

## Using the Puffy Mandrel to Create Large Hollow Beads

1. While holding your finger over the hole at the undipped end of the mandrel, dip about 1/3rd of the mandrel in the bead release. (Although any bead release will probably work, best results have been achieved with Dip-n-Go Sludge, Sludge Plus or FPI bead release.)
2. After dipping, and before placing the mandrel upright to dry, gently puff air into the mandrel to clear the hole that is pierced into the “business end” of the mandrel. Ideally, the pierced hole will open but the end of the tube will still be plugged with bead release. If the end of the tube happens to open in addition to, or instead of the pierced hole, just dip the very tip of the mandrel one more time, then set it upright to dry a little. (Standing these mandrels in sand or Styrofoam is a problem, they are so skinny they tend to get plugged up, so stand them in a piece of 2 X 4 wood or other inert object into which you have drilled some holes.) If you feel the pierced hole has closed up with bead release, when it is pretty dry you can re-drill the hole with a skinny wire – the port cleaner for a Minor Burner is the perfect size.
3. This next step can be summarized as “build a hollow bead around the pierced hole using the coreless disk method, making the sides thicker than usual.” But in case that doesn’t mean much to you, what follows is an elaboration of that explanation.
  - a. Coil a disk of wound glass on either side of the pierced hole. Rather than making the thin disks typical of hollow beads, endeavor to make the disk of a uniform thickness about the width of a small donut shaped spacer. For starters, the disks should be about  $\frac{3}{4}$ ” apart, with the pierced hole in the middle. (When you have had some practice, try some REALLY big beads!)
  - b. When the disks are about  $\frac{1}{2}$ ” in diameter, begin coiling them in the direction of one another, meeting, more or less, in the middle and making sure that there are no little air holes in between the coils. So far, this is no different than any other hollow bead.
  - c. Keeping your palm or finger gently over the hole in the undipped end of the mandrel, slowly rotate and melt the bead, so that the coils become solid and it begins to look like a hollow bead. (Please don’t press so hard that the mandrel cuts into your finger, it CAN happen!!) Even though you are blocking the opposite end of the mandrel, so that air is not escaping, the bead will collapse inward a little – don’t panic! Don’t rush this part, heat it gently and slowly and you won’t lose control, because for the next step you need to have a strong heat base evenly established throughout the bead.
  - d. Now for some fun. Keeping the bead parallel to the table, and slowly rotating the mandrel to keep the bead on center, bring the undipped end up to your lip, blocking that end with your lip (or tongue, but that sounds yucky, and again please don’t press too hard!). It is actually pretty easy to keep the bead centered in this step because you are looking at it down the length of the mandrel so you can see that it’s symmetrical around the mandrel and you are remembering to keep it parallel to the table.

- e. Don't rush this step. Blocking the undipped end of the mandrel with your lip, slowly rotate the mandrel until the bead is barely red hot. Next, put a gentle puff of air into the tube, about what you would need for CPR to a mouse. Recover the end and you will see the bead begin to inflate (yes you are still rotating it and keeping it parallel to the table). You may have time for a second puff, if the glass has not yet cooled to the point where it has lost all its glow.
4. Put the bead in the back flame and admire your results. If you are a beginner, perhaps you want to heat the bead and repeat the puffing steps again to get it bigger or more symmetrical. IT WILL NOT WORK TO HEAT AND PUFF OUT ONE PART OF A BEAD UNLESS YOUR DESIRED END SHAPE IS ASYMETRICAL. IT WILL NOT HELP YOU ROUND UP THE BEAD!
5. The bead is finished and/or ready to be decorated. It is very hard to do flush decorations since the heat of melting in the decorations can deflate the bead. If you are trying it, remember to put your finger or palm over the undipped end. These beads are great for flattening or squaring with marvers or mashers. Have Fun!

#### **Troubleshooting Tips:**

- If the disks are fracturing or blowing apart while you are making the bead you are not keeping them warm enough and/or you are adding very molten glass on top of relatively cool glass.
- If you inflate the bead with a puff that blows a hole in the bead either you have not gotten an even heat base prior to puffing (and the hottest spot has become a hole), the entire bead was too hot, or you don't understand that a puff like CPR to a mouse is a very, very tiny puff of breath!
- If the bead doesn't become symmetrically round (a common problem) try heating it more slowly before the puff shooting for a uniform heat base. If the bead cools unevenly (you see the color returning in one spot way ahead of the rest of the bead) this is a sign you don't have an even heat base.

Thanks for trying our puffy mandrels, please email me with any problems or questions, Jeri Warhaftig, [JeriBeads@aol.com](mailto:JeriBeads@aol.com)