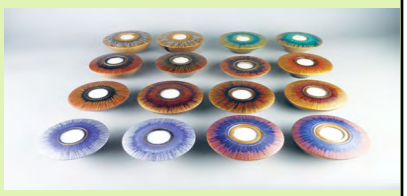
April 2012 JUST ONE MORE CUT VOLUME 12 ISSUE 4

JUST ONE MORE CUT

Central Florida Woodturners, a Star Chapter of the American Association of Woodturners.Central Florida Woodturners exists to encourage and assist its members in advancing their skills in woodturning, and to educate the public and promote among the public a greater enjoyment and appreciation of the art of woodturning. Member of the American Association of Woodturners

March Demonstrator - Bill Dalton



Candle holders shaped like interplanetary space ships were the subject of the demonstration for the March meeting. Bill Dalton, club member, demonstrated the turning of the candle holders; and to add some pizzazz to the candle holders Bill demonstrated a painting technique applied using the lathe.

The candles used within the holders are not the ordinary wax candles, but tea candles that burn lamp oil.

Bill started with a dry maple disk, maybe six inches square and about two inches in thickness. First, the underside of the candle-holder-to-be was shaped using a shear chisel, a flexible scraper, and a sander. A tenon was placed on the open end of the piece.

After the underside was formed and smoothed, the piece was taken off the lathe, rotated, and the tenon placed into the jaws of a chuck. The second side of the disk, or the top side of the candle holder, was then turned and finished.

A 1-and-9/16-inch Fostner bit was placed into the tail stock, and a hole drilled into the top of the disk. This hole will receive the tea candle when the piece is finished.

The turning of the piece was now completed. Shellac was Bill's choice for finishing the wood, and he recommended using several coats.

And then the crowning act was performed – the rotational painting of the piece. A low-viscous, acrylic paint was applied with a wet brush to a portion of the previously drilled hole. The lathe was then turned on, and as the piece rotated the paint spread out in a random, radial pattern. The pattern made is probably not reproducible, as it is a function of the viscosity of the paint, the amount of paint used, the location at which the paint is applied, and, of course, the speed of the lathe once restarted.

Bill suggested that the piece then be finished with lacquer.

But he still wasn't finished. He flattened the paint area around the candle hole with a turning tool, and as a final act, demonstrated how the candle holder could be placed onto a holding platform for individual finishing work.

Bill Dalton

Click here to download pdf file: at CFWoodturners website or the Wed night group website:

Calendar

Thursday, April 19 5:00pm Steering Committee Meeting

7:00pm April 19 Chapter Meeting and Demonstration by Al Hockenbery

Friday, April 27, 28 & 29
Southern States XII Woodturning Symposium
WhereGeorgia Mountains Conference Center, Gainesville, Ga

UCF Library Exibition When May 1 – 31, 2012

Bring your work to the April meeting

The UCF Library has granted the Central Florida Wood turners seven glass exhibit cases to display our work during the month of May. The purpose of this exhibit is to introduce the University community to contemporary woodturning. We wish to exhibit pieces that illustrate the range of work and types of pieces done by contemporary woodturners.

All the submitted exhibit requests request have been approved, so please bring your turnings to the April 19 meeting. Have your pieces in sealed boxes packed in a way that they can safely be transported. On the outside of each box clearly print your name and the number of pieces in the box. At the meeting you will be asked to fill out a final form about each piece. This information will be used to make the display tags. If you have any questions please contact Stuart Lilie at stuartlilie@gmail.com.

Thanks,

Memorial Service *Four members of the Central Florida woodturners attended Heinrich Niedrich's Memorial service on March 25 at the New Life Worship Center. Heinrich's would turnings and ribbons were in prominent display. The members attending were Connie LeFebvre, Dave Barriger, Stuart Lilie and John Sutton. His widow, Helga, was very pleased that the club was represented. Particularly in the later part of his life, Helga said that would turning And the club were extremely important to him.*

Handout from David Ellsworth on Sat March 31, 2012

CROWN HAND TOOLS LTD

332-334 COLEFORD ROAD, DARNALL, SHEFFIELD. S9 5PH
TEL: (0114) 2612300 FAX: (0114) 2612305

WHAT IS POWDER METALLURGY?

BY TERRY PORTER FOR WOODTURNING MAGAZINE

You normally think of steel manufacture as a process of molten metal being poured into a mould, being rolled or forged and then milled or ground into shape. Powder metallurgy, the **PM** of **Pro-PM**, refers here to the different processes by which the steel is made. Powder metallurgy is a process in which metal parts can be made in large quantities by compressing and sintering various powdered metals such as brass, bronze, aluminium, stainless steel and iron (Sintering is the welding together of small particles of metal by applying heat below the melting point of the base metal.)

Compressing the metal powder into the part being made is usually done with accurate dies and punches in special hydraulic presses. The compressed pieces are then sintered in an atmosphere-controlled furnace at high temperatures, which cause the metal particles to bond together. Subsequent heat treatment may also be used.

The physical properties of the final product are comparable to those of cast or wrought products of the same composition if the parts are processed to give high density. Lower physical properties will result from a lower density.

The particular advantage of powder metallurgy is that parts not easily machined can be made in this way, producing far less waste. Also, powder metallurgy high-speed steels are highly resistant to wear and corrosion, **offer optimum grindability, take a high mirror polish, have high toughness and a long tool life.**

Powder metallurgy with high-speed steels is new to woodturning tools, but is not new in the world of engineering. It is often used to make such things as connecting rods and transmission parts for the vehicle industry.

A typical powder-metallurgy high speed steel used to make turning tools will have the great combination for high temperature strength, wear resistance and toughness properties.

Test report on Crown's New 'Pro-PM' Turning Gouges
By Gordon Warr, for the Woodturner Magazine.

Even as recently as the 80's, Crown Tools were manufacturers hardly heard of, yet in less than ten years, this Sheffield firm have become one of the leading names as tools suppliers. Their range of traditional hand tools is extensive and still growing, but it is for their turning tools that they have perhaps become best know. Here, the rate of expansion of tools offered is very impressive, on average a new tool introduced every month.

Most of the current range of turning tools listed in their catalogue are made in HSS, grade M2 being the usual variety used. They also make a small range in carbon steel. Up to around twenty years ago, all turning tools were made in carbon steel, or tool steel as it is also known. Nothing wrong with carbon steel tools, as is witnessed by all the wonderful turning produced by countless turners up to the introduction of tools produced in HSS. High speed steel is much harder than carbon steel, and is thus able to keep an effective cutting edge for a far longer period of time. Put another way, while tools made of carbon steel can be made very sharp when they are highly effective, they are prone to dulling that much quicker which in effect means they require sharpening far more often.

Crown buy their steels from leading producers, and now they have tracked down a steel better than M2, a harder grade than what has hitherto been available for making turning tools. It is still classed as a high speed steel, and is loosely referred to as a super grade. Methods of manufacture, appearance, sharpening and use are all exactly the same as for M2 tools. The only distinction which Crown have made in order to make them visually distinctive is to fit them with ash handles stained and polished black.

At the present time, only gouges made from round bar are being produced, and following a recent visit I made to the Excelsior Works I brought back a small selection to try out. Mine is a fairly typical workshop in which I carry out a variety of work, so when it comes to comparing one type of tool with another I rely on a combination of experience and subjectivity. I would need a laboratory filled with sophisticated equipment in order to be truly objective.

However, one thing I did do with these new tools was to sharpen them, or I should say re-sharpen them. The tools are supplied ready to use, but by touching them up on the grinder I normally use I was at least giving a measure of comparability with my existing gouges.

So how did they perform, so they cut better, remove the waste faster, create an improved surface, or rarely need sharpening? It is this latter characteristic where these tools score, a direct result of them being harder, or tougher. Even the softest of woods have an abrading affect on the cutting edge of a tool, harder and grittier woods even more so. The harder the steel, providing the heat treatment stage does not make it brittle, the better able it is to resist the dulling which always takes place.

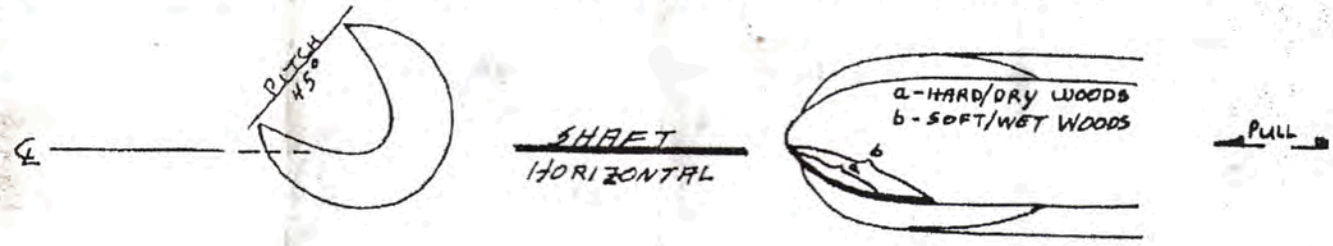
I tried out these tools for a variety of work on an assortment of different woods, and found they well lived up to expectations. It is though, difficult to actually measure the improvement in performance of these super grade tools over grade M2, but there is no doubt that less sharpening is required. What this also means is that because they stay much sharper for extended periods, they are at their prime in terms of cutting efficiency for far longer. This in turn means that the surfaces produced, especially on those species which simply do not like tools of any kind, are far superior than is the case when using tools which have a quicker rate of dulling. What has to be remembered is that all tools, whatever the steel, can be made equally sharp, but then start to loose their edge the moment they begin to remove wood. It's the rate of dulling which is the important factor, or put another way, the retention of a productive cutting edge.

So it's thumbs up to Crown Hand Tools, they have found an excellent steel and know how to produce quality tools with it. My estimate aligns with that of the makers, that is, this super grade retains its edge for around five times that of M2, so it's less sharpening which saves both time and tool. Thus they are highly cost effective.

The Ellsworth Signature Gouge
***** Exterior Cuts *****

Centerline of Workpiece	Axial Pitch of Gouge	Position of Gouge on Workpiece	Area of Edge Used (top view)	Direction and Type of Cut

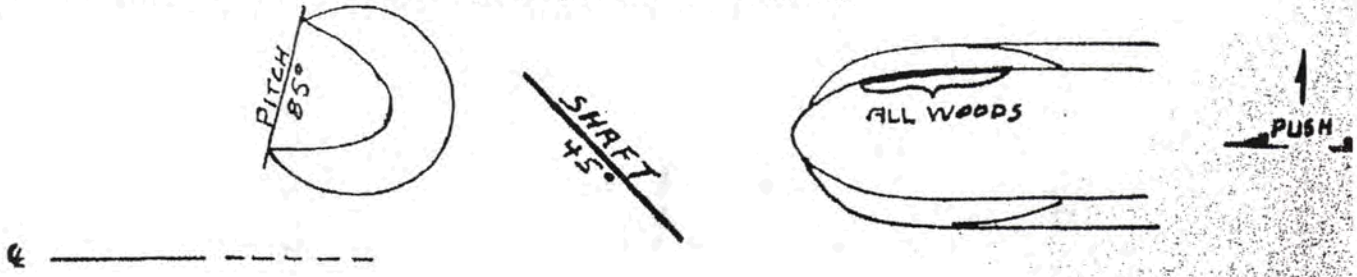
ROUGHING CUT – Used to remove excess stock in preparing to make bowl or vessel forms.



SCRAPING CUT – Used to flatten base of form in preparation for chuck, glue block or faceplate.

SLICING CUT – Used to shape the form, prepare surface for shearing cut (below).

SHEARING CUT – Used to refine shape, prepare surface for sanding.



***** Interior Cuts *****

Centerline of Workpiece	Axial Pitch of Gouge	Position of Gouge on Workpiece	Area of Edge Used Top View	Direction Type of

ROUGHING CUT – Used to clear mass from interior in preparation for finishing cut (same as exterior roughin

FINISHING CUT – Final cut on interior surface in preparation for sanding.

NOTES: Bevel must be in contact with wood throughout the cut.
To safely enter the rim, begin the finishing cut in the 'roughing' position as shown above, th
rotate the gouge counterclockwise to horizontal to complete the cut in the 'finishing' positio

1. John Russell segmented vase made from ash and walnut. Finished with Deft.

2. John Russell bowl turned from aspen and finished with Deft.

3. David McCoy vase made from chinaberry and finished with polyurethane.

4. David McCoy - candle sticks turned from golden rain tree. Finished with polyurethane.

5. Gene Gross - vase made from sycamore. Piece is textured and painted with acrylic paint

6 & 7. Gene Gross - vase turned from Drake Elm.

8. Bill Smith - bowl turned from sweet gum and finished with wipe-on poly

9. Gene Gross bowl made from cherry. The art work is known as piercing. Finish is wipe-on poly.

10. Bill Smith- bowl turned form hickory, and finished with lacquer.

11. Bill Smith bowl made from catalpa and finished with lacquer

12. Bill Smith bowl made from hickory and finished with lacquer

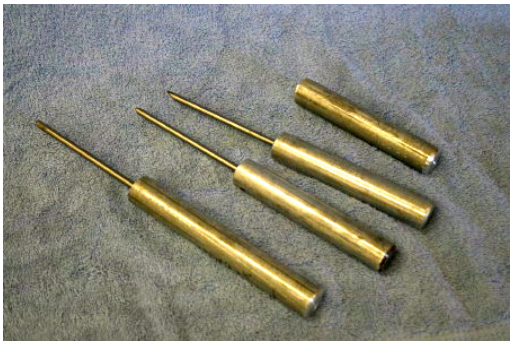
13. Phil Gold wine bottle made from an old bowling pin. Wood is maple, with a cherry stopper. Finished with lacquer.

14. Rick Coffman candle holders with captive rings made from unknown, but free, wood. Finish is wax.

15. Rick Coffman small vase and small box, both with colored rings. Made from unknown, but free, wood. Finish is wax.

16. Jim Schroeer platter made from ambrosia maple and finished with Tung oil.

17. Jim Schroeer platter made from ambrosia maple and finished with Tung oil.



18. Jim Schroeer 3 turning tools made from ¼-inch by 8-inch tool bits. Handles are aluminum.

19. David Brokaw platter made from hickory and finished with varnish.

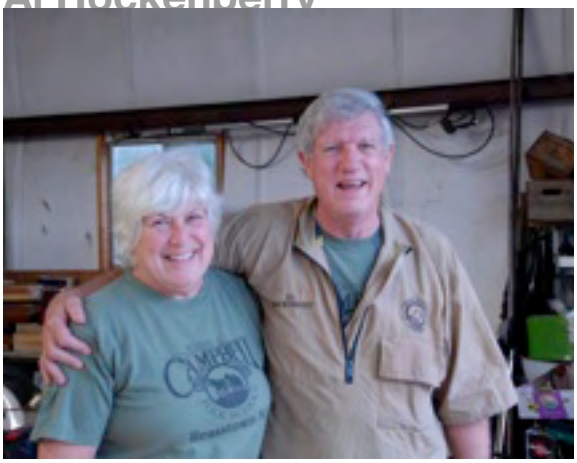
20. David Brokaw- lamp made from yellow worm pine and a oak base. Finished with varnish. Has an inlay of turquoise.

21. Kevin Obrien - vase made from camphor and finished with lacquer.

22. Kevin Obrien- vase made from citrus and finished with lacquer.

Guest Speaker April 19, 2012

Al Hockenberry



Click here to download pdf file: Turning Triangles

http://wednightwoodturners.com/Wednightwoodturners

I bought my first lathe in 1975 and I've been learning to turn ever since. I got serious about turning in 1987 and began selling work through galleries and a few shows. In 2001 I was invited to do a six week show at the Maryland Federation of Art City Gallery in Baltimore, MD. My work has been selected for numerous juried shows in Maryland and Florida. I have had pieces selected for the AAW national shows in 1996, 2004, 2005, and 2007. My most successful creations have been the natural edge hollow forms and my unique suspended special forms. Currently my Ball in a Ball has been a real fun innovation. The Ball in a Ball demo was selected for the 2010 AAW techniques video.
.
1994 I began an association with Maryland Hall for the Creative Arts, Annapolis, MD enrolling in a class with Liam O'Neil. I was a pretty good self taught turner but W0W! I then took classes with David Ellsworth, Christian Burchard, Michael Peterson, and Johannes Michelson.

1996 I joined the MD Hall faculty and teach part of the Intermediate Woodturning class. In 1998 I began teaching kids classes with my wife Sherry. From 2001 to 2004 I then managed the woodturning program and taught basic woodturning. As manager, I ran the Masters Classes taught by visiting turners including: Trent Bosch, Jimmy Clewes, Cindy Drozda, Lyle Jamieson, and Al Stirt.

In 2004 Sherry and I moved to Florida. We have a great big shop where we do some teaching and host workshops with friends who come to Florida including Jimmy Clewes, Cindy Drozda, David Ellswort, Trent Bosch, and Al Stirt. I taught one week classes at the John C. Campbell Folk school in 2008 and 2009. I judged the woodturning entries for the 2008 Florida State Fair. I've done demonstrations for numerous clubs, 3 regional symposiums and the AAW symposium in 2000 and 2010. I will be a demonstrator at the 2011 Rocky Mountain symposium in September.