stick on Rubber gaskets.

\*Pads

Usually use cloth, leather or fake leather. First take two fabric, put cotton inside, and sew it like a dorayaki (or hamburger). Then open a hole on the furry hand, and sew it from backside like pic does.

# \* Furry boots



First we can buy working shoes or sandals. build the shape with urethan form, draping it to make paper pattern, then put on the fur fabric with glue. Fursuit boot must long enough (up to shin) or your feet will be seen.

We can put EVA insole in the fursuit boot, it's very light and durable.

#### \* Breast



Make a shape you like with paper clay. draping it, then stick on the body. Or you can buy a breast-shaped bowl as the phototype. Just choose the shape you like, for example, Tirol is cup-shaped.









in front of them

### \* Zipper



Tirol type: use magic tape and fur to cover it.

Chocolat type: recommend using on the design that can't use the back zipper.

About 40~60cm is OK. Choose the color that similar to fur near to it. To avoid the fur got caught in zipper and broken, we can choose "vislon zipper".

Bending the vision zipper in a certain range is OK, so I suggest the Chocolat type (front type).

# \* Anko



"Anko" means "flesh in fursuit". We can use old body paper pattern, put cotton in the cheap cloth fabric. After washing again and again, cotton will become flat, so put more cotton in it about 1 year later.

#### \* Hips

If you want to make hips(two parts), first, don't put fur fabric on, but sew hips line on it. Then use hips' paper pattern to make heart-shaped Anko. Remember sew a line on the Anko, let is has left part and right part, then put cotton in. Use rope to fix with the tail, and it won't crook. Try it if you want to make a female fursuit.











# \* Sew the marking

If you want to make a fursuit that has marking, although you can use air brush of paint to dye it, the touch of fur will become bad, so I suggest to sew the marking on it.

First open a hole on the suit, then cut the different fur that a little bigger than the hole, and sew it from backside (just like pads) It's really a hard work fight!



# \* Accessories



Let's make your character fashion. For example: ribbon, collar, bandana and goggle. We can put on and take off everything like these by wearing fursuit hands.

The picture at left side is Tirol's
"Bianca's ribbon". I used frill tape and blue
ribbon, and put a little bell on it, so it will make
a sound when she is moving.



The picture at left side is the backside of Marie's collar. I put a piece of cloth that's the same color, and I also put a piece of Felt inside, it's called "perfume band", we can spray some perfume on it.



When we are at event, because other people won't know who we are and who the character is, wearing a NAME TAG is very important. Try to Appeal your name and let people call you as that name.

And another merit of wearing the name tag is that you can paste the event pass on the backside. Please don't paste on your fursuit, it hurts fur...

#### 3: Head

Please look at the picture here.









Make the head model

Make overall shape. put the fur on

Put on all the parts. makeup

# \* Material of head model

We usually make head part by urethan form or clay, and almost urethan form.





easily, easy to make open-mouth or teeth. Bad point: Can't make complicated hair styles, intolerant to heat



#### \* Stone powder clay

Good point: Hard, it won't break easily, can use together with urethan form.

Bad point: Heavy, difficult to carry, difficult to motify or repair.





Adhesive

There are many kind of stone powder clay, but choosing light one is always better. I suggest Premier.

# \*Others

I suggest " Cemedine SUPER (high transparent one) But it's too sticky, I usually use aron alpha" instant glue together too.

Varnish for outdoor Use at clay that's completely dry. Clay is water-intolerant so it must been used



Cut urethan, stick them with adhesive, then cut it with cutter or scissors.

Repeat it again and again when it becomes the shape you want.

We can also use "bowl bottoms net", but it's OK for not to use.



Remove it

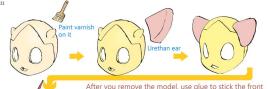
carefully.

\* Bending urethan Urethan form is like a board, actually we don't need to bend it because we will put it on and cut it. If you still want to bend it, you can heat it then put it on a spherical thing and press it down.



When the phototype is dry, paint varnish on it. When varnish is dry, then you can put the clay on to make what you want. Remember "MAKE EYEHOLES A LITTLE BIGGER." The head model will be 5-8mm thick, so don't put too much clay on or it will become too heavy.

Dry it for 2 days, then use cutter to cut a line, and dry 1 day more. About 80~90% dry, then you can remove it with flat-blade screwdriver, just be careful.





part and rear part, wait for glue dry then repair cracking place, and wait for about 5 days to let it completely dry. Then, use water-resist varnish and paint TWICE inside & ONCE outside. Wait for varnish to dry, use urethan to make ears, then

stick on the mask. Use acrylic color to draw around eyes and mouth (like panda). This is a way to avoid been seen from outside of the model

CHOCOLAT TYPE



Stone powder clay is hard, so remember to keep enough space of the model's back head or you can't put it on. You can see the red dotted line in the pic right side. We will use urethan form to make that part.



Laminated pupil sticker

Window film (black)

Clear PVC plate

#### \* Eyes TIROL TYPE





High transparent adhesive Painted pupil sticker Window film (black)

Clear PVC plate



There are many ways to make eyes. I want to make the eyes that "Shining, clear eyes and other people won't know where the peep hole are.", so I made them with shining material. If you're afraid of reflection of light when taking pictures, you can make it with aluminum punching plate(small holes).



12 \* Tirol type eyes You can make Chocolat type if you know how to make Tirol type, so I'll start

from Tirol type. First we make "pupil sticker" and "eye mat". Refer the head size and draw the eyes, scan it, use Photoshop or SAI to color and print it out (IN A4 SIZE). If you don't have a scanner, you can draw it on PC, remember draw different sizes and print it out, then choose which you want. If you don't have Photoshop or SAI, just use "Paint".



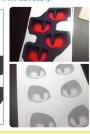
All the black part will become peep hole. It will look cute if the upper part is dark.

Draw some reflection light on the edge of the pupil.

Draw bright color around the pupil, and dark color on the edge of the eyes, then it will look clearly.







If you finished "pupil sticker" and "eye mat", put a piece of PVC plate on the eye mat, draw a line, then cut it down. Although you need only two (left and right), you can still make several pieces and choose the best.







Now prepare window film, choose a little lighter than black is better. If you choose black, you maybe can't see anything.

Use tape to peel the film off, put in the water with neutral cleaner, then stretch it with a plastic Scraper. When they're dry, wipe them carefully, then wear gloves and stick the films on the PVC plate. (pick up the PVC plate's



Cut pupil sticker down with a cutter, because the place you just cut down will be white color (paper of course), remember using marker to make it black. Be careful not to left fingerprints on them, then paste on THE FILM SIDE of



Put lots of high transparent adhesive on the screen protector, then put on the PVC plate and push it slowly to keep the air out. Wait for 3 days to let the glue completely dry.

Draw reflection and the white of the eye. I used acrylic color to draw it, but you can also use white vinyl sticker.





Now we need to make vinyl tablecloth curved. Cut a piece of tablecloth then put on the bottom of a ladle then use 7-9 clothespins to clip them together. Put it in boiling water 15 seconds, then put in iced water soon immediately. It will curved completely.





Cut tablecloth as PVC plate's size (like a contact lens), then stick it and PVC plate together, and eyes making is finished. Use tape to fix them first, smear glue between tape, when it dry, rip the tape off,

then smear glue on where the type was.

By the way, Chocolat type eyes only need to paste laminated pupil sticker on it, and it's finished, it's very easy, but bad point is that peep hole will been seen.



First use type to stick on reverse side to make a handle



Put a lid under the eye



Chocolat type eyes

# \* Mouth

We use mesh fabric to make mouth. Cut down appropriate size of mesh fabric then fold into 5 equal parts and sew around it.

Stick it on the reverse side of head model.

It's very important to breathe easily, that you can play it for a long time.







# \* Make head fur





Now we use fur to cover up the head



Where we will put wigs on the head model, we don't use fur but felt fabric. Remember choose the same color to





#### \* Gimmick of backhead

wias.

Stone powder clay head model is very hard, so it's difficult to cover up the fur. Make a gimmick of opening from backhead. It's important when you not in on.







# \* Nose, Eyelash

Make several noses from broad bean size to red bean size



We can use stone powder clay that we made head model to make nose. If you make head model with urethan form, you can use paper clay or resin clay to make nose. You can also make several sizes and choose that you want. Clay is water-intolerant, so after spraying

varniash, color it with acrylic color, then spray clear spray paint on it, and it will have luster.

We can make eyelash with felt or hard felt fabric. We can go to home center and buy felt pads to use on the bottom of furniture

like island stools/chairs to protect hard wood floors from getting scratched. The one has glue and grid at the reverse side is better.

# \* Put eyes and nose on



Use glue to stick eyes and nose on head model.

Before putting on eyes, we need to make doughnut-shaped Saucers and put them into head model's eyehole. We can buy EVA sheet or sponge rubber at home center.

AFTER we put the "doughnuts" in, cover fur on the head model, use adhesive to fix it, then put eyes into the "doughnuts".





# \* Cheeks, eyeshadow



We can draw cheeks with air blush & light pink acrylic color. Cut a little circle of white felt fabric and stick on pink-colored cheeks as abright spot.

Use a marker pen to draw eyeshadow. I don't know why but I just think red eyeshadow is good on furry female. I used " carmine" on Tirol.







# \* Eyebrow, double eyelid and others

We can make eyebrow, double eyelid and other parts by felt fabric. It will change a lot even if you use only a small piece of felt.







Eyelash



Eyebrow



Double eyelid

#### \* " Anko" at neck & inside the head model

To make the fursuit's neck, first draping from your own neck. You can make the backside opened and Fastened with Velcro. It will look naturally if you let head fur's color extend to part of the neck.

The inside space of head model will much bigger than your head, so remember put some sponge in it. and elastic on backhead is also useful.







# \* Hairstyle

Now we do some hair setting. First we need to think what hairstyle that we want. Of course the complicated one needs more time to make it. And we have to let the backhead can be opened, also there's nothing(\*page 10) at the backhead, so we need to put some urethan form to make it like a circle.









And the hair part, separate the wigs, like the picture at the left side:

1. back head 2.side head 3. front head and sew it.

Remember sew on the hair from lower to upper.



About front head, if we just put the wigs on, it will look too few. so we can use some urethan form and stick two pieces of fur that same color on, then put it on the front head, and then sew the wigson it.





#### \* Harden hair

The wigs will become messy, if it's straight, let's harden it. We use both styrofoam glue (harder one) and clear spray paint (softer one). Remember to use oil mist (for wigs) and brush it well then harden it.

Styrofoam glue will use on the top of head. Mix styrofoam glue and acetone as 1.7, and brush it wish a brush. Acetone may dissolve plastic cup, so remember using a paper cup.





Use clear spray paint to harden the front hair. Becareful not to spray on the head fur, we can use paper to cover it, and use hair wax to style then spray to harden.

We can also use clear film or plastic wrap to cover, it's easy to do because you can see clearly.

# \* Curl your ponytail buns wig (heat-resistant wigs only)

I can only find straight ponytail buns wig!! So I curled Tirol's ponytail by myself. There are many way to make, I choose one of them called " octopus feet".

First let your room temperature under 24 degrees celsius. put a piece of cloth on the floor, and put the wig on the cloth. seperate the wig about 3cm width each, spray hair solution on the wig and brush it carefully.

Spray half solution of the wing and brush it carefully.

Let the wig wet completely, set your curling iron at 120 degrees celsius, then repeat curling it and put it down. Because the room temperature is low, the wig will become cold soon and it will be curled.





#### \* Suit fitting & adjustment Now fursuit making is finished, but we have the last thing to do.

It's suit fitting & adjustment.

Put on your fursuit, look at yourself at mirror, and take some pictures with self-timer if you can.

No matter how you are good at fursuit making, when you put it to n, you will find maybe 2~3 places you need to adjust. Even sometimes 5~6 places. We've done this for a long time, so don't think it's a messy thing, don't give up, let it be the best. If this fursuit make you think that you want to put on and let someone to see it, that's finished!:D

## 4. Theriomorphosis, fursuit management



It's time to become a "Kemono" and join a event. Don't let your skin to touch fursuit when you are wearing it. Don't let your sweat stain your fursuit.

I suggest sports inner. Shirt and pants are about 5000 yen, it has excellent sweat absorbent and quick-drying quality. If you wear normal T-shirt, it may become sweaty.

About hands, you can wear cotton gloves to avoid touching the fursuit hands.

Or you can buy " full-body tights" from the party goods. About 3500,500 yen, can buy at Tokyu Hand or Loft. It depends on personal physique to determine "kemono time" long or short. Always drink water or sport drink, don't push yourself too hard, have fun and not to bother other geople.

Don't forget anti-fog spray, you can buy it at glasses shop.

#### \* The manner in Kemono offline events

- \* Don't lie down
  If you lied down, nobody will know you really feel bad or just kidding.
  Don't be a boy in" Wolf's Coming!"
- \* Sort out your luggage depository
  Fursuit is really taking space. Let everyone can use this place.
- \* Hug tenderly DO NOT hug: suddenly, intensely, from the back. Be careful to look around.
- \* No smoking
  It doesn't smell good, and fur is combustible. Absolutely NO!



\* Be a good support There are some people who just want to wear fursuit, and don't want to do other thing. I don't think that's a good attitude. Support is a part of the event.

Don't make other people uncomfortable Know the meaning of the event, speak politely. Be a social person. \*Types of events

\* CLUB EVENT

Normal Remono offline event \* CONVENTION (OVER 100 PEOPLE)

The large-scale event that participants are over 100 people. Some people come far away from the event site. It usually become a special event just for fursuit, and consideration for every people who come to this place, everyone can enjoy it. There are many "same kind" of people so it's a good time for socialize.

\* MIDDLE-SCALE KEMONO OFFLINE EVENT Gather some people, and rent a place to hold a offline event. Usually planning on this at TwiPla (http://twipla.jp/). It won't be too big and too small, it's good for the first time.

Gather a few people at someone's home to hold a small offline event....or you can say that just like go to friend's home. We can take it easy, and keep close to each character, I like this most.

step and have fun!

Reserve a club, and hold a party for Kemonos. You can wear your fursuit and just have fun. It's dark in a club so usually don't take many pictures. Watch out your

\* USA CONVENTION (3~8 PEOPLE) Find several people and go to USA convention event. It cost ab 150,000 yen. Event in Japan has only 1 day(or several hours), we can join the event all day long or even many days. You can try it

Special Remono offline event These event are different from normal ones, if you just want to wear it, don't go to these event. I screwed up before...

\* PHOTO SESSION EVENT

Reserve a photo studio to make Doujinshi(self-published works) photographing event. Because there's not other participant here, so you can talk to other people to let them know what you think.

\* OFFLINE EVENT IN A LARGER COSPLAY EVENT

This is a offline gathering to join like Wonder Festival, or other cosplay events held at amusement park. There are other normal cosplayers, so it's definitely different from normal Kemono offline event. Photographers may want some artistic photos. There's no luggage depository, and not every person like fursuits, so if you are surrounded, just be careful.

and you maybe can't see them, so a support person have to care about these.

# \* GREETING OFFLINE EVENT

Join cosplay events held at amusement park, or a festival held in the park, and play with normal people. not other fursuit player. Remember people don't think us as a normal gathering. Think yourself as a professional performer, join this event like a job. Besides there might be children hugging your feet.

# <sup>22</sup>\* After the event



After the event finished, it's time to clean up. Remember, DO NOT put the heads and the boots together!

Put them in different plastic bags, and go home.

After you are back home, take your fursuit out and unfold it soon to dry. If you don't take it out soon, the fur will be folded. Remember being unfolded for more than 3 days.

Use deodorant spray at the body part, dry it with electric fans. When it's completely dry, brush it. Use a wet towel to wipe inside the head part, then use circulator fan to dry it for about an hour. Use a towel to wipe the boots carefully







\* Washing

If you hug by a good smelling Kemono fursuit, it fells really good, right? To make fursuit smelling good, don't forget to wash.

First, turn your fursuit inside out, and put it in a big laundry bag. Then set "hand wash mode" that don't wash intensely.

Choose liquid laundry detergent you like (I use the yellow one in the picture down here). About fabric softener, choose the smell that fit to your character, and use a little more.



whir

reat toughing.

