# How I built my Breezy pieces

### Segment Pro to start with

- I started with the Segment Pro software.
- My talent with this program is poor; I can't wait to get to the St Louis Symposium to get some better understanding of how this works.
- My goal was to get the roundish shape and the cut sheet for the main body of the piece; mission accomplished

|          |        |             | Maple 5  | 24 | 0.25" | 7.50° | 5"     | 3.6"  | 24    |            | .65     |    |   |              |
|----------|--------|-------------|----------|----|-------|-------|--------|-------|-------|------------|---------|----|---|--------------|
|          |        |             | Maple 6  | 24 | 0.25" | 7.50° | 5.3"   | 4.2"  | 24    | 199. and 1 | .69     |    |   |              |
|          |        | źd          | Maple 7  | 24 | 0.25" | 7.50° | 5.6"   | 4.6"  | 24    | 1 220      | ,73     |    |   |              |
|          |        | /sed        | Maple 8  | 24 | 0.25" | 7.50° | 5.8"   | 5"    | 24    |            | .76     |    | 1 |              |
|          |        | losed       | Maple    | 24 | 0.25" | 7.50° | 5.9-6- | 5.2"  | 24    |            | .79     |    |   |              |
|          |        | closed      | Maple    | 24 | 0.25" | 7.50° | 6"     | 5.4"  | 24    | The second | .79     |    |   |              |
|          |        | closed      | Maple    | 24 | 0.25" | 7.50° | 6"     | 5.5"  | 11/1/ | AA         | 11.19   | 24 |   |              |
|          |        | closed      | Maple 7  | 24 | 0.25" | 7.50° | 6"     | 5.5   | 24    | YIN        | A 14.49 |    |   | Martin State |
|          | 5      | closed      | Maple 13 | 24 | 0.25" | 7.50° | 6" //- | 5.4"  | 24    | 11         | 1/179   |    |   |              |
|          | 93"    | closed      | Maple Ma | 24 | 0.25" | 7.50° | 6"     | 5.37  | 24    | NA         | 1.19    |    |   |              |
|          | .785"  | closed      | Maple 15 | 24 | 0.25" | 7.50° | 6"     | 152-1 | 111   | IVI        | 11.79   | 24 |   |              |
|          | 0.771" | closed      | Maple    | 24 | 0.25" | 7.50° | 5561   | 5"    | 24    | Y          | .76     |    |   |              |
|          | 0.753" | closed      | Maple 17 | 24 | 0.25" | 7.50° | 5.7"   | 4.7"  | 24    |            | ·73     |    |   |              |
|          | 0.727" | closed      | Maple    | 24 | 0.25" | 7.50* | 5.5"   | 4.3"  | 24    |            | 189     |    |   |              |
| .8"      | 0.692" | closed      | Maple 10 | 24 | 0.25" | 7.50* | 5.3"   | ,3.9" | 24    |            | ,65     |    |   |              |
| 14.5"    | 0.65"  | closed      | Maple    | 24 | 0.25" | 7.50* | 4.9"   | 3.4"  | 24    | 1          | .59     |    |   |              |
| - in the |        | 1.1.1.1.1.1 |          | -  | 0.75" | 7 50  | 15     | 28"   | 24    |            |         |    |   |              |





## Let's make some rings

• I made up some rings; we all know how to do this. Segeasy sled was a big help. Thanks to Jerry Bennett! Notice the clean shop, lol!

• I have noted the ring number twice on each ring as my intent is to go to the bandsaw and split these rings. The black line on the rings is where I joined the halves together.

 I glued up two halves using Malcolm Tibbett's techniques. Much of my techniques are taken from his DVDs. I suggest anyone wanting to take up this segmenting invest in the first several DVDs; they will supply you with solid fundamentals that are tried and true!

• I marked the half lines because I am going to align these points on the vessel as they were slightly sanded at these points. I am not sure this was important but the small things make for a better looking piece (thanks Tom Lohman for that lesson)!

### Vessel ready for Breeze

• I avoided taking pictures of the basic construction. I did make this in two halves so that the interior could be easily turned. Both halves were mounted on glue blocks on faceplates. Once turned and joined together, the face plates/ glue blocks were parted off.

• I left the bottom of the vessel intentionally thick for a reason. The flat section of the vessel will change later so that it is not square to the form.

• You see the piece mounted in my vacuum chuck. This is not a required tool but a handy one to have for doing remounting work. I got mine at Frugal Vacuum Chucks (or something like that, lol). The green tape is used to protect the finished surfaces from the wear and tear of the cup suction. BTW, I learned this the hard way!



#### Neck fabrication

• I made up some smaller rings for the neck. The segment count of the body was 24 pcs per ring. For the throat, I went 12 pcs.

- The rings were made up and split on the bandsaw similar to the body rings.
- These rings are held together with double stick tape. I am going to turn these 5-6 rings at a time to round them up. This takes very little time; they will require more work later.





### Needs to be hollow

• This is a simple process of drilling out the rings and enlarging slightly with a gouge. I didn't want to get too large as the exterior shape is still TBD.

#### Taping

• I found some double stick tape online that came in a 12" high roll. My thought was to cut my own thickness rolls of tape with my bandsaw. That was a bad idea as it gummed everything up and wasted my carbide tipped bandsaw blade. This roll is now 10" and will remain that way, lol!

• I made a sled for my drumsander (See Malcolm Tibbett's DVDs) and beveled about half my rings. I only beveled one side as opposed to both. I kept the segments in the same direction here because I am going to add another ring between each of these beveled rings.

• This process could also be done on a disc sander for those without a drum sander. Once beveled, tape is removed.









## Assembly

• I have about 90 degrees worth of bend. I am winging this; no prior design. Without a prior design, I have little chance of screwing this up. I am not sure how I would design something that is constantly morphing inside my own head.

- I did mark the thickest part of the ring so that I could somewhat control how the neck twists and bends.
- I start gluing beveled pieces to pieces I have turned on the lathe. The beveled pieces could have been turned prior to beveling them but on the original piece that I made, the amount of shaping work that needs to be done from this point on made me want to try this way, this time. It worked fine.

• It is at this point that I brick lay my rings, they align somewhat OK. You can image the challenge so I tried my best for strength (Not very Malcolm like but very Russ Braun). As I glued these up in pairs and then two pairs, I took them to the disk sander and did some rough rounding of the beveled pieces to get them roughly shaped up.





### Assembly complete

- I made the throat of the vessel separately and glued everything up. The picture with my hand in it has it before mounting it to the vessel. I did these final glue ups with a rub joint and held in place with my hand. It doesn't take long to adhere well.
- You notice in the picture that the base of the vessel is no longer square to the form. I captured no pictures of this. Unfortunately I had to use the disk sander to make a new flat spot on the vessel as I could not get my vacuum chuck to hold the body to turn. I am going to work on that technique.
- When I made the body. It was on a faceplate. I parted that off and with the vacuum chuck, rounded the base of the vessel as it is seen. All of the throat segments have been drilled out to make them hollow. Zero time was spent on aligning them on the inside section that will never be seen.
- Notice the lines on the segments that helped me twist and bend the way I wanted.







### Ugh time

• I have a high speed grinder that I start the process of cleaning the throat up. I have point A on the body of the vessel and point B at the top. This is a process that improves every time I do it but takes up a lot of time and gets you pretty dusty.

• Please note the organized and clean shop in background. If you leave the drawers open on your tool box, you can have more things to clean later!

• Once the shape is close to how I want it, I took time to clean up all the grinding marks, hand sanded and used a small hook and loop sander at low speeds on the grinder. It cleaned up nicely, the shape worked for me and the end result was a lot of fun and a wonderful gift exchange piece.





### The second piece

• This is a project that you can do. They get easier the second and third time. I find them enjoyable to look at.

• Give it a shot, there is no real right way to do them and the reward factor is high; both external and internal.

