

VULCAN

Rubber Mould Vulcanising Method

Step 1

Preheat mould can and both mould halves in your oven to approx 15-20 degrees C. This will help soften the mould rubbers and make them easier to work with. This stage is not required when making a silicone mould as silicone is inherently softer and easier to work with anyway and due to low vulcanisation temperature you do not want to start the process prematurely.

Step 2

Remove from oven once preheated and cut a small vee (approx 5mm) out of both mould halves on the circumference this is to allow for trapped air to escape once clamped.

Step 3

Dust the bottom and top of the mould can at this stage with french chalk. This is a release agent and will stop the vulcanised rubber sticking to the can when cooked.

Step 4

You can either now place the bottom half of the mould in the can and continue placing patterns etc whilst in the can or you may find it easier to work on the mould directly on your workbench. If using our sprue former place this and the center plug in the center of the mould remembering to apply french chalk to it first. Place your patterns/masters equally around the mould remembering to bear in mind balance and equal spacing. Depending on the size and shape of your patterns some cutting away of rubber and/or building up of rubber may be required to seat and support your patterns and ensure your desired parting line.

Step 5

Once you are happy with the placement of your patterns place the bottom half of the mould into the mould can. Now place acorn nuts around the edge of the mould 10 or so should suffice these are important as they are used to register the mould to the top half.

Step 6

Now take the top mould half (with the pour hole in the center) and apply a light dusting of french chalk to it all over and place it carefully in the mould can pressing it carefully around the edges and around the center plug.

Step 7

Take your Vulcan lid and place it onto the studs and carefully press it down by hand making sure it goes down nice and even. Screw the hand clamps on and begin closing the mould. Take care to clamp evenly all around and tighten all six clamps until they are tight. It is important at this stage that the lid of the can does not fully seat onto the base, if it does go to the base you may not have enough pressure on the mould in this case you need to remove the lid and apply a mould can shim and then try again. Ideally you are looking at leaving a 2/4 mm gap between the base and lid.

Step 8

Now place the entire assembly in your oven and vulcanise using the vulcanisation data.

Step 9

Once cooked remove the can or turn off the oven and allow to cool. You may open the mould can whilst hot but remember everything will have expanded and the clamp bolts will be very tight so we recommend allowing to cool before opening.

Step by Step Vulcanised Mould Making Guide Part One