
Minnesota Woodturners Association

January 1995

Tools, Tips and Techniques

Product Review

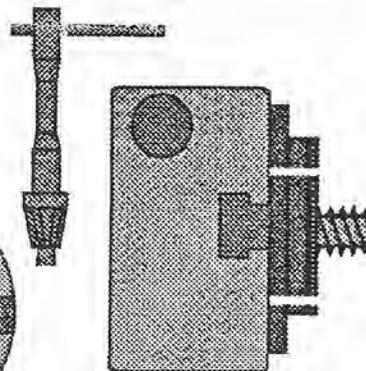
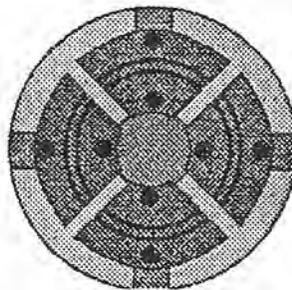
Dave Schneider

OneWay Stronghold Safety Scroll Chuck

The STRONGHOLD Chuck is a new four jaw scroll chuck, made by Oneway Manufacturing that works like their smaller chuck. However the jaws of this chuck are opened and closed using one large key (similar to a jacobs chuck), leaving one hand free to hold the workpiece while tightening the chuck. The Stronghold chuck body measures 4-1/2" in diameter by 1-7/8" deep and weighs about 8 pounds, guaranteeing less vibration. The hardened base jaws are about 25% larger than their smaller chuck making the Stronghold perfect for larger work.

The STRONGHOLD chuck comes standard with #2 top jaws which will grip on round stock from 1-3/4" to 3" in dia., or square stock from 1-3/8" to 3". They will also expand into a dovetail recess from 2-1/2" to 4" in dia. Each of the 4 jaws are held onto the base jaws with two easily removable screws so your choice of optional jaws may be used.

Also included is a screw center that is used to hold bowl blanks by screwing into a predrilled hole. The chuck comes with one adaptor to fit your lathe which can be easily changed by removing two screws with the wrench provided. Extra adaptors are available as an option.

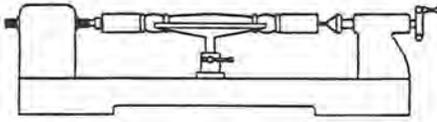


Side view shown with screw center mounted in chuck

I purchased a OneWay Chuck last spring after looking at several chucks on the market. Since I have started using the chuck, it very rarely is taken off the headstock of my lathe as I can do the majority of my turning with it in place by using the accessories for spindle turning and as a screw chuck. It comes with a 1/2" by 1 1/2" wood worm screw that I use on every bowl I turn to prepare the bottom side, base and foot before turning the bowl around to be gripped in the chuck. When turning spindles I use a 4 pronged spur held by the chuck and a revolving center in the tailstock.

Pros:

- Reduces the need for many faceplates
- Easy to move from lathe to lathe by changing the taperlock adapter insert. (To change you remove the 2 screws that draw the adapter into place and insert them in 2 pretapped holes in the adapter to give a pushing action against the body, therefore pushing the adapter out of the body.) I have used the same chuck on a Rockwell/Delta, Oliver and a Woodfast lathe just by changing adapters.
- Single hand tightening of the chuck using the geared key, allowing better single hand control on holding the piece to be turned.
- There is a locking pin in one of the jaws to prevent to prevent over-extension of the jaws.
- Large amount of accessories: (See following list)
- Works in expansion or contraction mode. (Grips on spigot/foot or expands into dovetail type opening)



- Heavy duty construction that minimizes vibration caused by irregularities in the turning blank.
- Will handle up to 20" plates and bowls if used with the set of Number 3 jaws.

Cons:

- Fairly expensive (\$249.95)
- Hard to work on turning from the chuck side as the chuck is very big.
- Potential safety hazard to fingers or a tool if they hit the scrolls, when you have the jaws extended and the scrolls are extended outside of the body.
- The jaws leave impressions in the foot or spigot and that have to be turned or sanded out for proper finishing.

Accessories Available:

- Number 1 Stronghold Jaws: Will hold small parts or bowls up to 4" in diameter. They will hold a spigot ranging from 1/2" in diameter up to 1 1/4" in diameter. They will expand into a recess ranging from 1 1/8" to 1 3/4" in diameter.
- Number 3 Stronghold Jaws: For holding very large bowls and platters up to 20" in diameter. They will clamp on to a spigot ranging from 3 3/4" in diameter up to 5" in diameter. They will expand into a recess ranging from 4 3/8" to 6" in diameter.
- Jumbo Jaws: Designed to rechuck bowls up to 12" in diameter.
- Mega Jumbo Jaws: Designed to rechuck bowls up to 16" in diameter.
- 1/2" Spur Center
- 1" Spur Center
- 1 1/2" Screw Center
- 2" Screw Center
- Collet jaws and pads in 5 inside diameters (1/2", 3/4", 1", 1 1/4", 1 1/2")
- Button set and Extra button set for the Jumbo and Mega Jumbo Jaws

I will bring the chuck, key and accessories I have to the next meeting for those interested in seeing it.

As I am finishing this review I have just received the February 1995 Issue of "American Woodworker" magazine, which has a Buyers guide to Lathe Chucks starting on P#62. The article includes the OneWay with many other chucks.

Please let me or any other Officer know of any specific articles/reviews you would like to see in future newsletters. Dave Schneider (612) 934-4667

Turners Tips

(These tips have been copied from the "AMERICAN WOODTURNER", Journal of the American Association of Woodturners)

Grindstone closer to your nose

If you are having trouble sharpening your tools, one thing you may want to try is raising your grinding wheel to the height of your lathe. That is the shaft of the lathe or the grinding wheel should be at about elbow height from the ground. I recently did this with my grinding wheel and was pleasantly surprised at how comfortable the change was: much easier to see and control the grind. After all, you use the tools at one height, why sharpen a foot or so below that? If I am not mistaken, John Jorden briefly discusses this in one or both of his tapes.

Robert Rosand, Bloomsburg, PA

Divvy tape

Dividing a round piece on the lathe into equal parts can be easy if you have a dividing head. Some of us don't, so here is a way to do it simply: Wrap a strip of masking tape around the piece. Mark where it meets and remove the tape gently so as not to stretch it. Fasten the tape to a metal surface and divide the space into the number of parts you desire by measuring the distance point to point and calculating the divisions. Or use a pair of dividers. Mark the tape, reapply to the turning, and mark off the points on the turning. I use the tool rest as a straightedge.

Palmer Sharpless, Newtown, PA

High-Tech Back-up

Computer mouse mats make great sanding disc backer.

Rus Hurt, Port Wing, WI

For Beginners

Learn to use your tools

The gouges, skews, parting tools, scrapers and hollowing tools each call for specific techniques. Many of the techniques are not transferable (i.e. the technique for using a skew doesn't naturally follow the technique for using a bowl gouge.) Learn why, when and how to use a specific tool.

You have probably noticed that the first pages of the newsletter have a new look to them. Dave Schneider has volunteered to do some of the writing and processing of the newsletters, and other announcements. I want to thank him very much for his help. I appreciate it tremendously.

Upcoming Meetings:

January 10, 1995. Tuesday, 7:00 - 9:00 pm.

Tools, jigs, chucks, homemade tools, calipers, etc. Many people in our association own tools that others do not. A lot of us own tools that have not worked as well as we probably hoped. When a new tool is advertized, we probably all wonder if it will work, or if it is worth the price.

This meeting will be a chance for all of us to show, and talk about our tools. We ask that everyone please bring some tools they have, which most members probably do not have, to show and talk about. This should include turning tools, homemade tools, chucks, calipers, sanding devices, dust masks, face shields, etc.

Also, please bring tools that do not seem to work well for you. Maybe somebody will have some insight as to how to make them work better, or maybe it will just be a good chance for others to see that it is a tool that doesn't work very well.

Please mark your tools with your name before the meeting, to prevent any mixups.

The meeting will be held in Tim Mannings heated garage.

Tim's address is 1100 44 1/2 Avenue Northeast, Columbia Heights. This is located about one mile south of I-694, and about 2 blocks east of Central Avenue (highway 65). If you are going south on Central, turn left (east) at 45th and go one block, then turn right (south) and go one short block to 44 1/2 Avenue. turn left and go to Tim's house, 1100 44 1/2 Avenue Northeast.

Please dress warm, and bring a chair.

February 11, Saturday. 1:00 - 4:00 pm.

Hands on turning seminar. We will have at least three lathes available to do some hands on turning, learning, and sharing of information.

There will be several experienced turners available to help instruct anyone who wants to practice some turning.

This is a chance to get some one on one assistance, in doing any type of turning that you want to do.

Depending on the number of people who attend, you may be able to turn a complete project (bowl, bud vase, candle holder, etc.), or maybe, at least do some practice of specific cuts. Even advanced turners may be able to get some assistance in certain techniques such as shear scraping, hollow turning, or other techniques. This would also be a good chance to get some help practicing tool sharpening.

Please bring your own tools and wood, and eye protection. Also bring your own grinding wheels if you want to practice sharpening.

The meeting will be held at Don Wattenhoffer's house. Don's house is located at 5312 Horizon Drive, in Fridley, Minn. The location is about 1/2 mile southwest of the interchange of I-694, and University avenue.

If you come via I-694, take the exit to go south at University Ave., turn right (west) onto 53rd Ave, which is the first intersection. Go two blocks and then turn right (north) on Horizon Dr. and Don's is the first house facing Horizon Dr. on the left.

NOTE: PLEASE MARK ANY TOOLS YOU BRING, SO THEY DO NOT GET MIXED UP WITH OTHER PEOPLE'S.

March 14, Tuesday, 7:00 - 9:00 pm.

Photography. Jim Tracy will show his techniques for photographing turnings. He will have a camera, backdrop, and lighting set up. He will also be able to photograph turnings that members bring to the meeting (limit two please).

Feel free to bring your own cameras, to take your own photos, or to learn how to use them better.

The meeting will be held at "Woodcraft Supply" (884-3634), 9741 Lyndale Avenue South, Bloomington Minn. This is approximately 2 miles south of I-494 and 1/4 mile east of I-35W. The store hours for that day will be 9:00 - 6:00. They will be closed from 6:00 - 7:00, and will open at 7:00 for us. They will be open for sales to us during and immediately after our meeting.

Please bring "show and tell" items.

Professional Demonstrations:

We are trying to set up one or two professional demonstrations for the coming year. Information will be sent out on them when it is available.

Safety:

We wish to remind all members and guests, that woodturning can be dangerous. Many of our members have had accidents, and injuries, of some sort, with the lathe. This is a reminder, that by attending our meetings, or using information from our meetings, you do so at you own risk.

We do ask everyone attending a meeting to sign a "sign in sheet and liability release", for that meeting. This includes nonmembers, and insures that everyone attending, has signed a liability release.

Past Meeting Minutes:

October 1, 1994, Saturday

Wood and tool swap, and woodturning demonstration. We will meet at

We met at Mark Resche's shop in Mound, for a demonstration by him on bowl turning. Mark turned two bowls out of spalted maple. It is very interesting to see that Mark accomplishes almost all the turning he does, using just a homemade screw chuck, waste blocks, and superglue.

Mark also used his chain saw to cut a number of turning blanks from some logs he had, and from some logs others had brought. It was very interesting to see how he chose to cut the wood. His knowledge of the grain of the wood, and potential turnings that could be made from it, determined how he cut the wood.

We also had a tool and wood swap at the meeting, that went real well. Unexpectedly, a number of people brought tools and wood to give away ! The generosity of so many of our members is really wonderful.

November 8,

I gave a demonstration on pen making. I showed how I make both the twist type mechanical pens, and straight pens using "BIC" pen inserts.

"BIC" pens: These are easy and cheap, and work real well. I got the idea for making these, from an article in the "American Association of Woodturners" Journal, about five years ago.

If the insert from a "BIC" pen is removed from its tube, you will find that it will stick into a 5/32 inch diameter hole.

These are just the common, clear, BIC pens, that cost about 10 for a dollar.

The inserts are removed from the BIC pen by taking the little knob off the back, and pushing the insert out through the front, using a small shaft. I use a T handle allen wrench.

The insert will fit into a hole drilled in a piece of wood 5 inches deep, with a 5/32 inch diameter drill bit.

Seven Corners Ace Hardware, On west 7th street, in Saint Paul sells 6 inch long 5/32 drill bits for about \$2.50. I have been told that Knox also now sells them.

To make the pen, I drill the hole first. The drilling can be done on a drill press, or on some lathes. Long, thin drill bits tend to wander a little when drilling in wood. Consequently, after the hole is drilled you need to try to find where the opposite end of the hole really is. On my Shopsmith, I determine this by drilling the hole, and then switching off the motor, with the drill bit still all the way in the wood. With the wood suspended on the drill bit I move the headstock so that the wood contacts the point on the tailstock. This point seems to mark fairly well the true axis of the drilled hole.

Note, if the point on the tailstock is not perfectly aligned with the headstock, the above method will not work. The shopsmith tailstock is adjustable, and mine was initially about 1/8 inch off center. After turning for a couple years with it off center, it was amazing what a difference it made, when I finally found out about it, and took about a minute to adjust it properly.

I turn the pens with the drill bit itself driving the wood. When I was first told that a drill bit would have enough gripping force to drive the wood, I doubted it. I have found that it really does work, however there may be some slippage if you try to cut to much at one time. The drill bit can be held in a Jacobs chuck, or a 3, or 4 jaw chuck. I find that the end of the wood must be supported by the tailstock.

The shape you chose for the pen is entirely a matter of personal choice. For awhile, every pen I made had a different shape, with some fancy shape on the end. Now the shape I prefer is very plain, somewhat like a cigar, except more slender at each end.

I turn almost all of the pen, and sand it, before cutting off the end at the tailstock. After cutting off the end, and switching off the lathe, I hand sand the end. Because the pen is an object which will be frequently handled and looked at, I take extra care to remove all circular sanding scratches. After sanding it with the lathe running to 240 grit, I stop the lathe and hand sand it, with the grain, with 240, and then 320 grit

When the end is cut off at the tailstock, I support the turning with my gloved hand, and switch off the lathe. This is real important, because sometimes the drill bit is not really centered in the wood, and there can be a lot of wobble. The wobble can be great enough that it would bend, and break the drill bit, if it were not supported.

Twist pens:

The local woodworking stores, and Craft Supplies, from Utah, sell kits containing the mechanical parts for pens that, when twisted, retract the point. They also have a clip on them, so they can be carried in a shirt pocket.

These pens use replacement refills that are the same size as those made for "Cross" pens.

It looks like the pens should be real easy to make. However, there are some aspects of making them that are more difficult than it would seem.

Gluing the brass tubes into the wood:

It is advised that the brass tubes be lightly sanded, before gluing. This allows the glue to stick to them better.

If you are doing a bunch of these, there is a way to sand these real fast, with a stationary belt sander. Slide the brass tube over a small rod, or a nail, or a small phillips screwdriver. Hold the rod at an angle slightly less than perpendicular to the running belt sander. When the brass tube is touched to the belt sander, it will spin like crazy, and get well roughened. The whole process only takes a few seconds per tube.

Make sure the tube will fit in the hole. I have found that sometimes the hole drilled in the wood is just to snug to allow the tube to go into it. It can be a mess if you find this out while everything is coated with glue, and you are trying to push the parts together. I shove a brass tube into the hole before gluing, to make sure it will fit. If it is to snug, I run the drill bit through it again.

Some people use superglue to glue the brass tube to the wood. Superglue works, but can be very messy. Vic Wood advised just using "Tightbond" yellow glue. I have used it on about 50 pens, and it has seems to work real well.

To avoid getting a bunch of glue into the inside of the brass tube, use an apple ! Poke the end of the brass tube, about 1/4 inch, into the side of an apple. Bend it slightly so that the small apple plug breaks off, and is left inside the end of the tube. Then put glue on the tube, or into the wood hole, or both, and shove the tube into the hole. The apple plug will keep all of the glue out of the tube. Poke a nail through the tube to pop out the apple plug.

Turning the wood:

The mandrels come with short tubes that serve as a guide as to how thick to cut the wood. Apparently some kits come with brass tubes, and some with steel tubes. The brass tubes can wear down after some use, and the steel tubes do not. For this reason I prefer to use the steel tubes.

Squaring the ends:

The ends of the blank of wood have to be made flat (perpendicular to the tube) before turning. This is very important ! Most of the woodworking stores, and Craft Supplies, now sell a "Pen Mill" That will remove excess glue from the inside of the brass tube, and trims the end of the wood blank flat. These tools sell for between \$15.00 and \$20.00. I have used one of these, and am very happy with it.

Assembling the pen parts:

I use a big bench vice to squeeze together the parts. Once squeezed together, the parts do not come apart ! Care must be taken when squeezing in the center, twist mechanism part. This part controls how far out of the pen, the writing point will extend. If the mechanism is squeezed to far in, the point will not retract all of the way back into the pen.

CLASSIFIED ADDS: Any member wanting to place an add, (free to members) send the pertinent information to me, Paul Kachelmyer, at 558 Farrell st. Maplewood Minn. 55119. I will try to get it in the next newsletter.

For sale or trade: Rolls of steel wool, 1 inch wide, by 24 inches round, 1/2 dozen, Call Jim Tracy 571-3374.

I would like to buy a used Nova Chuck, or Cole jaws for a Nova Chuck. Please call me if you want to sell one. Paul Kachelmyer 730-0166.