Encasing Boot Camp

Lampwork Glass Tutorial

By Mary Lockwood

Encasing can be one of the most difficult lampworking skills to master. It can produce beautiful effects, but it is not always the most exciting thing to learn. Hard work, hours of practice and good guidance are the keys to mastering encasing; there are no shortcuts.

Thank you for choosing my tutorial to help you in your quest for gorgeous, sparkling encased beads. This tutorial is based on my popular Encasing Boot Camp Workshop. We'll be practicing on plain bases to allow your focus to remain on the encasing and to lower your stress level.

Please read the entire tutorial through once before beginning to work. That is important!

Necessities and Materials

GLASS & MATERIAL

Clear Glass Rods in several sizes:

- Commercially prepared or hand pulled stringers
- 5mm rods
- 8-11 mm rods

A small assortment of short glass rods in opaque and transparent colors for making practice base beads

EQUIPMENT & SAFETY

Standard Safe Studio Requirements including but not limited to:

- Fire Extinguisher
- Good Ventilation
- Lampworking Safety Glasses
- Propane Outside
- Oxygen Tanks chained securely
- Bowl of water on work surface
- ***You are responsible for your own safety!**

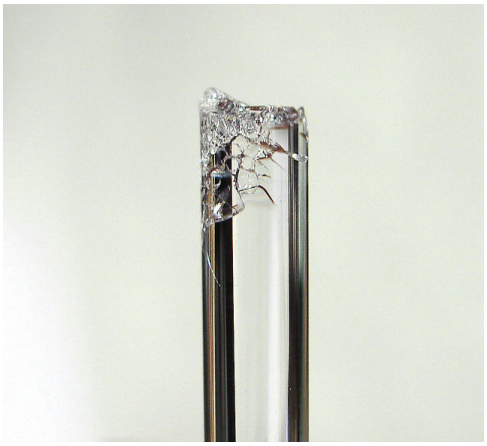
Tools and equipment:

- Mashers
- Graphite Marver or paddle
- Tweezers
- Hot Plate or Warmer
- Bent Steel rake or poker
- Thin Brass or steel hand tool for pushing hot glass

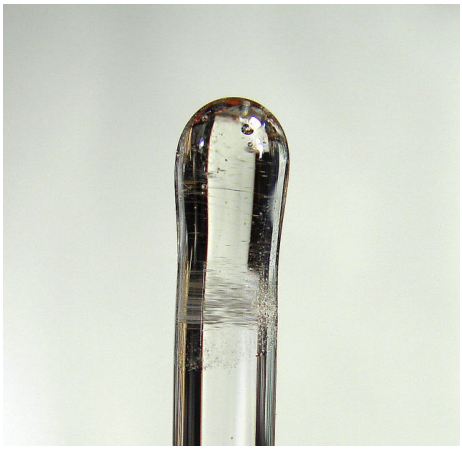
Clear Glass…

…is not always as clear as you think. Cracks, rough edges, bubbles and surface scratches can lead to flaws and scum in your encasement layers. Encasing is a lot of effort and it's worth it to make sure your glass is properly prepared.

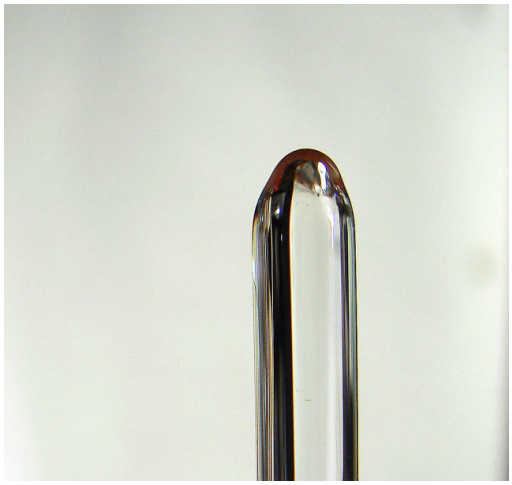
Wash your canes in hot soapy water, rinse thoroughly and dry with a lint free cloth. Some people wipe their canes with alcohol (don't do this near your torch- alcohol is flammable); others put them through the dishwasher. I've done all those and still favor the hot soapy water method. Once the canes are clean, you can inspect them for damage.



1- This is a typical sight. Rough cracked cane tips come from being thermal shocked, handled roughly, cut with nippers or dropped. If you were to melt this shocky tip it would result in bubbly, scummy glass. Not pretty.



2- You can see in this image the flaws, bubbles and other ugly bits that would be on your bead if you didn't remove the rough tip before using the cane.



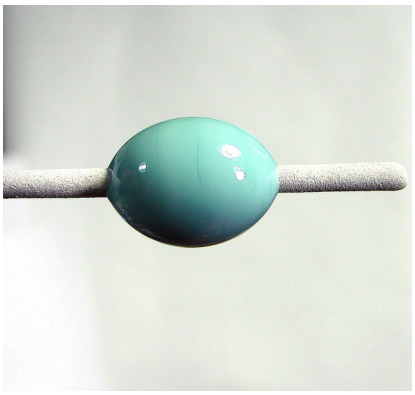
3- Remove the damage at the tip by melting it and tweezing it away. This results in a much cleaner glass to use for your encasing. Start off on the right foot- clean your glass.

4 **TIP**- If a cane is too damaged to use for encasement, save it to use as core glass for your more expensive colors of glass. Wrap your mandrel with the scummy clear glass, encase it in your expensive color and melt smooth. Your base will look like solid color but will save you money.

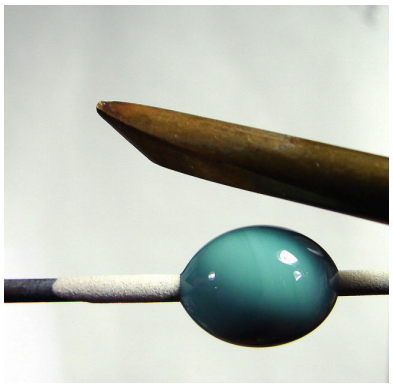
5- **TIP**- The smaller the diameter of your commercially prepared cane, the more obvious surface damage will be. For the absolute best clear glass, purchase large diameters of clear rod, wash them, preheat them in your kiln, use your flame and tweezers to melt and remove impurities and then pull them down to your desired diameter. This will always result in the most flawless encasing glass. Visit http://www.tumbleweedglass.com/videos.html to watch Steve Wright's awesome free video on exactly how to do this!

Method 1- Around the World With a 5mm Cane

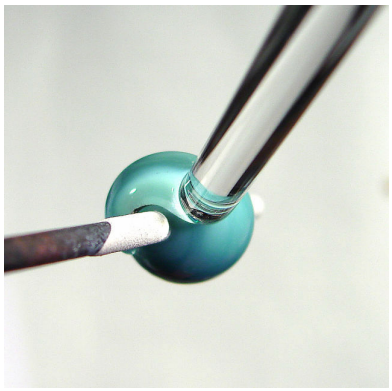
Starting off here with a very common method of encasing. This is used often because it is fast, it works well with many bead shapes and it is familiar. Flame position: The base bead is below the cone; the encasement cane is passing through the cone and onto the surface of the bead. **Crucial- keep the base bead out of the flame**.



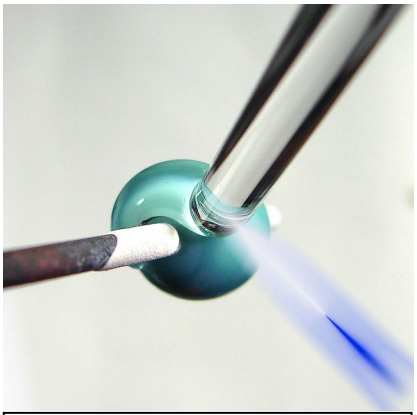
1- Begin with a simple oval base bead. It will be easier to get all the way to the mandrel if you don't have dimpled ends at this point.



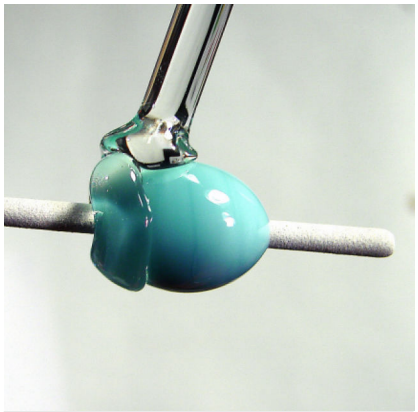
2- With any encasing method, your base bead needs to be relatively cool, what I like to call 'locked'. Tap on your base with a metal tool- it should make a clink sound.



3- Turn your mandrel to point away from you. It will improve your line of sight and let you get closer to the mandrel. Heat the tip of your 5mm clear cane to soften it then touch it to your base near the mandrel. Turn your mandrel to begin your first wrap.



4- This image illustrates your flame position. Base bead dropped below the flame, encasing rod passing through the flame. Take your time and allow the encasement glass to get very soft before pushing it onto the surface of the bead. Maintain this flame position. If your base bead gets too hot, it will smear and drag. Keep it out of the flame.



5- Once you've completed your first wrap simply continue around without stopping and make your second wrap. Maintain the same flame position and be sure to push the molten portion of the clear rod down into the channel formed where your first row of clear meets the base bead. Make sure the glass is soupy hot so less air is trapped between the rows of clear.

6- Continue wrapping clear around the base. On the last wrap, turn the mandrel toward you so you can see to get as close to the mandrel as possible. Maintain flame position. If your base is getting too cool, flash it briefly in and out of the flame to protect it. Smaller beads should be kept safe enough from the ambient heat of the flame and the clear glass.