

Ramming Sand And Preventing Drop Outs

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Ramming is something that you will have to develop a feel for over time. Not enough and the sand will fall out of the flask. Too much and you will get surface imperfections caused by gas not being able to escape into the sand.

One thing I have found helpful is to ram using a tool with serrations on the surface. Actually I use a root beer bottle that has a radial pattern of wedge shape protrusions on the bottom. This helps the next layer of sand lock onto the rammed layer. If the surface is hard and smooth after ramming the next layer might have a problem bonding to it.

It's best to ram carefully around your pattern so as not to jar it, but still ram it tightly enough so the sand won't crumble away when the pattern is pulled. I will ram the following layer rather tightly. Subsequent layers get a lot of sand each time, so the material isn't packed as tightly when it's rammed. I overfill the last layer to give me a hump to strike off level with the flask.

If you find that you are getting dropouts consider adding ledges around the interior of your flask. Commercial flasks will have these cast in or flanges bent in on the top and bottom edges. For really large flasks gagers (bars running across the flask near the pattern) will help to hold the sand in. The gagers can rest on the ledges of the flask. If your flasks are made of wood you can hammer in nails in a line to help hold the sand in place.

It's also a good idea to dust your pattern with parting *before* placing the flask on the board. Even a light dusting of parting will weaken the bond of the sand to the flask.