



Hand and Foot Casting Model Making Instructions

Preparation:

- (1) Impression Powder, Casting Powder
- (2) Suitable container
- (3) Water (water temperature around 25-30 degrees Celsius is ideal; the following data fluctuates with room temperature)
- (4) Mixing stick (such as a chopstick)

Procedure:

- (1) Cloning: Take an appropriate amount of Impression Powder and the corresponding ratio of water (approximately 1:3 ratio of Impression Powder to water) and mix them in the container. Quickly stir with a mixing stick (do not exceed one and a half minutes of stirring time). After thorough mixing, place your hand (foot) into the paste. Do not shake at this time, and maintain until the Impression Powder solidifies.
- (2) Demolding: Approximately 4 minutes after the Impression Powder solidifies, it can be demolded (the solidification time of the Impression Powder is directly proportional to the water temperature; the actual solidification time will fluctuate due to room temperature and water temperature). Slowly shake the wrist to allow air to enter and separate the hand (foot) from the gel. Then slowly remove the hand (foot) from the gel. This step is crucial for the success of the entire cloning process, so extreme care and slow movements are necessary.
- (3) Casting: Take an appropriate amount of Casting Powder, add a suitable amount of water (the ratio of Casting Powder to water is 1.5:1, with a consistency that allows it to flow smoothly; do not add too much water), and mix thoroughly. Pour the mixture into the cavity of the gel mold. When pouring the Casting Powder, be sure to pour slowly and continuously shake to avoid air bubbles getting trapped inside.

- (4) After about 1 hour (the initial setting time is 15 minutes, so be careful when demolding), the mold can be demolded. Carefully use a hard card-like tool to gently pry open the gel, and remove the hand or foot mold. Please be extremely careful.
- (5) After the model is completely dry, you can apply gold or silver paint to it and then use glue to attach the model to the base.

Reference for Quantity				
	Single Hand		Single Foot	
	Impression Powder	Casting Powder	Impression Powder	Casting Powder
Birth-3 months	60g with 160ml water	80g with 50ml water	80g with 200ml water	100g with 70ml water
3 months-1 year	100g with 250ml water	150g with 100ml water	150g with 400ml water	200g with 130ml water
2-4 years	150g with 400ml water	200g with 130ml water	200g with 500ml water	250g with 250ml water
5-12 years	200g with 500ml water	250g with 160ml water	250g with 600ml water	300g with 200ml water
Adult Single Hand	Approximately 400g Impression Powder with 1200ml water		800g Casting Powder with 500ml water	
Adult Double Hand	Approximately 600g Impression Powder with 1800ml water		1200g Casting Powder with 800ml water	

Tips and Tricks:

- (1) The container size should be appropriate; too large will cause the Impression Powder to be insufficient, while too small will cause the hand (foot) to touch the edges of the container.
- (2) Before cloning, you can apply some Vaseline on your hand (foot) to make demolding easier.
- (3) The solidification time of the Impression Powder is directly proportional to the water temperature; the higher the water temperature, the faster the solidification. It is recommended that the water temperature be between 25-30 degrees Celsius. If the water temperature is too high, the Impression Powder will solidify quickly, causing uneven mixing or premature solidification before the hand (foot) is placed.

- (4) When making baby hand and foot molds, it is recommended to do so when the baby is sleeping. Have the father hold the baby while sitting in a chair, and the mother can crouch down to operate.
- (5) After the Impression Powder solidifies, extend the retention time as much as possible to improve the cloning effect and the toughness of the gel, making demolding easier.

Solution for Removing Bubbles on the Finished Product:

After the model is formed, some uneven small bubbles may appear on the surface. The main reason is the air trapped between the printed mold and the colloid when the mold is printed. When there is a small amount of air not removed between the contact surface of the printed object and the solvent, bubbles will be produced.

For protruding bubbles: Use a probe or small knife to directly remove the bubbles. Larger bubbles need to be carefully removed slowly or can be polished with sandpaper.

For sunken bubbles: Model clay repair method: Take a small amount of Casting Powder and add water (1:2 ratio) to make a very thin paste. Use a probe knife to fill the concave hole with some paste, then smooth it with your fingers (this method is suitable for repairing larger or just completed model bubble concave holes).