

**December 21, 2019** 

## **Making Dizzy Bowls**

## John Kowalchuk



LIWA is a chapter of the American Association of Woodturners. Our purpose is to foster a wider interest and appreciation of woodturning on Long Island and in the Metropolitan area. We generally meet on the third Saturday of each month from 9:00 AM until Noon at the Old Bethpage Village Restoration, Bethpage, L.I. See listing below for 2019 scheduled meetings:

#### Upcoming Meeting Schedule for 2020. All meetings run from 8:00 am to 12 noon

January 25 Marc Deitrich – Casting and turning a resin vase - \$25.00

Feb 22

Mar 21

Apr 25

May 16

Jun 20

July and August Dates TBD

Sept 12

Sept 26 (yes, instead of Oct)

Nov 28

Dec 19



President Les Hoffman (516) 431-2280 Vice President Peter Richichi (631) 218-2481 Secretary/Newsletter Barry Dutchen (516) 443-5342 Treasurer Joe DeMaio (516) 766-5189

Thanks to Bob Fentress for taking photos.

#### **Summary of meeting**

After a slight delay in starting, due to being locked out of OBVR, we set up the tables and lathe.

Les started the meeting with several announcements: The presenter for the Jan 25<sup>th</sup> meeting will be Marc Deitrich, who will be demonstrating casting and turning a resin vase. The fee will be \$25.00 and includes lunch.

There is a new AAW website, easier to use. You will need to enter your password again.

The Meadowlands WW show is March 6 - 8 and comes highly recommended.

AAW Symposium will be in Louisville, June 4-7. There is a \$25 discount if we have 10 or more people attending. There was a short discussion (reminder) that we should consider video conferencing with presenters who would normally be too expensive or unavailable to us.

As per By-Laws, a vote was held for Board Members for 2020:

President: Les Hoffman

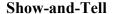
Vice President: Barry Saltsberg Secretary/Newsletter: Barry Dutchen

Treasurer: Joe DeMaio

Ken Deaner will succeed Steve Fulgoni as Chair of our Board.

#### Treasurer's Report

Joe reported a balance of \$4333.69

































MARKET A

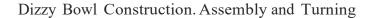
## **Main Event**

Dizzy Bowl Construction, Assembly and Turning

Presenter: John Kowalchuk

Ed Note: The notes that follow were supplied by John to all those who attended this demonstration.

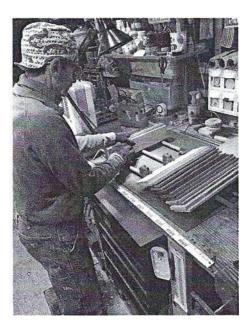




This project requires the use of a planer, band saw and or thickness sander.

Steps to constructing and turning a vortex or "dizzy bowl"

- 1. Design bowl shape by drawing exact height, width and bowl thickness to scale on graph paper.
- 2. Include outside and inside dimensions for each ring.
- 3. Create a simple shape for your first dizzy bowl-one with relatively straight lines.
- 4. Select multi-colors for wood selection (walnut, wenge, purpleheart, bubinga for darker shades, maple, cherry, birch for lighter. Dyed or traditional veneers may be included also.
- 5. Dimension boards to approximately%" to 1/8" in thickness. This variation adds to the visual effect of the vortex bowl. You will need boards that are 3" wide and slightly longer than your overall maximum bowl diameter. For example, a bowl with an eight inch rim will require a block totaling 9" X 9 X 3".
- 6. Arrange woods in a pleasing order.

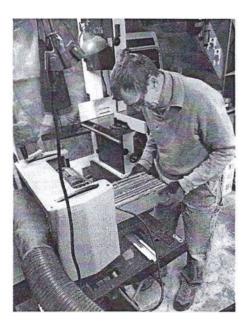


- 7. All boards must be flat and true so they can be glued together with no gaps.

  Titebond green is waterproof and is my preferred type as it has more open gluing time than the yellow or red varieties. Use enough clamps to insure a sound bonding.
- 8. Glue only 3-5 boards together at one time so no board slippage occurs. Let each glue-up dry at least 30 minutes in a warm shop.
- 9. After all boards are glued together to form your block, let the block dry clamped overnight



10. Plane top and bottom of block.



11. Trim ends so block can stand on end to band saw into panels.12. Slice the block into at least 6 equally sized panels approximately 3/8"-1/2" thick. Each of these panels will be a slice of the original large block each containing all of the board colors.

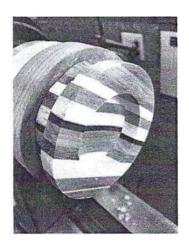


- 13. Flatten each panel side by removing any band saw marks with planer or thickness sander. Check flatness with a straight edge.
- 14. Referring to your graph paper design, use dividers to draw a circle of the largest ring on the first panel as per your bowl plan. You should have one sheet of graph paper for each panel to use as your dimensional guide for transferring the rings sizes to each panel for cutting. Be sure to allow space for the kerf. You will get 2-3 rings from each panel. (See copies attached at the end of this handout.)
- 15. I used a jigsaw to cut out each ring by first drilling a hole in the kerf that is slightly larger than the saber saw blade. Another method of cutting each ring is to first cut the entire whole block in half and then draw each ring by putting the two block halves together. This allows you to cut semicircles on the band saw. You will then glue each half ring together when adding the rings to the bowl. It results in another glue joint in the bowl. I have used both methods and find that whole-ring method using a jig saw, although more time and another step, results in a cleaner looking ring that enhances the overall appearance.
- 16. Another method to cut rings from each panel is to use a thin parting tool. The kerf is much less and is more accurate than cutting a circle with a saber saw. This can be done by mounting a panel mounted to a faceplate that is true and flat (I've used melamine but plywood or MDF will suffice. The panel is affixed to the board with double face tape and centered by using the tailstock with a live center. After cutting through the panel ring, the double face tape will keep the cut ring in place. Stop the lathe, remove the sectioned ring and cut remaining rings in the same manner.

You now have rings in graduating diameters overlap both inside and out. Stack each ring in graduating diameters rotating each ring slightly clockwise or counter clockwise from first ring to last. You now will see the vortex design. Experiment with different amounts of rotations to see which amount of effect you like.

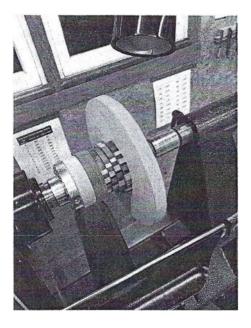


- 17. Mount and true a waste block to a faceplate. Use a round nose scraper or sheer scrape with a bowl gouge to be sure the waste block is flat. Use a straight edge to check flatness.
- 18. Select a compatible wood for the solid base. This wood base could be from a species of wood used in your multi-colored block or some other of your choosing.
- 19. Mount and center the trued base to the waste block. For consistency and appearance, the rings should be the same approximate height except for the base which I make 5/8" to Yz" high. This extra height is important because the first ring needs to be blended to the base. You will remove a small amount of wood from the base when making a smooth transition. Use the lathe as a press and allow the base and waste block to dry fully. Except for the base ring and rim, I've turned all other rings to a height of 3/8".



Too.

- 20. True the exposed side of the base to accept ring #2.
- 21. Center and glue ring #1 to base. Clamp the two together. You can use the tailstock to apply gluing pressure or place the assembly on the workplace with a weight. I use a spare chuck for this when not using the lathe.



- 22. True exposed side of ring #1and size to desired height as per your graph paper drawing.
- 23. Now comes the fun part as you begin to create the vortex effect. Again as per your design, rotate ring #2 slightly to the right or left. You will continue rotating every ring the same amount in the same direction. A variation of this is to rotate the rings until the midway point of the bowl and then reverse direction to create a "S" pattern. This pattern was used on one of the bowls that I brought for show and tell.
- 24. To repeat, as each larger ring is added, the surfaces must be flat and true to insure no gaps between rings. Note: certain woods have varying densities and the grain may raise slightly above the others so recheck for flatness before gluing.
- 25. After every 2-4 rings are glued together, turn the inside corners off to the predetermined width as per your diagram. You can sand to final grit as you will not be coming back to that area. I use an inside caliper and refer to the graph paper drawing to measure the interior dimension. Turn each ring to that measurement. It's easier doing this at this point rather than waiting until all the rings are glued together and you need to reach way in with the tool to trim off the corners.
- 26. WORKING ON THE OUTSIDE Using a light touch, remove the outside corners using a bowl gouge or tool of choice such a scraper. To stabilize the bowl, you may utilize the tailstock to press a flat board against the rim or insert a cone center inside the bowl.

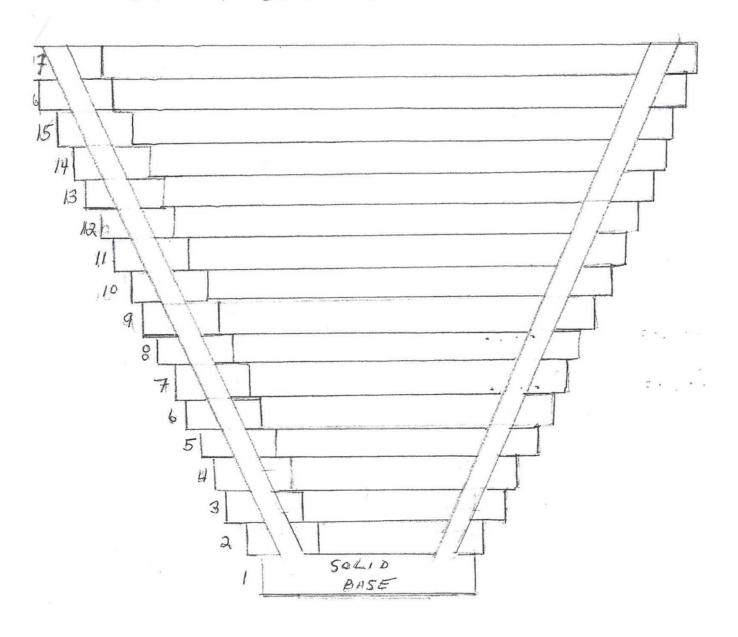
- 27. To check the wall thickness, measure the outside diameter of each ring with calipers as you remove the corners forming the outside bowl shape. You can again refer to your drawing for the proper outside diameter of each ring to achieve the proper wall thickness.
- 28. As a design consideration, you can add a rim to the bowl for visual effect. This can be a segmented ring construction or a solid piece of wood similar or same as the base.
- 29. When the outside is turned to size and sanded, apply finish to entire bowl.
- 30. Remove from faceplate, reverse and finish the base using cole jaws, jam chuck etc.

I know that this project sounds time consuming (which it is) and has many steps, but it is a fun endeavor that will have your family and friends asking you "How did you do that". If you have any questions that weren't answered during the demonstration, feel free to call or come over and we will get them answered.





# DIZZY BOWL SCALE DRAWING

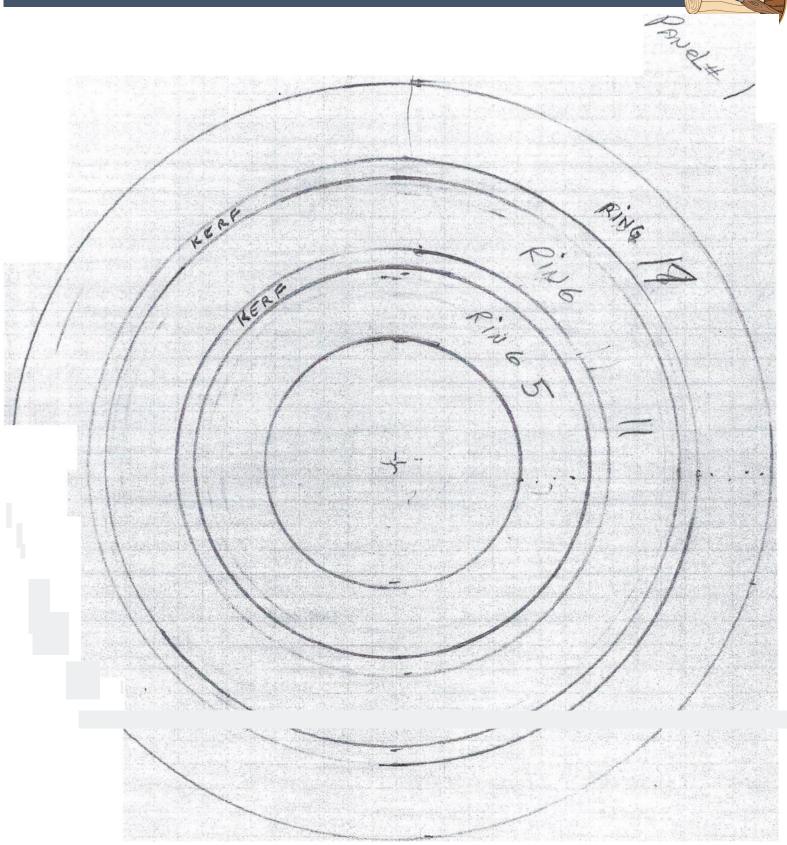


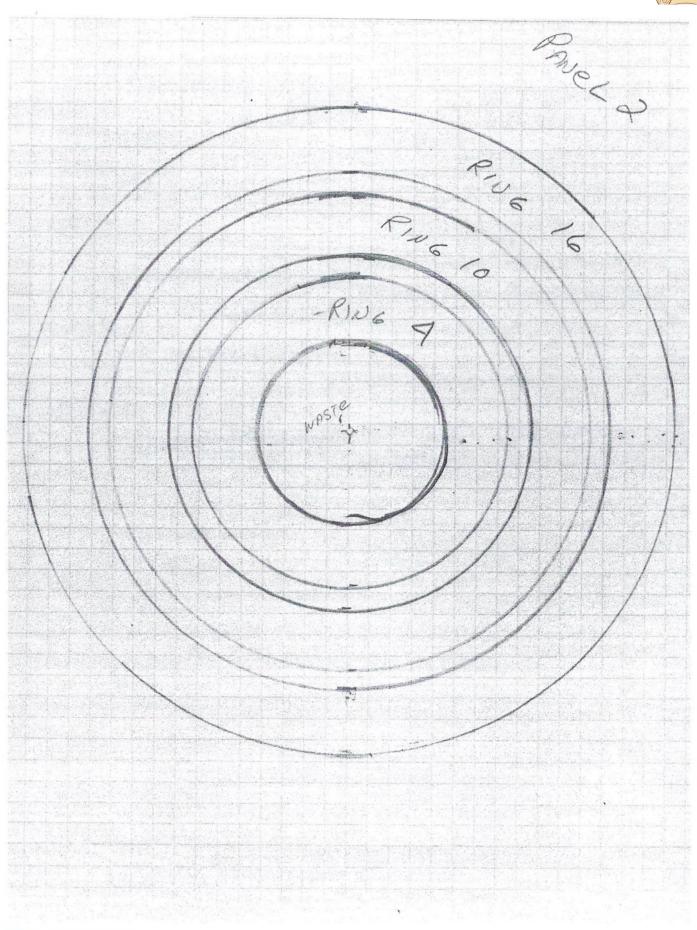


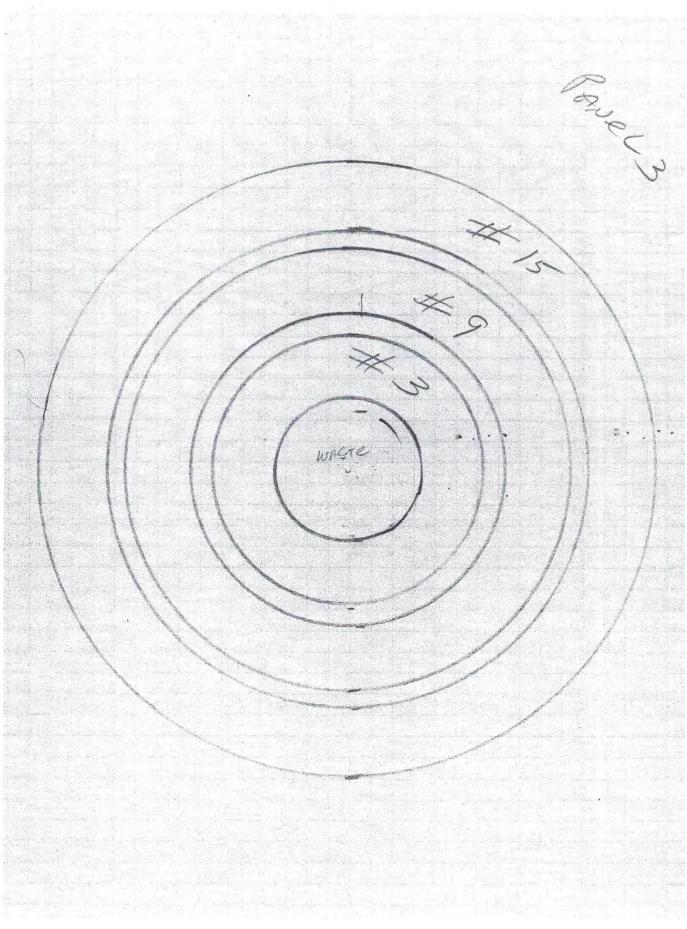
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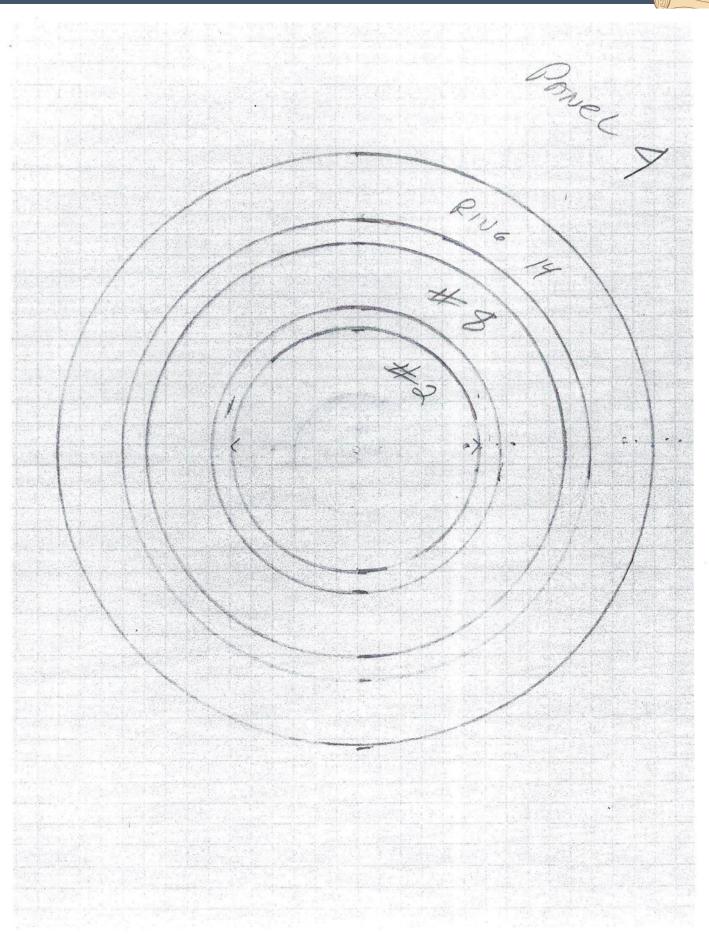
	DIMENS	10 10	ď
RING #	Diameter dring	WIDTH	Height
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16	7 5/8		
15	7 1/4"	The second secon	1
14	70"	The second secon	
13	6 518"	D. Calabara ( ) (c)	
12	6 3/8"		
11	600"		
10	5 5/8"		
9	5 1/411	4	
8	47/8"		des
7	4518"	and the state of t	
6	4 3/8"	44 m	
5	4.0"		Principal Princi
4	3 5/8"		A CONTRACTOR
3	3 1/411	V	7.64
ત્ર	27/8"	3/4"	3/8/1
1	21/2"	SOLID BASE	1/2"

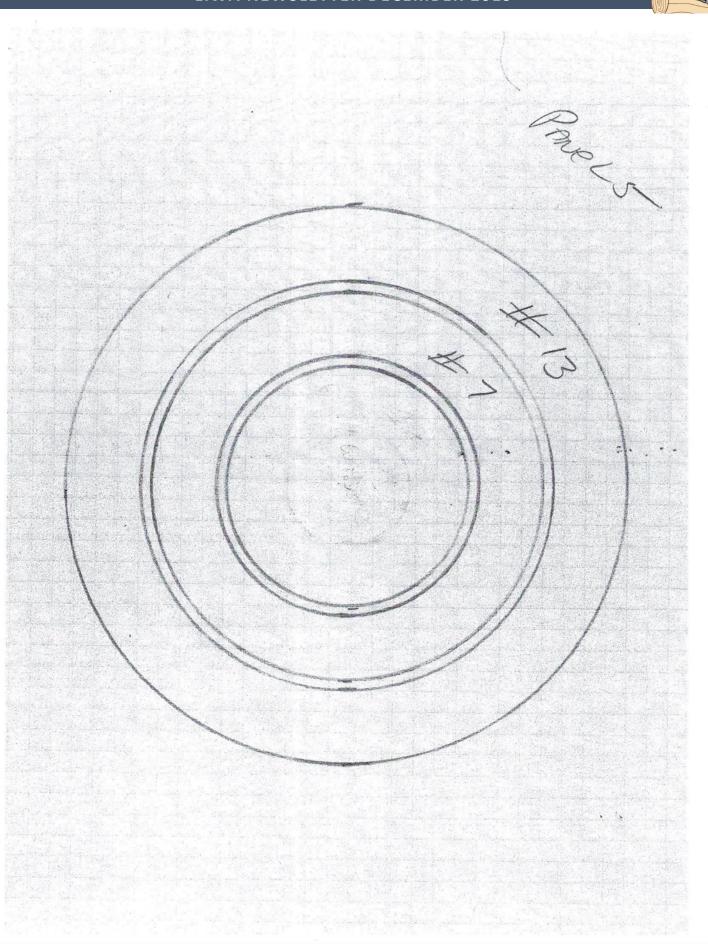
5/16" WALL Thickness

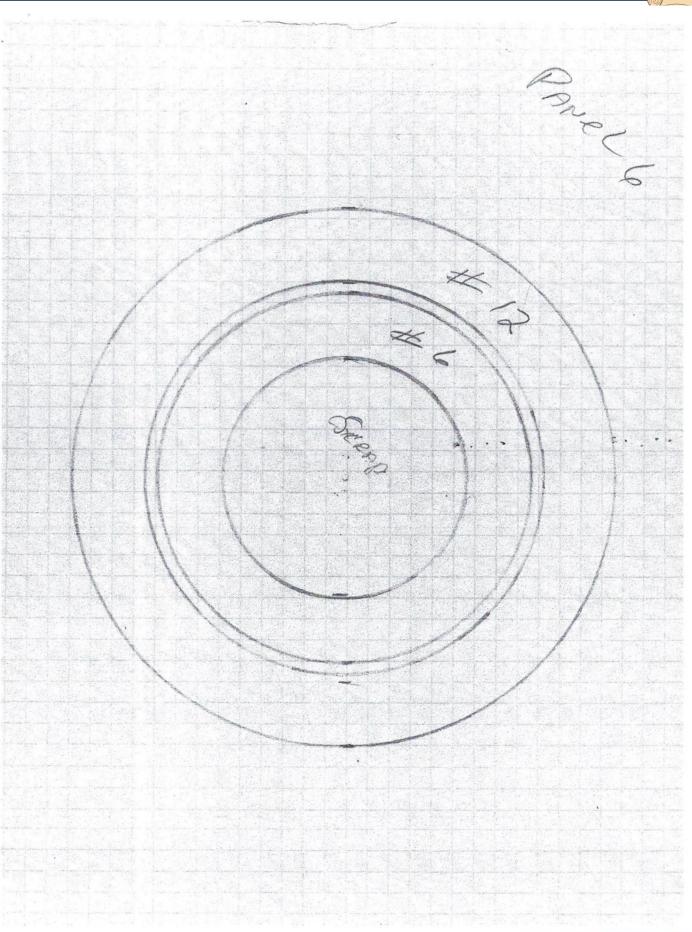














# Thank you to John Kowalchuk



