



Casting step by step

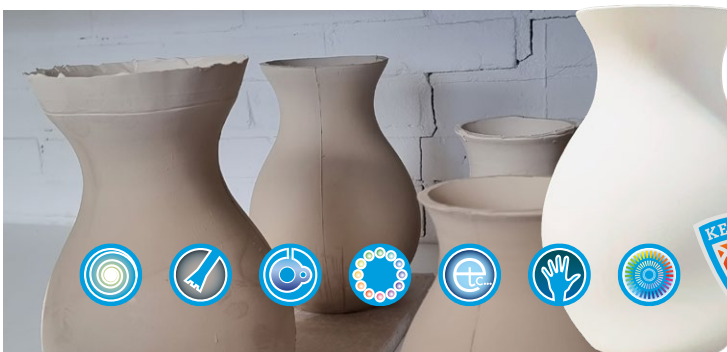
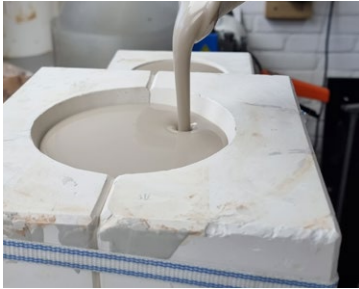


In this example we have casted vases with stoneware casting slip. The casting, - setting, - and drying time before the firing are all dependent on:

- ◆ The temperature and humidity of the space where the casting happens.
- ◆ The type of slip what is used.
- ◆ The thickness of the product.
- ◆ The age of the mold and how dry the mold is.

The steps of casting a mold:



1. Make sure the mold is dry so the cast absorbs the moisture of the clay.
2. Slip / porcelain of the right consistency.
3. Slowly pour the slip in the mold, this way the clay can find its way and no air bubbles will form.
4. The setting time of this vase is about 1,5 hour. This is also visible at the edge of the casting sleeve where the slip dripps and the edge thickens. The setting time differs per mold, the environment and how thick/thin you wish the product to be. It also changes per slip sort. Casting porcelain had a clearly shorter setting time than clays.
5. Slowly pour the slip out of the mold, without 'gurgling'. With some molds there is a risk the slab of the wall can come loose if it's poured out too fast. This creates a vacuum. With this example of the vase it's unlikely to happen.
6. After pouring out the slip, leave the mold upside down to let the last slip drip out.
7. How to take out the product again depends on the mold, environment, kind of slip and the thickness. With some molds there can appear some cracks due to shrinkage to edges in the mold that can hinder the shrinking of the product.
8. Removing the cast can be done immediately when the product is taken out of the mold or when it is still leather hard. The edge and seams can at this time also be smoothed with a sponge. Use the sponge only for these spots and don't use it on the entirety of the product, this causes the clay to close of making it harder for the glaze to attach.
9. Firing the product happens when the product has dried properly. This, again, depends on the thickness of the clay and the environment.
10. Leave the mold to dry and remove any left over pieces of clay. Make sure not to use sharp tools on the mold to avoid damage. Store the mold in a dry place so it is ready for use.





Setting times of our casting slips and porcelains (cast in the mold DM147)



Casting slip / porcelain	Height at casting	Height after 10 min setting time	Height after 15 min setting time	Height after 20 min setting time	Edge thickness after 10 min pouring out	Edge thickness after 15 min pouring out	Edge thickness after 20 min pouring out
KK500 	132 mm	125 mm	126 mm	126 mm	2.6 mm	2.8 mm	3 mm
Vingerling K150	132 mm	126 mm	126 mm	126 mm	2.4 mm	2.8 mm	3.2 mm
Vingerling K153	132 mm	124 mm	124 mm	124 mm	2.3 mm	2.6 mm	2.8 mm
Witgert 10	132 mm	124 mm	122 mm	122 mm	4.7 mm	5.6 mm	6.3 mm
Witgert 11	132 mm	125 mm	124 mm	124 mm	2.9 mm	3.4 mm	3.9 mm
Witgert 12	132 mm	123 mm	123 mm	122 mm	4 mm	5 mm	6 mm
Witgert 116	132 mm	124 mm	124 mm	123 mm	4.4 mm	5 mm	6 mm
PK155 	132 mm	124 mm	124 mm	124 mm	5.1 mm	6.3 mm	6.5 mm
Witgert 001	132 mm	123 mm	123 mm	123 mm	4.9 mm	5.8 mm	7.2 mm

