Making a Chin Na / Wing Chun arm

Total Costs:

1 arm: 16-20 \$

2 arms: 32 to 35 dollars

Tools Needed

Saw (electric of hand)

Drill

Patience

Material

1 PVC tube , 1 meter (50 cm diameter)	3,50 \$ / (enough for 2 arms)
1 isolation foam tube for PVC, 50 cm diameter	1 \$
3 x PVC end-cap for PVC 50 cm	3 \$
1 x caster wheel (width 45mm)	3 \$
1 x roll flexibele electra tube (yellow)	3 \$ (enough for 2 arms)
1x pce of rope (3 mtr plastic, not to thick)	2,50 \$
1x roll Duct tape	3-5 \$
1x screw and nut 7 cm long	1 \$
1x PVC glue	5 \$
1x old yoga mat or old shirts	

Total production time:

Depends how good you are, and how naturally you want to make the arm \odot . It took me about **4 hours** (included some glasses of wine) to make my first arm. The next arm I did in 2 hrs. (Also with a good glass of wine on the side)

Ready? Here we go!

Put the caster wheel in the PVC tube, and draw the circle that the wheel makes in the tube (on both sides of the tube)

Drill a hole in through the PVC tube AND through the weel of the caster wheel. Connect the wheel and the PVC tube with the screw nut.

Make a extra whole in the 'armpit' of the tube so that the tube (in this case the upperarm) can swing as tot he left as well as the right, and up as well as down. (see pictures

under)



Now we are going to make the upper and under-arm. Measure the length of your upper -/ and under arm, and saw the two pieces. I made an upperarm of 10.6 inch (27 cm) and an underarm of 9.6 inch (25 cm) .



Take rope and devide in two lengths, and pull it trough the upperarm tube. Hook the rope around the wheel and place it in the whole that you made in the armpit of the tube (see pictures)

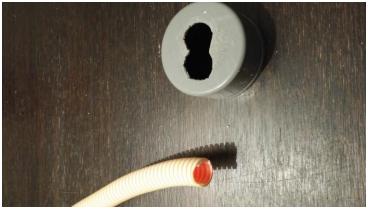






Now pull the ropes through both PVC pipes.

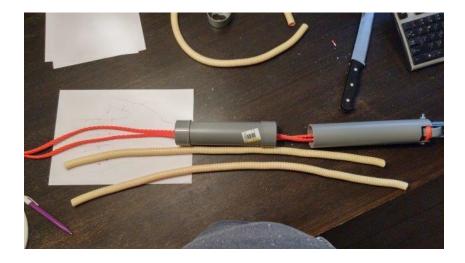
Make a hole in the 3 endcaps so that the two flexible tubes can go through them.



Draw your hand on a paper, and draw all the phalanx of the fingers. You need all the bending positions, to make an anatomic correct hand.

Lay out the complete arm including hand on a table to calculate the tot length of the ropes that you need.

Keep in mind that the end of the ropes will end in your middle -/ and pointing finger.



- A. The yellow flexible tubes need to go at least halfway into the upper arm.
- B. Leave enough space between the upperarm-tube and the underarm-tube so that it can imitate a natural bending arm.



- C. Make the yellow tubes long enough, they are going to be two of your fingers!
- D.The ropes need to stick at least 2 or 3 inches out of the 'finger-tubes'. Later you will need to make an knot or smelting to keep the ropes at their place.

Stick the two flexible tubes to each other and tape them together, and tape them to the ropes. Make the tape thick enough so that the yellow flexible tubes don't slip out of the endcap.





Put the endcap on the upperarm-tube. Do not glue them together. Keep them loose so that it can turn tot he left/right later, like a elbow joint.

Put some tape beneath the endcap, so that it will stay in place.

Take the underarm-tube, and glue one endcap to it. Now shove the grey underarm-tube over the yellow flexible tubes to its place.

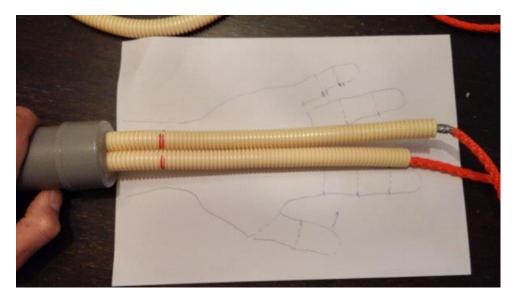
Don't forget to keep the 2-3,5 inch space between the underarm/upperarm!

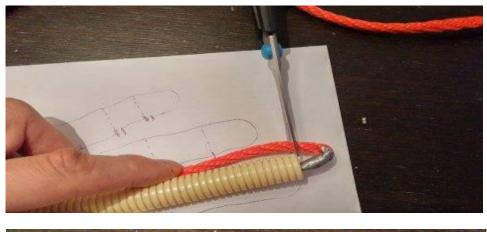
Put the last endcap on the underarm-tube and put some tape beneath it, so that everything will stay in place. (Don't glue the endcap)

Don't worry, later on everything will be further taped!

Duw de laatste afsluitdop onderaan de onderarmbuis. Lijm deze niet vast!

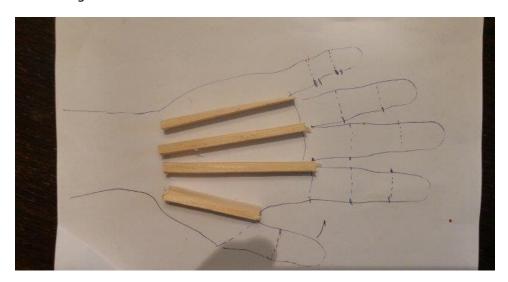
Make the ropes that stick out of the flexible tubes, the right size. Make sure with tape, that they don't dissapear in the flexible tubes!



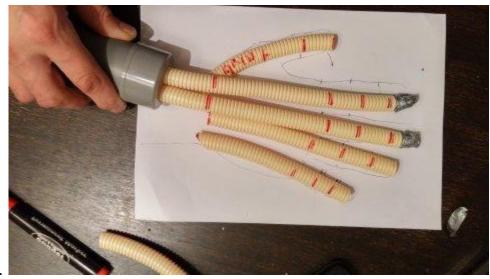


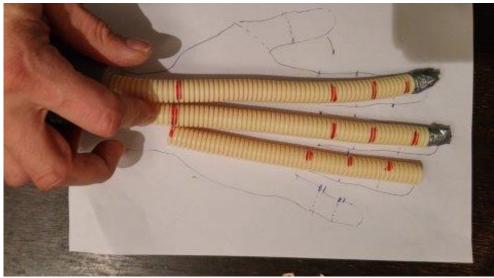


Make 2 or 4 pieces of wood (0.2, 0.3) inch thick) and place 2 between the pointing and middlefinger.



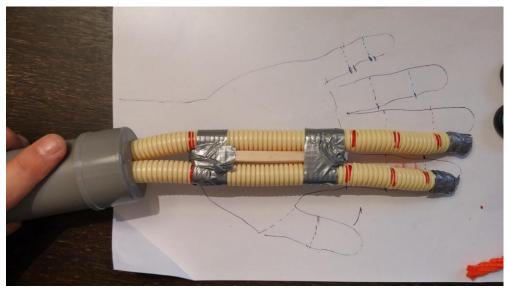
Now make the 3 other fingers, en draw lines on them to mark the right spots fort he finger phalanxs.





Now put the 2 pieces of wood between the fingers. This will give some space between the fingers.





Now take a knife and chip out the spaces in the flexible tubes. (about 45 degrees) These spaces will make the fingers bow in the right way. WATCH OUT:

Don't cut them TO deap! If the flexible tubes break, they won't be that strong. And DONT cut through the ropes that already in the two middle fingers!

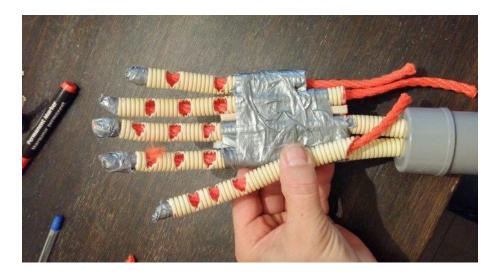


Cut some pieces of rope for the fingers, and attach them tot hem.



Now tape all the fingers together with a lot of tape. It's better to use a lot of small pieces of tape than to use 1 piece of tape !

Fold the ropes that still come out the flexible tubes and keep taping.







Your hand still looks idiot. Now we are up to the real shaping, the making of an arm and hand that looks like a human.

Take the isolation tube, an old yogamat or some old clothing, and start wrapping small pieces of them around your hand-skeleton and use tape to keep them on spot.

Try to follow the natural path and flow of your own hand-muscles. Each piece of tape also will make the skelet more stronger and rigid.

For the elbow you can wrap some old clothing around it, to make it feel like a real elbow. Always firmly use tape, tape, tape!

Use the isolation tube to make your arm feel like a human arm.

Don't be shy with the tape!!



In the end, after wrapping and taping the arm to your own taste, you should have an arm on witch you can train all the Chin Na modules without hurting anyone!





