Once a model has been chosen, there is some preparation and some tools that must be created in order to expedite the process. First cut a piece of cardboard so that the face just fits through:

It is important that the cardboard fit tightly against the sides of the head in order that when the alginate is applied it does not run down the sides of the face and head.

With a sheet of normal writing paper, tear off a strip about 1 1/2”-3” wide and roll it up to make two breathing tubes for the nostrils.

When this rolled up paper is placed in the nostrils, it will unroll to a certain extent and fit the individual’s nostril to give a liquid tight fit.
Once the cardboard and paper tubes have been fitted properly place the cardboard over the face and place the tubes in the nostrils far enough to allow comfortable breathing. Although no release agent is necessary for alginate, it might be a good idea to apply a light film of mineral oil to the eyelashes to prevent these from becoming embedded in the Dermagel.

When mixing the alginate, it is important to mix thoroughly with a drill mixer. This is best done in a deep bucket with the water having been poured into that bucket and adding the powdered alginate to the water while mixing vigorously with the drill mixer. In this way, the proper consistency can be easily achieved and it is essentially a “what you see is what you get” situation.

The Dermagel when mixed properly should be about the consistency of yoghurt and will give a set time of five to eight minutes depending on the ratio of powder to water and water temperature.

Immediately begin applying the Dermagel to the face with the bare hands and “dribble” and spread the alginate onto the face starting at the top of the forehead and working your way down the face. It is always a good idea to talk to your model and tell him/her exactly what you are doing to ease any apprehension they might have during the process.

Continue quickly and thoroughly applying the Dermagel over the entire face while paying special attention around the breathing tubes as to not disturb them and cause them to become dislodged. Make sure to get a fairly thick coating of the alginate on the entire face being sure to work the surface gently to release as much air from the face as possible.
Once all of the alginate has been applied to the face it must be allowed to set before proceeding to the application of the plaster gauze mother mold or support.

We find that plaster gauze makes a fast simple mother mold. two ot three inch wide strips seem to work best to follow the contours of the face and the rolls should be precut into four to eight in wide sectionis. Dip these into wrm water and draw the strips between your incex and middle fingers to squeeze off some of the excess water before placing onto the alginate surface.

When placing each strip of plaster gauze onto the alginate, rub it gently to mix the plaster and water on the surface and continue placing these strips onto the face mold until it is completely covered with three or four l ayers of gauze. If the surface becomes too wet, place a dry strip of the gauze onto the wet surface and rub gently to work the excess water into the dry layer.

Be especially careful when working around the nostrils to prevent water from leaking into the breathing tubes. The bridge of the nose can be reinforced with a rolled up piece of plaster gauze that is layed onto the surrounding plaster.

It may take from between five and fifteen m inutes for the plaster to set completely. It is important that it be set before you attempt to remove the mold from your model. The whole process of making the face mold may take between fifteen and twenty minutes. For this reason it is important that your model be in a comfortable position for the duration of the process.
Once the plaster gauze has set completely, have your model sit up and gently blow out the mouth. This will release the Dermagel from the face and the whole mold and support can be gently removed from the face.

Place the mold and its support into a box where it can be supported along the edges and not sit flat on a hard surface. This will prevent the face from becoming smashed when pouring the Hydrocal into the mold. It is recommended that the nostrils be filled with small balls of water clay to prevent the Hydrocal from leaking out these holes.

When mixing the Hydrocal, sift fresh material a handful at a time into clean, cool water. Continue this process until the water is completely covered and the top surface begins to look like a dry lake bed with some visible "cracking." Allow the Hydrocal and water to soak for approximately two minutes and mix thoroughly with a drill mixer.

Mixing should be done for approximately two minutes as well. If the proper ratio of powder to water is achieved the mixture will be about the consistency of crepe batter. If mixing by weight, the ratio of powder to water is 100 parts Hydrocal to 42 parts water. Always use cold water.

Pour the mixture immediately into the prepared mold and fill completely being careful to level the mold to allow for it to become filled to the edge. Gently tap on the box and/or plaster mother mold to help release air bubbles that might be entrapped. It is also possible to use a brush in the Hydrocal to brush out air bubbles that might be in the casting.
The Hydrocal will set in approximately an hour to an hour and a half. Once this takes place (the Hydrocal will get hot and steamy—when it starts to cool down it is generally strong enough to be removed) the casting can be removed from the mold. Lift the mold out of the box and turn it over in your hand, take the mother mold off of the mold and gently peel the mold from the casting.

After the casting has been removed from the mold it may be necessary to clean it up. Carefully break off any excess material from the edge and remove the clay from the nostrils. These can then be retooled to look more normal. At this point let the Hydrocal dry thoroughly, which may take a few days. Once the casting is completely dried, it can be painted, decorated and mounted onto a backing for display.