



Model Sculpt

Zloba/S



Let's sculpt together

**Step-by-step
sculpting of a master model**

- **Medias**
- **Tools**
- **Scales**
- **Anatomical charts**



Horse-mounted “Samurai” miniature

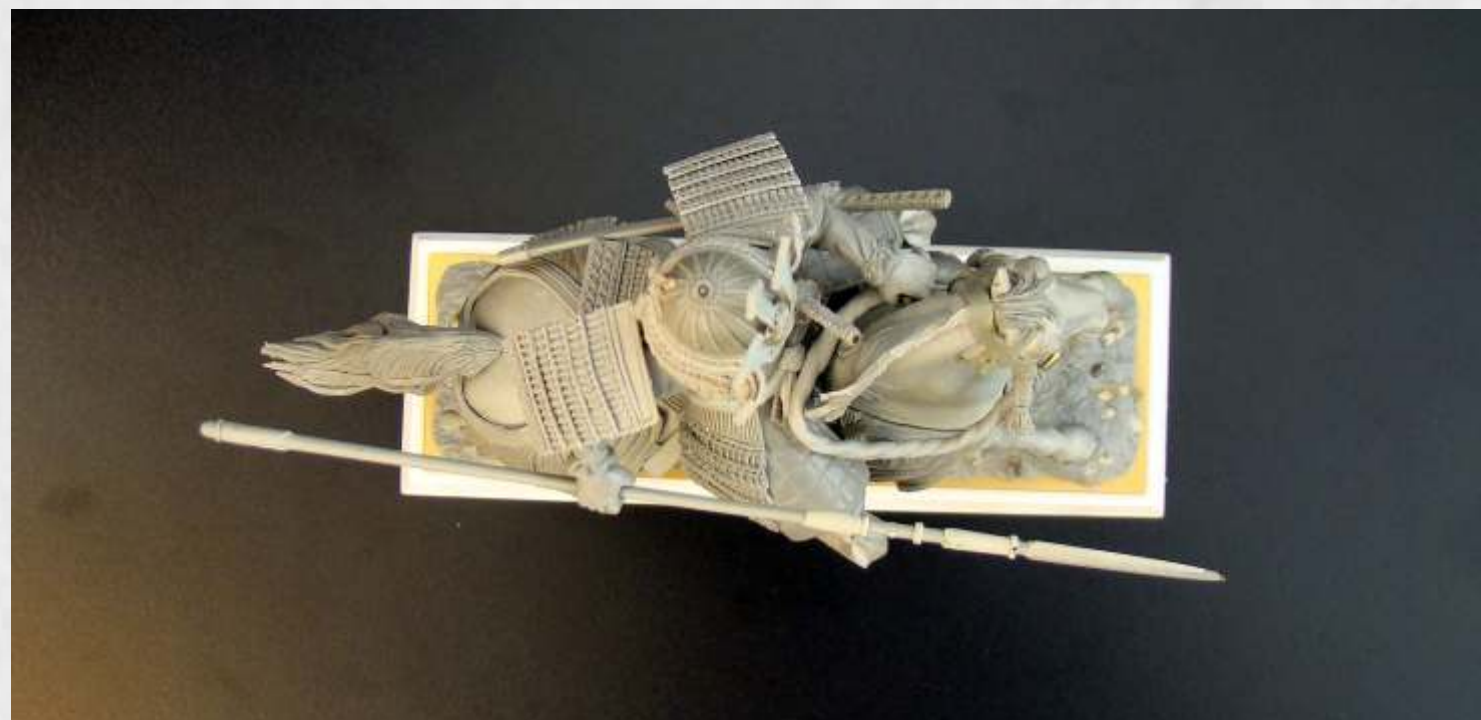
This is a unique miniature that was made for collectors. It's not the most popular scale, 70 mm, but this was as per a client's request. I found that it is important to photograph the sculpting at different stages: for myself-to see mistakes or imperfections and for client – to see the process. It gives him the possibility to ask for corrections or improvements.

I took multiple photos of this particular miniature and will post most of them in order to illustrate the extensive process of the figure creation. I will show you all techniques and tricks that I usually use. It's really a combination of Sculpting and Modeling, as you will notice yourself.

Now, I will show you a final result and later will explain how it was accomplished.



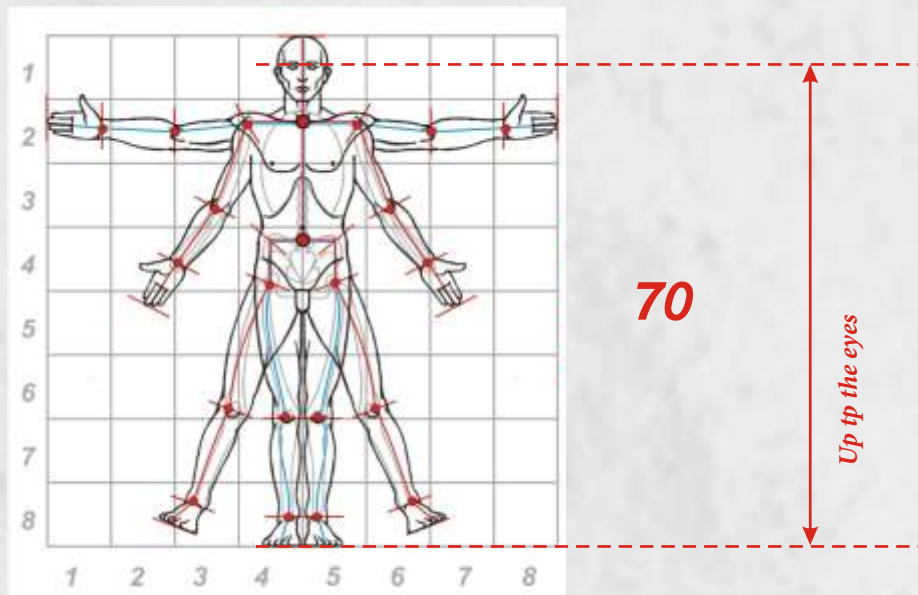






And here, all 33 pieces of this master model. Ready for resin or metal casting.



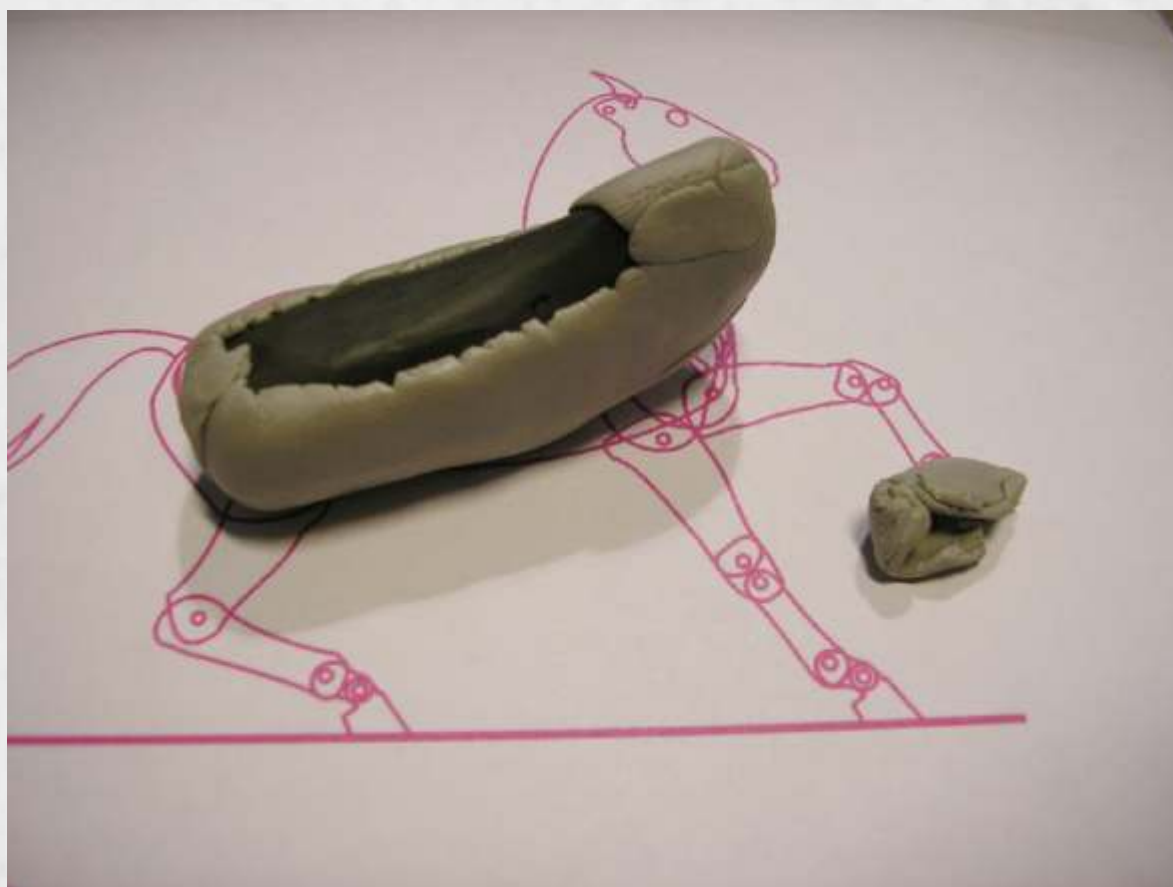
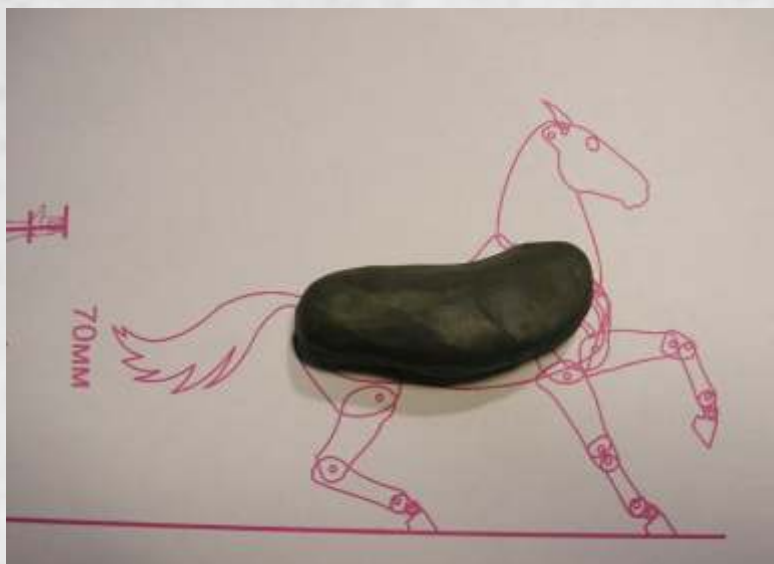


First step, creation of a wire mannequin based on anatomical charts. The height is measured approximately, to the eyes. I resize the chart and print it.

This miniature was created by using these two part epoxy patties: Duro and Magic Sculpt



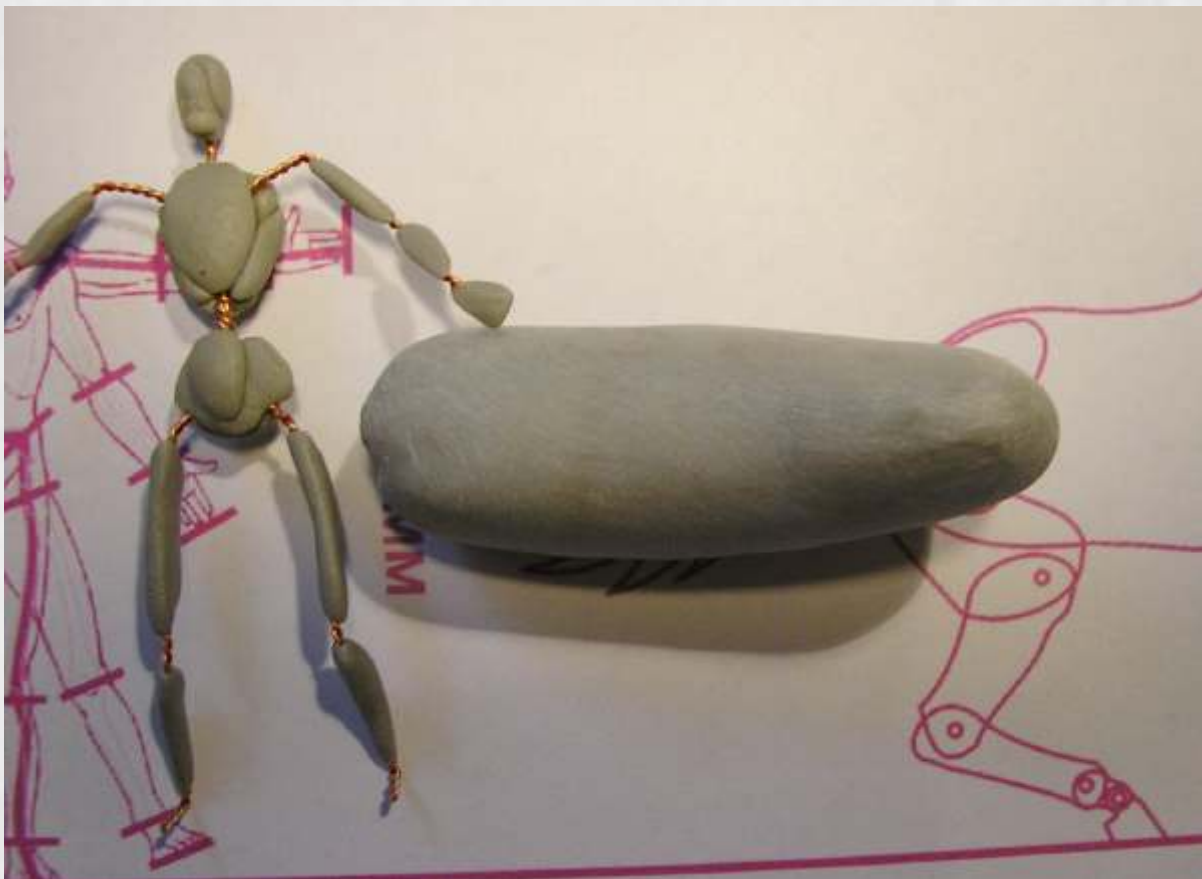
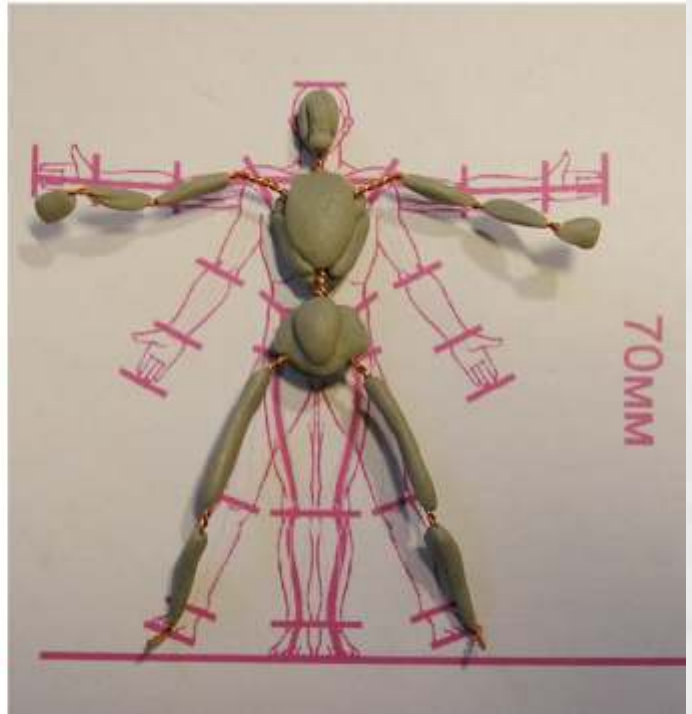
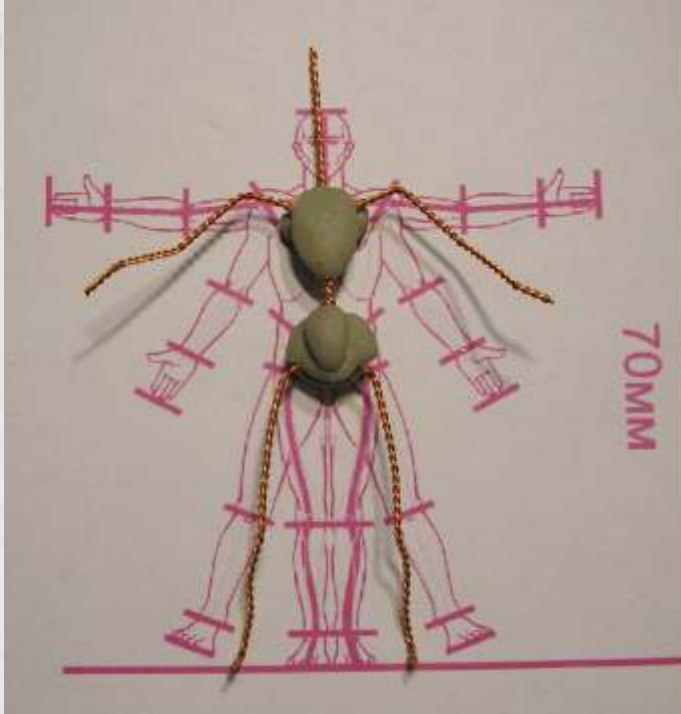
Now when you see the result, let's start from the beginning. We can use any kind of plasticine to create a hollow horse body. With help of the chart I create a body that a bit smaller than "real" size. It is needed to create an outer shell with thin walls and maximum hollowness volume. Once the body is finished it will be sewed and I will take all plasticine out of it. Take a photo from above and from a side. Now I mix two parts epoxy and dress up the horse body and smoothen the surface.

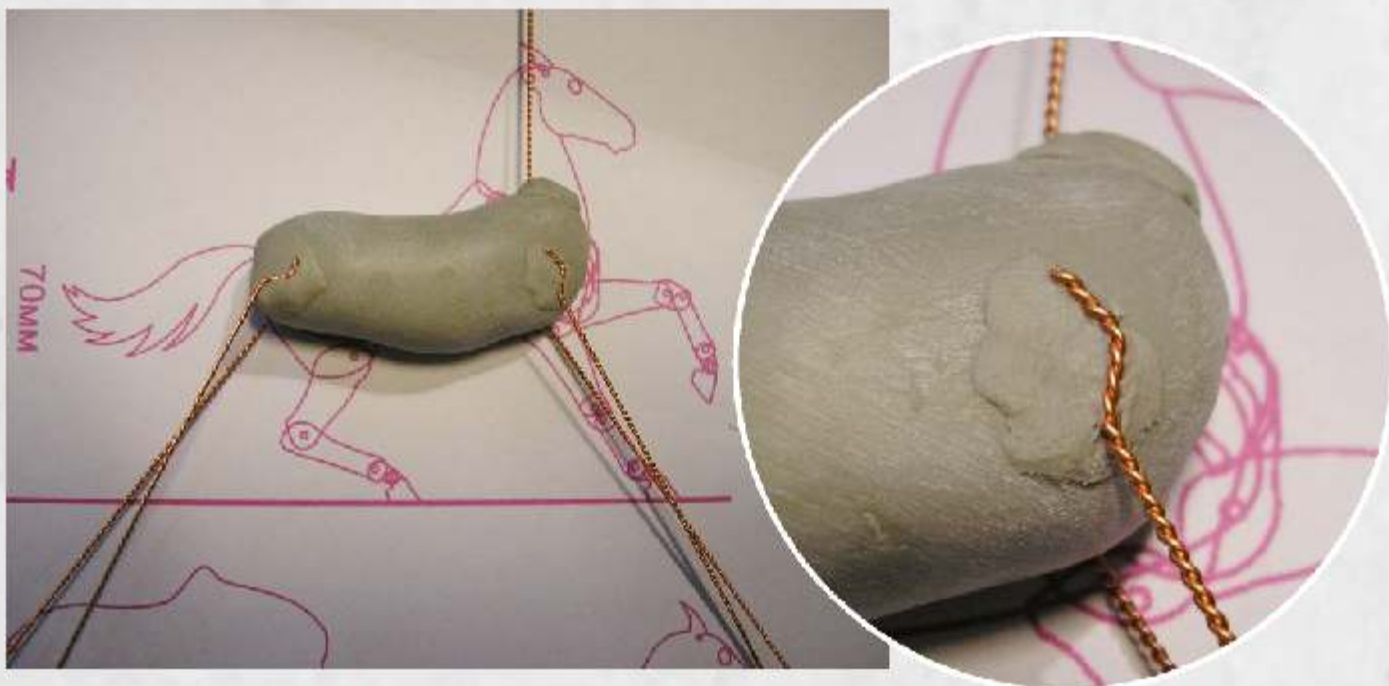


On photo below, a body dressed up in hard epoxy. You can shape it with nail filer and sand paper. Inside, we have soft plasticine, and the outside is hard epoxy. The most important detail is to make the body be not too big and should have enough “space” to add muscles.

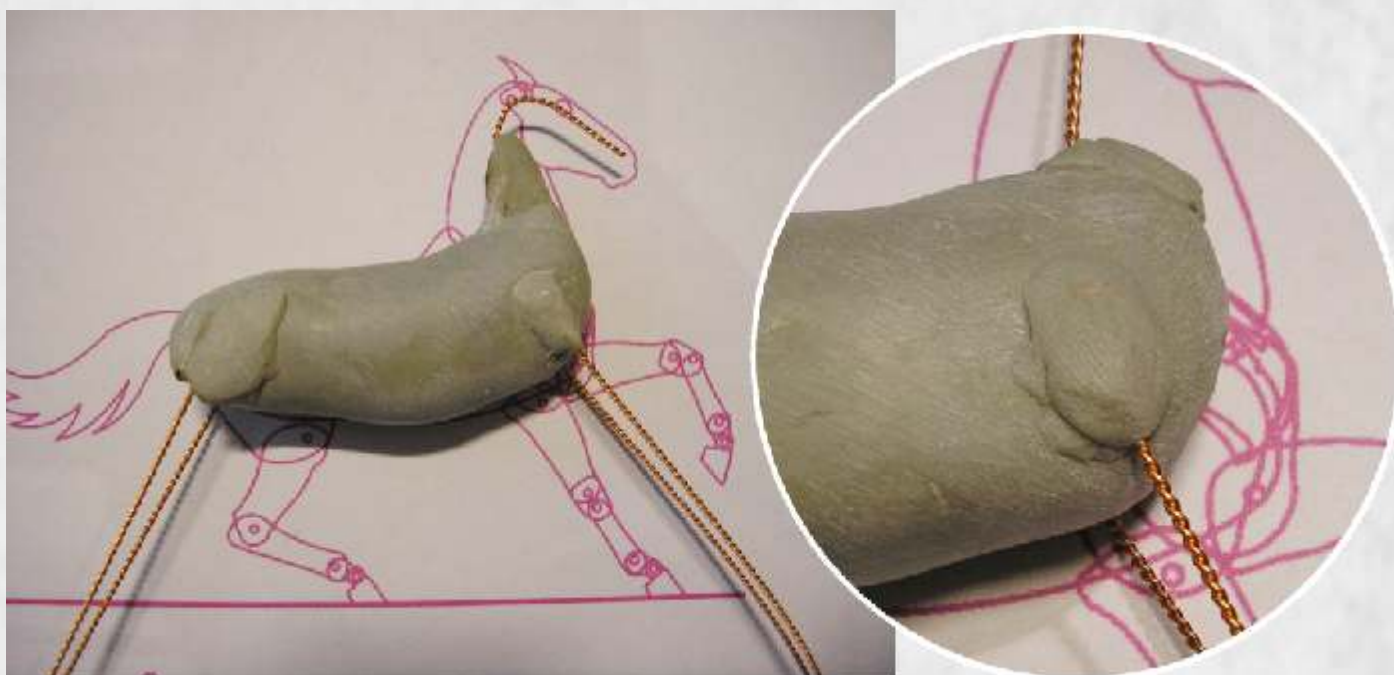


While we are waiting for putty to harden, let's make a mannequin for the samurai. Usually, I mend together two copper wires by bending them, then make an armature, put it on the chart and "lock-in" pelvis and rib cage by applying putty. With markers I indicate points where joints will be articulated and location of the main bones.



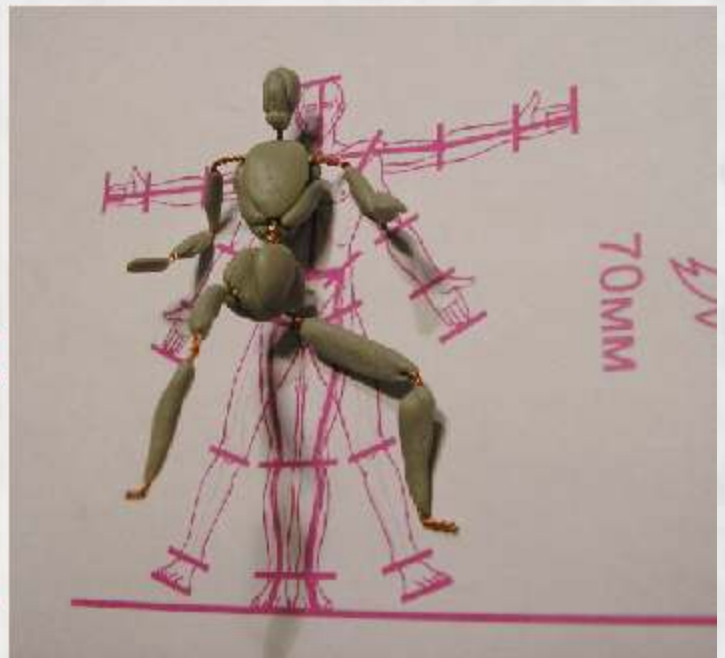
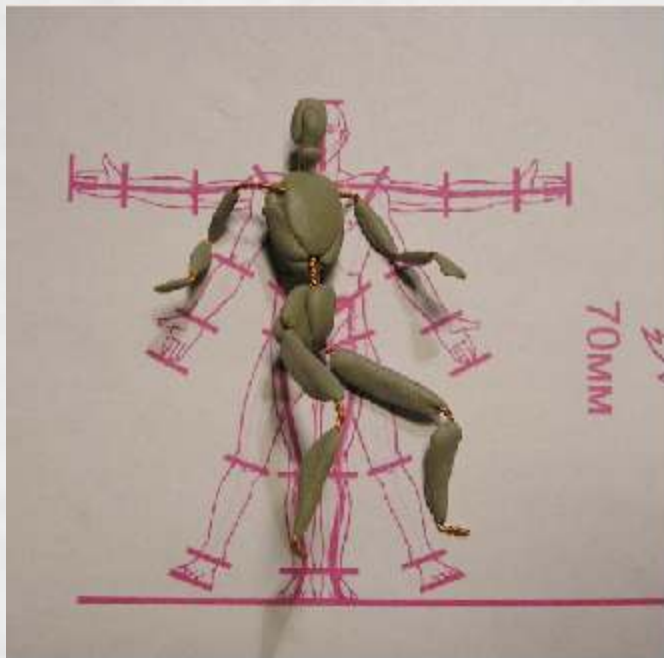


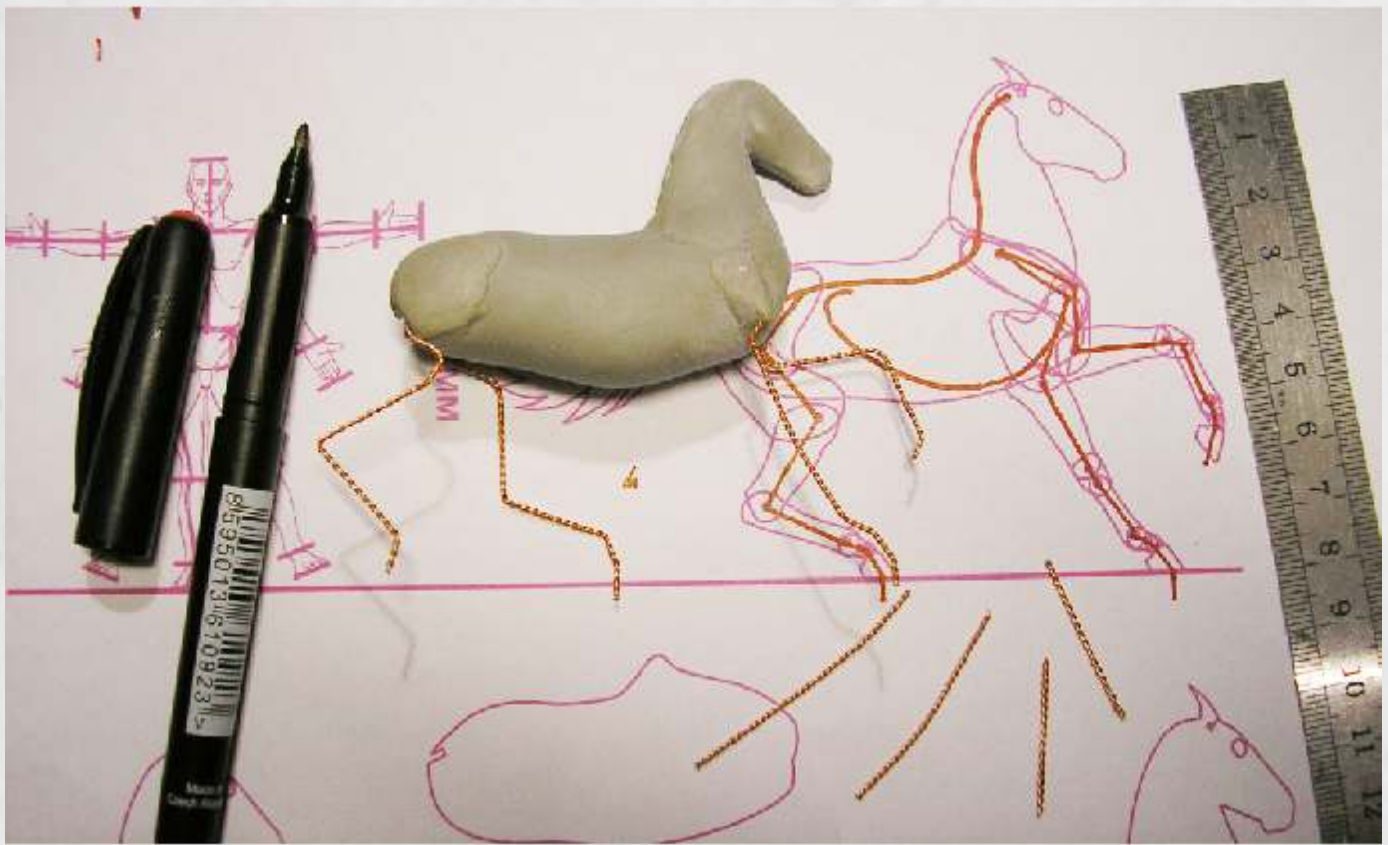
Now I get back to horse: add wires for all four legs and neck, including the head. To perform this, I add a fresh piece of epoxy, push wire into it and add some more epoxy on top. Close-up view.



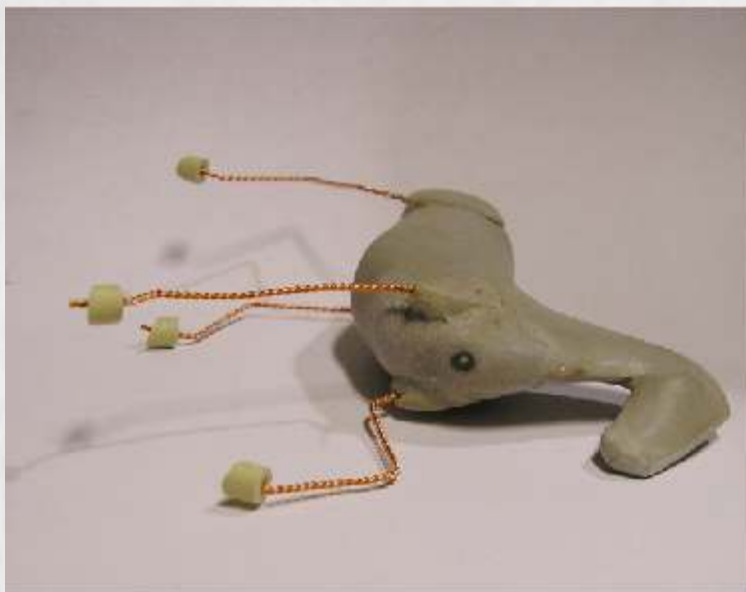


Here is a roughly shaped horse: basic volume and pose. Simultaneously I fixed horseman pose sitting on saddle as well.





Up until now everything seems to be simple. Let's go from simple to elaborated. With a ruler I measure all articulations, indicate them with markers, and bend all legs to create desired position. I cut the extra wire with cutters. BUT! I always leave 3-5 mm of wire that will later help me to fix the horse on its base. Now I string the hooves. Here is my personal trick how to make even hooves: we make a roll to the desired diameter, wait until it is almost hard and cut even pieces at 45° angle. I showed this method numerous times on my website www.modelsculpt.org. Now I drill a hole in the center, string the hooves with wire and glue them with Super glue.





The horse is in desired position and has its hooves – now we should fix it. I mix fresh putty and put a thin coat on armature: legs, neck and head. What I am looking for is a well prepared mannequin. Now, instead of a skeleton I have something that looks like a horse.





I drill a hole and insert a wire that will serve as armature for the ears. Ears in this scale are very fragile and the risk that they will brake is very high. It can happen during sculpting process, when it is sent to a client or when you make a mold. This is why we must use an armature.

It is very important to consult an anatomical atlas in order to verify the volume. On photo below: by adding chunks of putty I create the main croup muscles and smooth top surface.





A small correction: I add some volume to a knee, to the neck and align the legs according to anatomical atlas.

Below: progression from a plasticine piece to a mannequin.





Well, now the skeleton became a mannequin. Desired pose is created and fixed, basic volume is correct and draft figure is ready.

At this stage, I verify one more time if horse position corresponds to how I imagine the final result, measure all proportions with a ruler, cut and send where needed in order to prepare figure for further sculpting. On photos you can see that wire comes out of the hooves, but only for the legs that will be pinned to the base.





Another important moment, I locked in samurai's pose as well except for the legs. Why? Later, I will add some muscles to the horse body as well as blanket and a saddle. It will add some volume to it. If I lock in the legs, I won't be able to put the samurai on the horse's back. I would need to cut and move his legs a lot in order to spread them. Also, I would need to sculpt his pants and that will add some volume to them as well. Based on my experience, I always spread horseman's legs larger than naked horse's back.



Now I start to work on the horse's anatomy. I always keep an anatomical atlas in front of my eyes as well as a horse in miniature. Don't take it as publicity, but in my objective opinion the best horses were done by Andrei Bleskin. Those done by Bruno Leibovitz, Vitali Birzul and Viktor Konnov are also very good. I could suggest horse done by Russian Vitiaz, but they are way too expensive to be used as reference. Mariano Numitone creates nice horses by using Historex parts. So you have to choose for yourself which model you will use as reference.



The next few pages will look like a comic book: a lot of pictures to see step-by-step how to add muscles to the horse's body. I verify anatomy then add, cut, sand and smoothen the top surface. I wait until one layer of putty is hard and I add another one.



One image is worth hundred words.