

# Sea Turtles Four Ways

## Two Mandrel Wound Beads and Two Offhand Pendants

By Mary Lockwood

Thank you for your interest in my Sea Turtle Tutorial. There are four variations of construction in this tutorial, and I've also packed it full of useful tips that will make your sculptural efforts easier to accomplish and result in more stable finished pieces. Moving from a basic mandrel-made sea turtle, to building pre-made components, to your first foray into offhand work and right into more advanced construction this tutorial will cover all skill levels and grow right along with you.

Special emphases in this tutorial are heat control and correct joining of elements, as these are the two most important aspects of building structurally sound pieces.

**Please read the entire tutorial through once before beginning to work.**

### Necessities and Materials

#### GLASS & MATERIAL

5mm rods of 104coe glass:

**You can use whatever colors you like,**  
but the following are shown in the tutorial

Clear  
White pastel  
Medium Topaz or Amber  
Dark Topaz or Amber  
Opal Yellow  
Nile Green Pastel  
Transparent Dali silver glass  
Super Silver Michelangelo

Misc:

Raku Stringer (not mandatory)  
Size 1 coarse goldstone frit  
Size 00 fine frit or enamel in a sandy color  
Premade or purchased ocean themed  
murrini chips 3-5mm in size

#### 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  
**Respirator Mask suitable for powdered glass protection**  
**\*You are responsible for your own safety!**

Tools and equipment:

Mashers  
Graphite Marver or paddle  
Hot Plate or Warmer  
Your favorite hand tools for shaping



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# Fully Mandrel-Built Sea Turtle

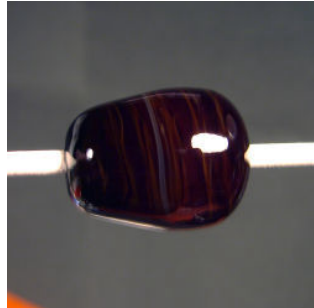
The most basic of the turtles covered in this tutorial will be within most lampworkers' comfort zones. All components and construction happen right on the mandrel.

If you are new to sculptural pieces this is a great place to start. The most important aspects of any sculptural work are heat control and stable joins. Be aware of frequently reheating your bead to protect it from thermal shock. Be sure that anytime you are adding new glass to a structure that the spot where it joins is smooth and without ridges or undercuts where the two come together.



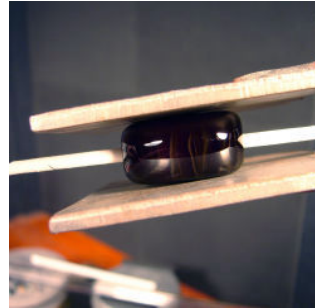
1- Set out:  
med. transp. amber  
clear  
size 1 frit in opaque or  
reactive color  
white  
dark trans. Amber

2. Preheat your dipped  
mandrel



3- Apply dark amber to  
mandrel in a short, fat  
cone shape about 1.5"  
long.

**\*I usually make the  
wide part of the bead  
be closest to the tip  
of the mandrel.**



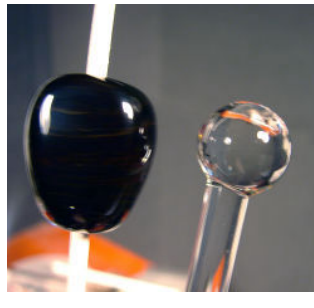
4- Mash with mashers  
or marver to form body  
shape.



5- This is what your  
turtle's body should  
look like at this point.

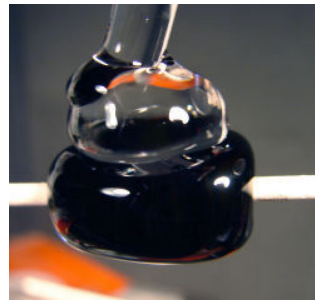


6- Begin a nice large  
gather at the end of  
your rod of clear.

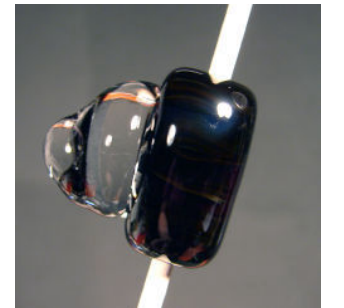


7- This clear gather  
should be about half  
the size of your base  
bead.

The larger you make  
this clear gather, the  
larger your turtle's  
shell will be.



8- Get your clear  
soupy hot then apply it  
as a large blob to one  
flat side of your turtle's  
body base.



9- Here is what your  
bead should look like  
at this point.

# Mandrel-Built Sea Turtle w/Pre-made Components

Having that mandrel as a sturdy handle can be comforting and familiar but when you step out of your comfort zone and begin to explore the world of offhand work a whole new set of doors will open for you. This turtle is a combination of both techniques to help you step over the threshold.

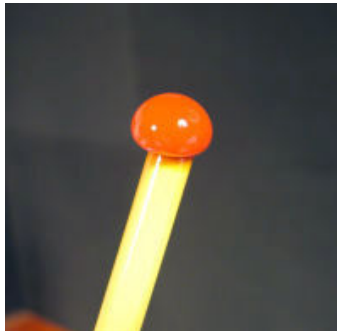
The benefits of making components, in this case the flippers and head, in advance are:

1. You can put more detail into the components because you are able to focus on them more.
2. You don't have to worry as much about your base thermal shocking while you fiddle with component construction.
3. Final construction is faster.



1- Set out the materials:

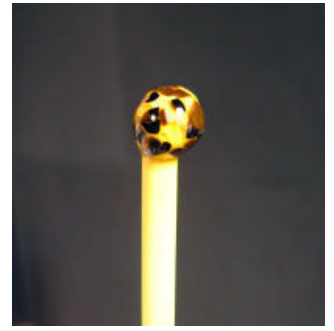
clear  
opal yellow  
dali transparent silver  
glass  
opaque green  
size 1 opaque or  
reactive frit  
5 clear stringers  
raku stringer



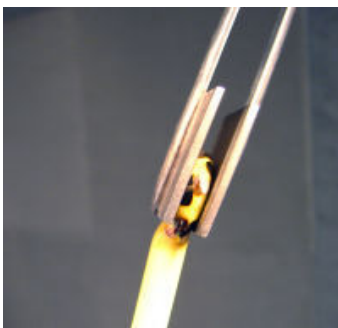
2- Form a gather the size of a chickpea or garbanzo bean at the end of your opaque green rod



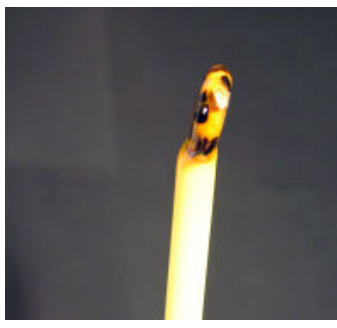
3- Roll your gather in the coarse frit and melt smooth.



4- This smooth frit covered gather will form one of the front flippers.

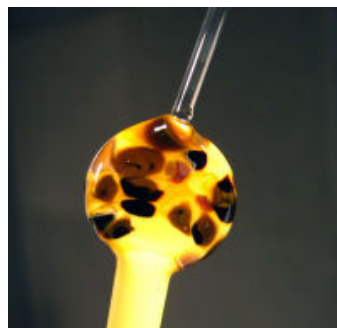


5- Use mini mashers to squish this gather flat into a paddle shape, sometimes called a lollipop shape.



6- Here is what your paddle should look like now.

Use gradient heat to heat this paddle just like you heated the flippers in the previous bead.



7- Preheat the very tip of one of your clear stringers and touch it to the edge of your paddle.

Pull straight out from the paddle.



8- When you feel the glass begin to stiffen, change direction while pulling the stringer to make the flipper curve back toward the green rod.