



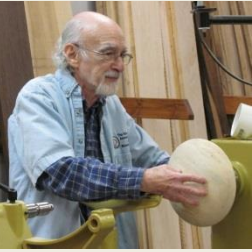
WOODTURNERS OF ST. LOUIS

A Chapter of the American Association of Woodturners

stlturners.org

January 2015

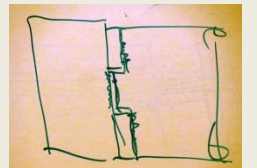
January Demo > Bill Rubenstein – Vacuum Chucking ● My usual way of finishing the bottom of a bowl is to make a friction drive by reverse chucking it between a live center and shaped piece of wood with a soft mat to protect the finish. I then turn away as much of the tenon or recess as I can, then carve or sand off the remains. Vacuum chucking offers another way to holding your work by drawing a vacuum thru the head stock. A complete commercial vacuum chucking system can be purchased (e.g. [One Way](#), [Rubber Chuckie](#), and there are many others), but with a little work, you can save a lot of money by making your own. Bill Rubenstein demonstrated how to build a vacuum chuck from available plumbing and hobby shop supplies.



The system is composed of an adapter to connect the vacuum hose to the lathe's rotating headstock spindle, a drum/chuck mounted to the headstock spindle that holds the vacuum and turning, and a vacuum pump. Bill showed a commercial adapter that he sells and one that he made. The homemade version has two bearings mounted in a wooden cylinder with a fitting for the vacuum hose. Water pump bearings are used to reduce air leakage. Lamp rod is used to extend the vacuum through the headstock to the drum. The nosepiece (fitting inside the drum) has a lamp fitting pressed into it to accept the threaded rod and is sealed against the drum with an O-ring. This picture shows a fitting turned from [Delrin](#) but it can also be turned from wood.



Bill likes to hold his work with a larger drum. However, with a drum nearly 4" in diameter most chucks would have to hold it with an expansion grip. Bill adds another feature that lets him use a compression grip. He starts with a length of 2" schedule 40 PVC (do not use PVC Foam Core), cleans up the end with a scraper and glues it into a 3" to 2" [PVC increaser coupling](#). The piece is then reversed chucked and the 2" diameter PVC piece cut off to a length (3/8" for Bill's chuck) so that the flats on the increaser coupling register on the jaws of the chuck without the 2" PVC bottoming.



A baffle for the 2" PVC is then turned. A piece of the 2" PVC is slipped over the tail stock and used to size the baffle as it is turned. A slight taper lets the PVC be moved forward and when held, creates a burn mark to show the proper size diameter. Once the baffle is parted off, it is hot melt glued to the drum. A 3/4" hole is then drilled into it (which is large enough to accept a #2 Morse taper) for the



nose piece that attaches to the lamp rod.



[Buna cord](#) (1/4" is the best size) can be used for the seal. However, it tends to leave a mark on the turning. Bill uses [foam sheets](#) which can be found at hobby stores. After cleaning up the end of the PVC increaser, he aligns the foam, brings up the tail stock with a piece to press against the drum and hot glues the foam to the drum. After it is glued, the inside and outside are cleaned up.



The remaining part of the system is the vacuum pump. Most oil vacuum pumps are designed for closed system use where the system is pumped down and held versus a continuous flow needed for woodturning due to leakage through the wood and components. Bill recommends a non-oil pump to eliminate issues from the oil out gassing. A pump that can pull 20" of vacuum is about all you need. CFM is more important due to system leakage with 3 to 3 ½ CFM being the minimum. Pumps should have a regulator for pressure adjustment and a dirt filter. How much vacuum you need to pull is a function of the size and weight of the piece being turned, the size of the vacuum chuck, the speed of the lathe, Very thin turnings may implode when exposed to too much vacuum. Bill sells both a [vacuum pump](#) and complete systems. Club members can contact [Bill Rubenstein](#) for his pricing. [William Noble](#) is also a good source for surplus pumps.



A [reversing adapter](#) is sold that allows you to keep your project clamped in your scroll jaw chuck and then transferred to the tailstock. The tailstock is moved forward to the vacuum chuck, vacuum applied, the scroll jaw chuck is released, and the piece is aligned. Bill demonstrated another method that can be used to center your piece. Tape is applied to the turning at every 90 degrees. A distance is then taken from the edge of the piece to the tool rest at one piece of tape, the piece is rotated 180 degrees and adjusted ½ the distance that it is off that measurement. This is then repeated at the next piece of tape, and continued until centered.



Thanks Bill for a very informative demonstration on how we can build our own vacuum chucking system using big box store parts.

Additional links with information on vacuum chucking:

http://www.woodturningonline.com/Turning/Turning_articles.php?catid=11

http://www.hillcountryturners.org/Projects/Vacuum_Chucking.pdf

<http://www.rockler.com/how-to/turn-bowls-spheres-vacuum-chuck-pump/>

<http://www.woodbodger.com/woodturning/make-your-own-vacuum-chuck-for-under-10/>

http://marleyturned.com/January_2011-Online.html

January Pre-Meeting Demo > Bill Farny – Part 1 of Turning Basics● Bill started off our new series for beginning turners that is based on a program developed by the AAW. The program is a great introduction and an excellent refresher for more experienced turners.



Bill covered the parts of a lathe – head stock, tail stock, banjo, tool rest, ways, locking mechanism for banjo and tail stock, and how the threaded shaft on the head stock is used for mounting a variety of chucks and faceplates and when/how the Morse taper is used.



Safety was emphasized. He wore a turner's smock to protect his clothing and to keep out the chips. Before starting the lathe he removed his jewelry (watch and ring) and put on safety glasses. Other safety tips that he covered include:

- Always follow the A, B, Cs of turning: Anchor, Bevel, Cut – always contact the tool rest before contacting the wood, get the bevel riding, then raise the handle and start your cut
- Removing the tool rest before sanding
- Covering the tips of tools with a protective shield (could be a piece of plastic tubing) to protect both them and the turner
- Wear hearing protection
- Wear breathing protection – [Dust Bee Gone](#), [N95 masks](#), and respirators for vapors
- Wear face protection (various eye shields and face shields)
- Inspect the wood to be turned for any cracks, bark, or unstable features that could cause a failure or fly off
- Allow adequate time for glue to cure when doing segmented turning
- Allow about ¼" between the work piece and the tool rest
- Spin the work piece by hand to ensure it clears the lathe ways and tool rest before turning on the lathe
- Adjust the lathe or build a platform so that the drive center is about elbow height
- Never, never, using a spindle roughing gouge for bowl work. It is only for spindle turning.
- Set tool rest height at about the height of the drive center so that all cuts will be above center to reduce catches
- Remove tail center to prevent turner's elbow (that's what you get when you run your elbow into the sharp point on the tail center)
- Learn to turn with both hands
- Periodically clean out Morse tapers



Bill also covered how to rough out a cylinder between centers:

- Using a center punch to put a dimple in the center of the ends
- Working from the center of the piece toward the ends
- Using a steb drive or safety drive to reduce the severity of a catch
- Various hand grips to use while turning (see book by Richard Raffan for more info)
- Proper stance and body movement for support and stability

Thanks Bill for a great introduction to turning for members new to turning and for giving everyone a refresher in safety. Editor's note – See the [Jan 2013](#) and [Feb 2013](#) newsletters for more information on safe turning.

Library News > Rich Hinkebein● Last month the following items were added:



- DVD's:
 - AAW Master Series : David Ellsworth-the spirit of woodturning
 - William Hunter-innovator/sculptor
 - Dale Nish-The Woodturner's mentor
 - Rude Osolnik-dean of American woodturners
 - Ed Moulthrop, Woodturning Pioneer
 - Palmer Sharpless-the Johnny Appleseed of Woodturning.

These are inspirational reviews of these successful turners and how they progressed and should give encouragement for all of us to keep improving. Each DVD also shows a collection of items that each of these turners has accumulated from their own work and the work of others.

- Books:
 - Getting started in Woodturning-18 projects
 - Sharpening woodturning tools

Both books are collections of articles from the American Woodturner magazine. AAW has articles that may be accessed by both members and non-members of the [AAW](#). Check out their site to see what is available.

Several of our DVDs have developed problems from fingerprints, dust, dirt, scratches, and other issues. Please handle all DVDs with care and by their edges or center hubs. Let me know of any problems with them that cleaning does not fix.

A reminder to all members: *"If you can't get to a meeting:*

- *You can return that item to the Woodcraft store at your convenience, just put your name and St. Louis Woodturners on the item and the store will get it to me.*
- *You can ask another member to return it.*
- *You can mail it to me or the store.*

Our library is only open on Sunday at our club meetings and is open to all our members for checking out books, videos, and DVD's.

When checking out material, sign and date the card and put it **BEHIND** the letter of your last name in the box. When you return material, make sure you put the card back in the item and that the card goes with that item. Watch that you do not put multiple cards in one item. Remember to sign legibly so if something is amiss we can contact the correct person.

Our library is a great source of inspiration and knowledge. A complete listing content is on the club web site. Please take advantage of this wonderful club benefit and return items in a timely manner.

[Editor's note – thanks to Rich for providing a review of new material and a synopsis of the subject matter. He has compiled one of the best club libraries in the region for our members.]

Tech Tips of the Month • Wear a face shield when using a vacuum chuck. In addition to the possibility of the piece flying off the lathe, it may also implode from too much vacuum with pieces flying everywhere.

Some woods are not good candidates for vacuum chucking. Worm holes and other flaws may create too much leakage.

Duck tape, Saran wrap, or sealers can be applied to a turning that has some leakage through the wood.

Vacuum chucks are meant for final finish turning. Take light cuts and stay within the diameter of the vacuum chuck. It is good practice to maintain tail stock support as long as possible. - Bill Rubenstein

Want to turn a Morse taper for either a vacuum chuck you are building or just for other uses? Check out this [video](#) by the AAW with Beth Ireland demonstrating how to turn a Morse taper.

Vice President's Spin > Steve Reynolds • Welcome back everyone. We started the New Year with a challenge – setting up our meeting in a new location, the “Wood Room”. We encourage feedback from all of you on how we can make the layout work best for you. We learned that it will take more time to set up and take down and we ask for your help in cleaning up and properly stowing our equipment both before and after the meeting. Keep in mind that we are “guests” at the Woodcraft Store and during breaks be courteous to staff members and others in the store.



My sincere thanks to Bill Rubenstein and Bill Farny for a pair of excellent presentations at the January meeting. The club is for both new and experienced turners and their topics showed this very well. Members who step up to the lathe to share their experiences are a key resource for all of us. Neither speaker considers themselves to be a “presenter”, but both had the full attention and interest of the members. People describing their successes and their failures both caution us against some mistakes and challenge us to create alternatives. Our meetings are an interactive process, contributing questions and thoughts enhance every presentation. – Steve Reynolds

Club News>



Membership dues are due • Dues for 2015 are payable now. An [application](#) is available on the club web site. Dues are \$30 individual; \$40 family. If you are renewing, you don't need to complete a new application just pay your dues to Walt and make sure that the [contact information](#) we have on file is correct.

Attendance/Treasurers Report • Approximately 52 members/guests attended the January meeting. - Walt Ahlgrim

Coffee and Cookies • Complementary coffee is available at the meetings. The price for cookies is posted. Purchases are on the honor system.

Sandpaper • Dan Bursleson has a connection with a sandpaper distributor and will be bringing a box of free sandpaper in March. In return he likes to give the distributor a token of appreciation. You are asked to bring a turning donation (pen, bowl, candle sticks, tops,.....) to give to the distributor to the February meeting. Dan will collect them and pass them on to the distributor. This is a great club resource for free sandpaper, please participate.

Web site● If you have not signed on to the [club web site](#) but want to establish an account send your request to the President, Bob Goulding. Once your membership is verified, he will contact the web master and an account will be established for you with a temporary password. When you sign on for the first time you will be able to set your own password. If you would like to be featured on the home page, provide Jon Spelbring with 4 to 6 good quality pictures (640 x 480) of your turnings with the same background. If you have any problems with web site operation, downloading, or general suggestions please contact the officers.

President's Challenge> January Lidded box with finial (a finial is an element marking the top or end of some object, often formed to be a decorative feature)● Charles Sapp's Native American box was selected by the members as the winner of the January President's Challenge. The other entries in the January President's Challenge are shown in the picture section of the newsletter. Congratulations Charlie.



Corian● K&D Countertops are no longer handling Corian. Dave Ackmann picked up what they had left and is sharing it with members. Pieces are being made available at the meeting.

February President's Challenge ● Steve Reynolds, Vice President, set the President's Challenge for February - turn a bowl with integral handle(s). One entry per member; entry must be turned within the last three months for the competition. An example of the challenge is shown in the picture.



New member● Please join me in welcoming our new member Paul Detrick from Webster Groves.



Wood from Missouri Botanical Garden● Thanks to Claire Andracsek for making contact with the Gardens to see if they would share some of their cut trees with our club. The MBG agreed and has already shared a large American Holly. Members will be notified as wood becomes available.

Newsletter● Did you know that by hovering your mouse over the "blue" text in the newsletter you can click and be taken to the web site that provides you with more information on the subject? Give it a try if you have not done so in the past. Want to make the text and pictures bigger – just Ctrl + Scroll on your mouse to increase or decrease your screen display.

Symposiums and Classes>

- **International Walnut Council** – The Council will hold their annual meeting in St. Charles, MO on June 14-17, 2015. For more information : www.walnutcouncil.org. Did you know? – On black walnut the white sapwood is 11 or 12 annual rings of growth. – Dan Schmoker

- **[29th Annual AAW International Symposium](#)** June 25-28, 2015 at the David L. Lawrence Convention Center in Pittsburgh, PA



January Show and Share



Walnut and maple open segmented bowl and lidded box from sycamore and African blackwood by Rich Hinkebein.



Jeff Nasser tuned some beautiful cross grained pens in buckeye burl, Brazilian rose wood and other exotics.



Dan Burleson brought in some of his basket weave platters and bowls.



Duck calls made with an aluminum body by Charles York. The aluminum was turned on his wood lathe with wood turning tools. They look great, but Charlie says they reflect the light and scare away the ducks. Still good for Show and Share!



Tom Brock turned the bowl from box elder and created the inside-out turning for a Christmas ornament. Inside-out turnings take skill in turning and joinery to get the pieces to align. Nice work.



Cecil Robertson used sassafras to turn a mallet and rolling pins which were patterned after one from his great-grandmother.



Segmented vessel by Michael Blankenship.

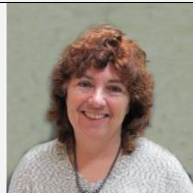


Steve Geho showed two bowls that he turned from green wood and finished with wipe on Poly. The small bowl is pecan.

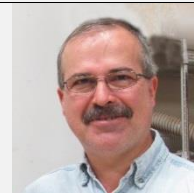
Additional Entries for the January President's Challenge – Lidded Box with Finial



Dave Ackmann turned a postage stamp dispenser from Corian.



Lidded box by Laura Spelbring turned from rosewood with ebony finial.



Jon Spelbring turned this box from desert ironwood – Mesquite. It is very dense and hard (sinks in water).



This box by Rich Hinkebein has a sycamore base from a tree on his brother's pond bank and a redheart finial from a piece given to him for Christmas by his grandson.

Calendar of Upcoming Events

Feb 22, 2015

Part 2 of pre-meeting demos for beginning turners and those wanting a refresher by John Buehrer. (11:30am)

Meeting demo with Walt Ahlgrim turning open spiral candle sticks. (1pm)

Mar 22, 2015

Meeting demo with Matt Keim. Topic TBD. (1pm)

Facebook site • Check out the club Facebook page:

<https://www.facebook.com/pages/Woodturners-of-St-Louis/292734664135601> and “Like” the page (click on the “Like” icon) to receive updates.



If you enjoy turning wood, making things on your lathe or want to learn more about woodturning then join the Woodturners of St. Louis. Learn and share ideas with like-minded Woodturners of St. Louis. Our chapter normally meets from 1:00pm to 4:00 pm on the fourth Sunday of every month at Woodcraft Supply; 2077 Congressional Drive (Westport area), St. Louis, MO 63146. <http://www.stlturners.org>

American Association of Woodturners• The AAW is dedicated to providing education, information, and organization to those interested in woodturning. You can join the AAW at their site:
<http://woodturner.org/member/MemberLogOn.asp>.

Membership comes with access to on-line training information and includes a subscription to the *American Woodturner* magazine. Our club is a chapter of the AAW and we encourage all club members to join the AAW. They have been publishing a great series of on-line woodturning training articles for members that are worth the price of membership by themselves. They have also indexed all of the past AAW magazine articles so you can search and find help with most any issue you may have or ideas on your next project.

Board Members

President:	Bob Goulding	636.745.2333	bobisturner@yahoo.com
Vice President:	Steve Reynolds	636.938.5366	stephen-reynolds@sbcglobal.net
Secretary:	Charles Sapp	636.928.0149	cwsapp@charter.net
Treasurer:	Walt Ahlgrim	314.567.5268	stlwoodturner@sbcglobal.net
Conf. Admin.	James Payne		jpayne.2011@gmail.com
Newsletter:	Charles Sapp	636.928.0149	cwsapp@charter.net
Librarian:	Rich Hinkebein	636.332.2396	kathryna1945@yahoo.com

Questions: info@stlturners.org