IWG News

The Newsletter of the Island Woodturners Guild November 2023

About the IWG:

The Island Woodturners Guild meets from 1:00 - 4:00 PM on the 4th Saturday of each month (except for July/Aug) at the Central Saanich Senior Citizens' Centre, 1229 Clarke Road, Brentwood Bay, BC.

Visitors are welcome.

Executive Committee

President:
Don Costello

Vice President:
Don Robinson

Treasurer:
Bonnie Hallas

Secretary:
Michael McEwan

Members at Large:
Hovan Baghdassarian
John Kilcoyne
Virginia Lee

Past President:
Tim Karpiak

Newsletter Editor:
John Kilcoyne

The IWG gratefully acknowledges the support of the following companies:
Artisan Wood to Works
Chipping Away
Industrial Plastics & Paints
Island Blue Print
KMS Tools
PJ White Hardwoods
Richelieu Hardware
William Wood-Write

THE PRESIDENT'S TURN

Happy November! 'Tis the season to be turning…

I guess everyone is pretty busy this time of year. I am sure that I am not the only one who has been asked if I could make something to give as a Christmas gift, whether it be ornaments, bowls or perhaps tops. Or maybe you have been preparing to sell your work at the many markets at this time of year. A great way to make a little money for shop supplies or perhaps a few tools for Santa to leave under the tree.

Your Guild executive elves have been busy as well!

Hovan has been working on updating our audio-visual gear to make for an easier set-up as well as a higher quality production. Virginia has been working on a new website as well as performance improvements while Don R has been busy organizing the demos for our monthly meetings. Bonnie has been very busy behind the scenes making sure that our books balance and that we are able to not only cover the costs of our upgrades but also future expenditures. Mike has also been busy behind the scenes as our secretary ensuring that the executive is following defined processes as well as assuming other tasks such as renewing the Guild insurance policy. John has kept busy preparing our newsletters as well as aiding the two Dons as they find their way as President and Vice-President. Although Tim is now located in Alberta, he has been very active as our membership co-ordinator and advisor to me. Without his support I would have struggled to step in to the large shoes he left behind him. For me, with all the work being done by the rest of the elves I do feel a bit like Santa. Showing up on the day, stealing the limelight from the elves and looking for the milk and cookies.

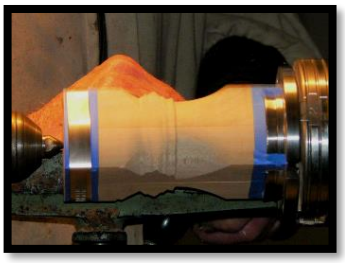
As there is no meeting in December, I wish you all a very happy holiday season and a wonderful New Year.

Don Costello

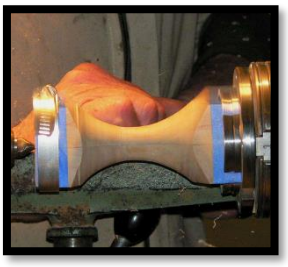
NEXT MEETING: SATURDAY NOVEMBER 25: 1:00 P.M.

This meeting will feature a demonstration by Barrie Baptie on turning Inside-Out ornaments.

As this is the last meeting of 2023, we decided to save the best for the last! (No pressure Barrie!!!)



Topics covered will include blank assembly, safe mounting methods, spindle turning tools and techniques, design considerations and finishing options.



SHOW AND TELL PHOTOS

Historically, our Guild photographer would take pictures of *Show and Tell* turnings and forward these to our webmaster for posting on our website. However, it has been three years since our last photographer passed away and we have no replacement.

While Chris Leach has now agreed to act in this capacity, he is unable to commit to attending every meeting. Accordingly, we need two additional members to share this task which would mean 3 meetings a year at most each of which involves approximately 15 minutes taking photos and another 5 minutes, forwarding them to our webmaster.

If there are no volunteers, we will require members who wish to have their turning(s) posted to take a photo and forward it along with the conventional information (size, species, finish) to our webmaster (remoteva@gmail.com)

OCTOBER RECAP

The October meeting saw a demonstration by Mike Peace on various tools for texturing and spiraling. The following are the highlights.

I. STANDARD TEXTURING/SPIRALING

A. TOOLS

1. Commercial

The two most popular commercial tools are those from *Sorby* and *Crown*.

Robert Sorby Texturing/Spiraling Tool

Mike prefers the Sorby tools which come in two sizes. The full-size tool comes with 1 texturing wheel and 3 spiraling wheels (LV: $311) while the *Micro* (KMS: $130) comes with 2 spiraling wheels (A texturing wheel can be purchased separately).

Unless you plan to do a great deal of texturing, the cost of the full size is difficult to justify. Accordingly, Mike recommends the *Micro* although he did note that unlike the full size, it does not have a bearing. The wheels simply turn on a brass shoulder.

b. Crown Spiraling and Texturing Tool

Crown also offers these tools in a full (*Highland*: US$210) and micro version.

At the following site, Carl Ford explains why he prefers the Crown tool as well as offering several helpful hints for using a spiralling/texturing tool.
https://carlford.us/blog/2020/04/crown_sorby_spiraling/

2. Knockoffs

There are a number of less expensive knockoffs. For example, *Black Forest Woods* in Calgary offers a full-size texturing tool for $108. (https://blackforestwood.com/products/lge-texturing-course-wheel-only)

3. Homemade

You can make one of these full-size tools at a fraction of the cost using a steel bar that is drilled and tapped for the wheels. While the wheel will be located on the side of the bar, Mike indicated that this off-centre placement will not pose a problem as there is minimal torque.

While *Sorby* wheels are available from *Canuck Tools*: $25-$60/*Black Forests Woods*: $50, there are a variety of less conventional sources of gears for wheels. The following video offers some suggestions: https://www.youtube.com/watch?v=vnG_SF32-bs

B. TECHNIQUES

1. Generally

a. For best results, you should use a hardwood with a close, even grain. Leaving aside exotics, the best locally available woods are maple and cherry.

b. In addition to end grain, you can use these wheels on both spindle turnings - where the grain is parallel to the lathe bed - as well as faceplate turnings - such as the side or rim of a bowl. However, in the latter case, the variation between side grain and end grain will make it more difficult to get a consistent imprint.

c. The distinction between texturing and spiraling is based on the cutting wheel used, which determines the finished look.

A texturing wheel (left) has teeth that come to a point (left) while a spiraling wheel has a flat bearing surface akin to a conventional gear (right).

d. The lathe speed should be approximately 450 rpm and the wheel should engage the wood at or slightly below centre.

e. Angling the wheel only a few degrees will produce a more aggressive cut which will be more difficult to control. Accordingly, for beginners Mike recommends that the cutter should be positioned at 90 degrees to the work.

f. To highlight the effect, the pattern should always be framed by a border. In addition, you may want to consider colouring the pattern to make it more visible.

g. Both wheels are scrapers and will inevitably produce "fuzz". To clean this off, Mike uses a green 3M pad.

2. Patterns

There are innumerable on-line articles and videos which demonstrate various wheel positions and their effects.

Two of the better ones are Mike's article in the AAW magazine which can be found on his site at:
https://www.mikepeacewoodturning.com/wp-content/uploads/2019/04/TexturingSpiraling_AW_1213.pdf

and a video by Nick Agar which can be found at: https://www.youtube.com/watch?v=qEIbEQyTnrQ

II. KNURLING TOOL

A. TOOLS

This tool is a modified version of a knurling tool used on metal. It is often referred to as a Wagner texturing tool as this was the first commercial offering.

The Wagner model is available from *Craft Supplies* (US$50), but you might want to consider a knockoff version from *Ron Brown's Best*, which is considerably cheaper (US$30). The tools are available in 1/4" and 3/8" widths and wheels with 16 tpi (for harder woods) and 12 tpi (for softer woods).

B. TECHNIQUES

1. Generally

a. The tool needs to be held firmly and pressed hard into the turning. You also need to hold this firm pressure for some time - Mike recommends at least 7 seconds in order to achieve the intended effect.

b. He recommends a top speed of 350 rpm and finds it most useful on end grain.

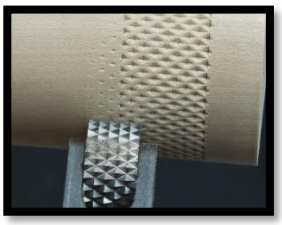
c. The pattern will vary depending upon whether the tool is presented on centre, or above or below.

d. If you want to widen the texture, he recommends that you slightly angle the tool to engage the outside teeth on the wheel in the previous ring and then rotate the tool to a 90-degree position.

e. For further tips, check out: https://www.woodturnerscatalog.com/docs/wagner.pdf

2. Patterns

a. The most common pattern is a diamond one which results from a 90-degree position on centre.



b. You can also create a spiral pattern by tipping the tool on its edge to roughly 45-degrees and drawing it across the turning. The angle of the tool and the speed of the pass will determine how fine or coarse the pattern is.

For instruction on how to produce a variety of patterns, see the following video by Sam Angelo aka Wyoming Woodturner: https://www.youtube.com/watch?v=YTkra9TG1Lg

III. ROTARY TEXTURING

A. TOOLS

1. Commercial

The *Decorating Elf* features a 5/16" HSS ball burr in a handle which can be used to create a variety of patterns including a semi-spiral effect. (Elite Tools: $76).

2. Kit

You can purchase the parts (sans handle) from *Highland Woodworking* ($US32) which also provides instructions for assembly. https://www.highlandwoodworking.com/mini-texturing-tool-kit.aspx

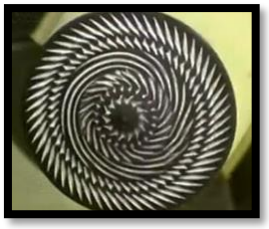
3. Homemade

Mike discussed how to make a homemade version of this tool. Basically, it is 5/16" Dremel burr mounted into a handle using three 1/4" bronze Bunting bushings with a rare earth magnet to keep the cutter from falling out.

You can find the instructions on his website at: https://www.mikepeacewoodturning.com/wp-content/uploads/2022/09/Rotary-Texturing-tool-01282020-1.pdf

B. TECHNIQUE

1. Mike recommends a lathe speed of 600 – 700 rpm.



2. One of the most attractive options is to use this tool to texture the inside of a cove. He indicated that the diameter of the cove should match that of the burr – which will generally mean 5/16".

3. For more suggestions, see the following video by Nick Agar:
https://www.woodturnerscatalog.com/p/49/4555/henry-taylor-Decorating-Elf-4-Piece-Set

IV. CHATTER TOOL

A chatter tools consists of a handle holding a thin piece of spring steel. When the tip contacts the turning, it flexes back and forth in a "bouncing" motion. Each time it contacts the wood, it scrapes off a small amount.

A. TOOLS

While commercial versions are available, at a minimum cost of US$55, it is a relatively simple matter to make your own.

An internet search will reveal a variety of different methods ranging from a very simple effort: (https://www.youtube.com/watch?v=G-ryK-kNfcs) to a somewhat more elaborate one: (https://detroitareawoodturners.com/uploads/3/5/5/6/3556254/making_a_chatter_tool.pdf)

For the spring steel tip, you can use blades from a sabre saw, bandsaw or reciprocating saw or an old windshield wiper blade. The most common shapes are a spear point and a round, and the blade should be bent down at the tip.

B. TECHNIQUE

1. Mike indicated that this tool will only work on end grain.

2. He recommends that the tip should be set on centre to a 7:30 position.

3. The pattern will vary depending upon lathe speed, pressure of the tool and how fast the tool is moved across the surface.

4. It will produce a high-pitched squeal and ear protection must be worn.

ABRASIVE PASTE

The following is in response to members who asked about Mike Peace's reference to a homemade version of abrasive paste in his recent demonstration.

Introduction

Abrasive paste is a sanding product that typically consists of mineral oil, beeswax, and a very fine abrasive powder (pumice or rottenstone). Often referred to as "liquid sandpaper, it is used **before** the application of a finish.

As long as any excess finish is rubbed off, I could find no reports of turners experiencing difficulty with topcoat adhesion.

***Note**: Rottenstone, also known as tripoli, is the same product used in the Beall Buffing System, albeit typically after a finish is applied.*

During application, the abrasive powder breaks down into smaller particles resulting in a finer sanded surface which is said to replicate a 1000 grit sanding. (Some manufacturers offer a "super fine" version which is said to be equivalent to micro mesh sanding pads of 12,000 grit.) While it can be used on wood, it works particularly well on acrylics and resins including CA glue which makes it popular with pen turners.

Commercial Products

While there are a variety of commercial pastes, in a test using a digital microscope (500X magnification), Mike found there was little or no difference in the finish of the various products. His advice was to purchase whichever one was the cheapest and most accessible.

While in Canada this has historically meant *Yorkshire* products, this year *Woodslee Summercraft* introduced a made in Canada abrasive paste in original and microfine grits. ($23/8oz).

While the cost is less than *Yorkshire* (KMS: $27), shipping costs of the $24.95, make it a very expensive alternative. (*Tx MMc*)

Homemade Paste

You can make a homemade paste for a fraction of the cost of a commercial product. The most common recipe is:

By weight: 1 part beeswax 4 parts mineral oil 1 part abrasive powder

Abrasive Options

While some turners use pumice or rottenstone, these are relatively expensive.

Accordingly, many opt for diatomaceous earth (DE) which is made from the fossilized remains of tiny, aquatic organisms which contain very fine silica.

It is used in a variety of skin care products, toothpastes, foods, and medicines, as well as mechanical insecticide products designed to safely kill crawling insects such as bed bugs, fleas, ticks, and spiders. As a result, you can find it in a variety of stores ranging from health foods to gardening.

***Note**: Some DE products for use as an insecticide contain up to 20% "attractants" without any indication of what these are. Accordingly, you should read the fine print to ensure that the product is 100% food grade DE.*

Sources

While there are a few local sources for DE, many of these are for very large amounts and it was difficult to determine whether they were pure DE. The cheapest source I could find without any added chemicals, and one that you can use to compare local prices, is *Organic Matters*: $5.50 + $10 shipping/1 lb. https://www.omfoods.com/products/misc-packaging-diatomaceous-earth-powder?variant=7102513578041

Mixing Instructions

You can find detailed mixing instructions including safety tips at the following site: https://www.woodworkersjournal.com/sanding-woodturning-projects-with-a-lubricant/ Foremost amongst the latter is the need to wear a face mask to protect against inhalation of the very fine powder.

CA GLUE/ACCELERATOR HAZARDS

The following are a few of the commonly cited health and safety hazards when using CA glues or accelerators (CA/ACC) as well as some preventative recommendations.

I. HEALTH

1. SKIN INJURIES

If you inadvertently glue your finger to another body part or other material, do not try to pry them apart – it will tear the skin off.

While the glue will spontaneously release in a few days, there are a few quicker options.

You can wash your hands with soap and warm water which will soften the glue and then rub the area with vegetable oil or Vaseline which will break down the bond.

Alternatively, you can use acetone or an acetone-based product, such as nail polish remover for more immediate removal. To avoid burning, use a cotton swab to apply the acetone to the area.

Most glue manufacturers offer an inexpensive debonder which is an acetone product in a viscous medium which means that it will not run as freely as pure acetone.

EYES: Both CA and ACC can cause irreparable damage to your eyes. If you get either in your eyes, **seek emergency medical attention immediately**. Do NOT use any acetone-based product.

2. ALLERGIC REACTIONS

a. Sensitization

When a person is first exposed to CA/ACC, usually by inhaling their fumes, the body responds by creating targeted antibodies – a process known as sensitization. Every subsequent exposure will prompt the production of these antibodies.

It appears that for most turners who use CA/ACC sparingly, these antibodies are effective, at least initially, in preventing any significant reaction.

b. Irritation

However, some turners do experience what is described in medical terms as relatively moderate reactions, the most common ones being sore/tearing eyes, runny nose, or sore throat. In such cases, you should immediately move to a clean air environment.

EYES: Once again, the eyes are particularly susceptible to the fumes. In the case of sore/tearing eyes, you should rinse the eyes with warm water for at least 10 minutes. **If pain, blinking, or redness persists, seek medical attention immediately.**

c. Systemic Reaction

In rare cases, exposure to CA/ACC can produce more severe reactions such as a harsh rash, difficulty breathing, nausea, fainting, and low blood pressure.

Needless to say, in such cases, you should seek emergency medical assistance immediately.

The following post by a doctor on the *AAW Forum* provides an explanation for these reactions and notes that they may increase in severity over time.

With each exposure to the allergen [CA/ACC] your body produces antibodies… Unfortunately, with repeated exposure your antibody level rises. Once the antibody level is high enough and you are exposed to the allergen you could have an anaphylactic reaction. … I have seen patients both in clinic and in the ED with all levels of reaction and most started out mild and became severe with repeated exposure.

I am one of those that worked with CA for some time before getting a reaction - for almost 2 years with no problems whatsoever. Then by the time I got proficient with CA I began to have normal allergies such as sniffles for a day or so. Then about 3 months after these symptoms first occurred, it started getting worse. Cold like, flu like symptoms for 3 days and even double vision.

3. PREVENTION/PROTECTION

The following are some recommendations to protect yourself.

a. Safety Glasses/Disposable Gloves

The threat to your eyes is particularly significant. Protect them by wearing safety glasses.

> **Note:** You should **NOT** wear a faceshield when using either product. It will trap the fumes inside the shield increasing your exposure.

While wearing gloves is an obvious step, ensure that you remove the gloves once you have finished an application. I was surprised at the number of reports of individuals who inadvertently wiped their eyes with CA/ACC on the gloves.

b. Respirators and Cartridges

Particulate filters including P100 will not provide protection from the fumes. Accordingly, you should not rely upon PAPRs with particulate filters such as the *Trend Airshield Pro*. In fact, as is the case with a faceshield, these units will draw in the fumes and significantly increase your exposure.

While I was unable to find any manufacturer of organic vapour cartridge that specifically identifies protection from CA/ACC fumes, there are nonetheless many sources which recommend these. Support for this view is contained in the following 2013 post on the *International Pen Turners* (*IAP*) website:

I asked 3M this question a couple of weeks ago and following is their response.

"Thank you for contacting 3M regarding respiratory protection. An organic vapor cartridge (6001) can be used with a 7500 series half facepiece respirator to reduce exposure to organic vapors in cyanoacrylate (CA) glues. When used with a half facepiece respirator that is qualitatively fit tested, it will provide a protection factor of 10, meaning it will protect against contaminant concentrations up to 10 times the Occupational exposure limit."

c. Ventilation

Every source I could find indicated that the number one measure to minimize exposure is adequate ventilation. Many online posts recommend using a fan or a dust collector to draw the fumes away.

d. Application Tips

Avoid leaning over the turning when applying CA/ACC which will obviously increase the amount of exposure.

For an accelerator, use a hand pump rather than an aerosol spray as it will introduce less airborne liquid and thus fumes.

e. Odourless CA Glue

Finally, you may want to consider using an odourless glue which manufacturers claim will not produce fumes that can cause a reaction. Originally marketed to those who are allergic to standard CA, their use is also recommended whenever sufficient ventilation is not possible. They offer only slightly less adhesive strength than regular glue but are much more expensive (KMS: $29 vs $11/1 oz.)

f. Additional information

You can find additional information and recommendations here: https://www.woodturner.org/common/Uploaded%20files/Safety/CAGlueSafetyFirstAidRichardWright.pdf

II. SAFETY

When CA glue cures, it produces an exothermic reaction – the molecules rapidly heat and fuse before quickly cooling. While the heat may go unnoticed when applying a small amount of glue, the result may be otherwise when a large amount cures.

With the permission of the *Greater Vancouver Woodturners Guild*, the following note from many years ago was recently republished in its newsletter.

After a recent discussion about the hazard potential of large bottles of CA glue, a qualified expert on Cyanoacrylate glue has asked me to bring the following safety information to the attention of woodworkers:

Cyanoacrylate is unlike the other woodworking adhesives we use, and it requires some special handling. CA in the bottle is a very small, very reactive molecule. It doesn't become an adhesive until it cures. Curing involves a chemical reaction between the small molecules to make very large molecules (polymer). The special properties of polymers enable cured CA to become an adhesive. The curing reaction gives off large quantities of heat. For example, less than 4 oz of CA will produce 15,000 calories of heat during curing. The heat given off by a small dab of CA curing slowly is dissipated and it is not noticed, but if a larger quantity of CA cures quickly, enough heat can be given off to boil and / or decompose the CA with the production of noxious and probably toxic fumes as well as the possibility of fire or explosion.

An accelerator (catalyst) will cause CA to quickly cure and lead to these potential hazards. In addition to the accelerator designed to cause CA to quickly cure, many other substances act as accelerators. Many dyes will be excellent accelerators, and even water or glass can cause CA to cure rapidly. An extremely tiny amount of accelerator can lead to the rapid cure of a whole bottle of CA. The bottle would explode if it rapidly cured. To avoid possible problems with CA don't store large quantities, at least in the same bottle. Don't ever add anything to CA unless you first test with a very small quantity of CA to see if the additive is an accelerator. The test should be done with good ventilation in case there is rapid cure, which leads to boiling, fumes and possibly fire. Don't transfer CA to a different container from which it was originally packaged. The new container could contain something that could act as an accelerator.

Bottom line: Be cautious handling anything more than a drop of CA and never add anything to a larger quantity of CA that could lead to a rapid cure.

HIDDEN ACCELERATORS: CELLULOSE FABRICS!

There are certain types of cellulose fabrics such as cotton and wool that can act as a highly potent catalyst causing severe burns. While the same amount of heat is released as in "normal" curing, it does so in a much shorter period of time.

Accordingly, you should never use cotton or wool gloves when working with CA glue.

Moreover, you should also be careful about spills onto pants, or a smock made of cotton. There are numerous medical reports of this occurring including a very serious burn on the thigh of an 82-year-old man, who was using CA glue to make a model airplane. His cotton jeans caught fire when some glue spilled on his leg causing a serious injury which required a skin graft.

BEADING TOOLS

While turning beads has been an integral element of spindle turning for centuries, the widespread use of beads on bowls or platters is a much more recent phenomenon.

Initial efforts tended to focus on functional considerations such as adding a bead to the rim of a bowl to improve handling.

Subsequent use included turning beads on the rim of a platter or the side of a bowl to frame and highlight the “captured” area which often featured various forms of embellishment or inlay.

And adding colour to beads became a popular technique.

The emergence of “basket illusion” pieces which features a beaded surface on the entire outside (and in some cases, the inside) of a bowl or platter, prompted even greater interest in beading.

TOOLS

1. Spindle Gouge

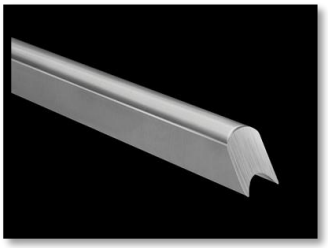
If you only intend to cut single beads, such as on the rim of a bowl, a small spindle gouge with a fingernail grind will suffice. And, unlike dedicated beading tools, a spindle gouge will typically provide a better finish.

The first few minutes of the following video illustrates the technique: https://www.google.com/search?client=firefox-b-d&q=woodturning+beads+with+spindle+gouge#kpvalbx=_QjwWZc7GLdXa0PEPkOeR-AE_29

2. Commercial Beading Tools

In cases of multiple beads, it is important for aesthetic reasons that the beads are all the same size, and in the case of "basket illusion" turning, it is essential. Doing so with a spindle gouge will be a challenging task to say the least. Accordingly, most turners will use dedicated beading tools.

While there are many options, one of the most popular beading tools are those offered by *DWay Tools* in Washington state. (https://d-waytools.com/beading-tools/

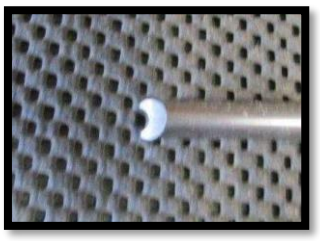


They offer 8 sizes (1/16" to 1/2") at a cost of US$55 each. The following video shows how to use these tools. https://youtu.be/ZgBn5YLOqvA

3. Homemade Beading Tool

Purchasing multiple beading tools can become an expensive proposition. Accordingly, for larger beads you might want to consider making your own using an old 1/4", 3/8" or 1/2" spindle gouge.

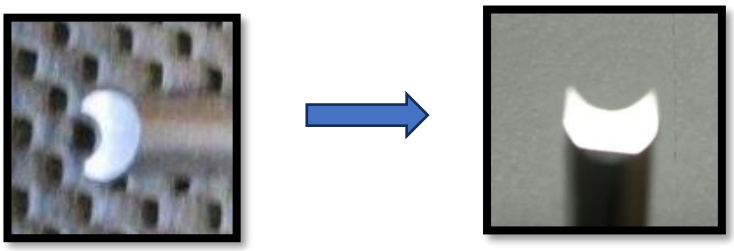
Which is what Graeme Evans did. He began with an old spindle gouge which had become too short to sharpen using his jig.



The grinder table should be set between 50 - 60 degrees and the tool placed on this with the flute up. He then ground off the back of the gouge straight across until there were two sharp points on the wings.

With the flat side on the tool rest and using a slight rocking motion of the tool, he was able to turn a set of beads on a maple turning with virtually no tearout. And the tool can be quickly sharpened using a diamond hone.

Note: As the cut deepens, there is an increasing amount of metal on the side of the wings which will produce a relatively wide groove between the beads. If this is a concern, you should grind the sides of the tool to produce a taper to the tip.



An internet search will reveal a number of videos showing how to use a beading tool.

RECALL OF GRIZZLY LATHES

On November 2nd, the U.S. Consumer Safety Product Commission issued a recall of approximately 21,300 Grizzly lathes which were sold in the U.S. as well as **approximately 60 which were sold in Canada**.

The recall involves all model G0584 and G0462 Grizzly Industrial and model W1758 Shop Fox wood lathes.

You can find more information here: https://www.familyhandyman.com/article/grizzly-recalls-more-than-21000-wood-lathes/

CBN WHEELS

While some turners continue to use Aluminum Oxide (A0) grinding wheels for shaping and sharpening turning tools, most have shifted to Cubic Boron Nitride (CBN) wheels.

not overheat your tool, never need to be dressed, and will last a lifetime for a hobby turner. And as they will always retain their original diameter, it means there is no need to adjust grinder jigs.

If you own or are considering purchasing a CBN wheel, the following are a few points to keep in mind.

1. Speed

CBN wheels work best on slow speed grinders operating below 2,000 rpm. (Most slow speed grinders offer 1750 rpm which will work fine.)

2. Configurations

While CBN wheels are available in 3 other configurations (*Flat, "4 in 1" and Mega Square*), the most popular form with members is the *Radiused Wheel*. As the name implies, the abrasive on these wheels extends to the radiused edges (typically 1/4") which makes it easier to grind round scrapers and small hollowing bits.

3. What Grit?

If you are only going to purchase one wheel, the vast majority of turners recommend 180-grit. It will allow you to get a good cutting edge while also allowing it to be used for reshaping.

Note: If you have to remove a great deal of metal, a 180-grit CBN wheel will take a long time. For that reason, some turners will match a 180-grit CBN with a coarse AO wheel (46/60 grit) on the other side which will work much faster.

For a second CBN wheel, while some recommend a 60-grit wheel which can be used for serious reshaping, most recommend 600-grit which is said to provide a sharper edge for finishing cuts.

4. Cleaning

For hobby turners, it is **highly unlikely** you will ever need to clean your wheels. Merely sharpening HSS tools on the wheel will typically remove any buildup of metal filings and sap or sludge from wet wood.

Having said that, if you do need to clean the wheel, you can use a stiff brush (steel or brass) with a variety of "solvents" without having to remove the wheels from the grinder. For light buildup, a mixture of warm water and dish detergent may suffice.

For more substantial buildup, you can use a blade and bit cleaner such as PB Blaster (Cdn Tire: $11) or CMT Formula 2050 (KMS: $15). Rather than spraying these compounds and creating a mess, simply apply a small amount to a cloth or paper towel and then rub it on the wheel. There should be no need to use a brush and there is no need to clean the wheel afterwards.

5. Metals to Avoid

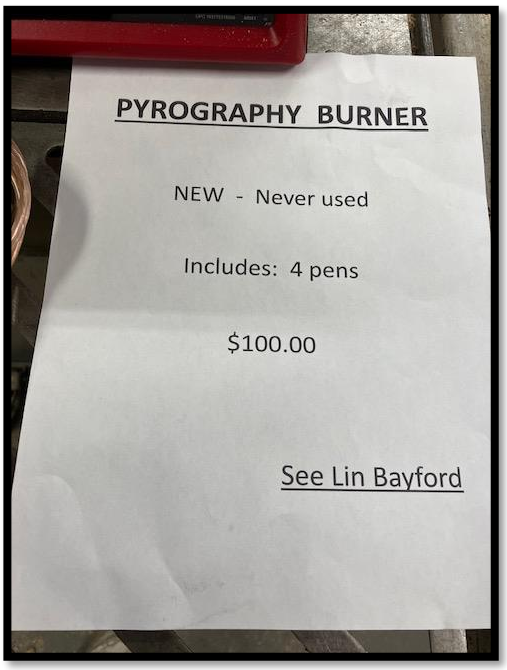
You should avoid grinding soft metals on CBN wheels. This includes aluminum, brass, copper, and soft carbon steel.

> To determine whether a tool is made of soft carbon steel, run a metal file against the tool. If it scores the metal, the tool is likely soft carbon. If it skates off the surface, it is likely not.

Having said that, if you make a mistake, you can take comfort from the following "test" by noted turner Reed Gray aka Robbo Hippy. He intentionally loaded an old CBN wheel with aluminum, brass, copper, and soft steel just to see what would happens. He indicated that he "loaded it up pretty heavy". A frequent turner, he used this wheel to sharpen his HSS tools and reports that it took a week or two to get about 90% of removed and it was clean after a month or so.

> **Carbide Warning**: Despite some on-line reports to the contrary, you should not sharpen carbide tools/cutters on a CBN wheel. Many sources suggest that it will destroy your wheel. If you need to sharpen a carbide cutter, use a diamond hone.

FOR SALE



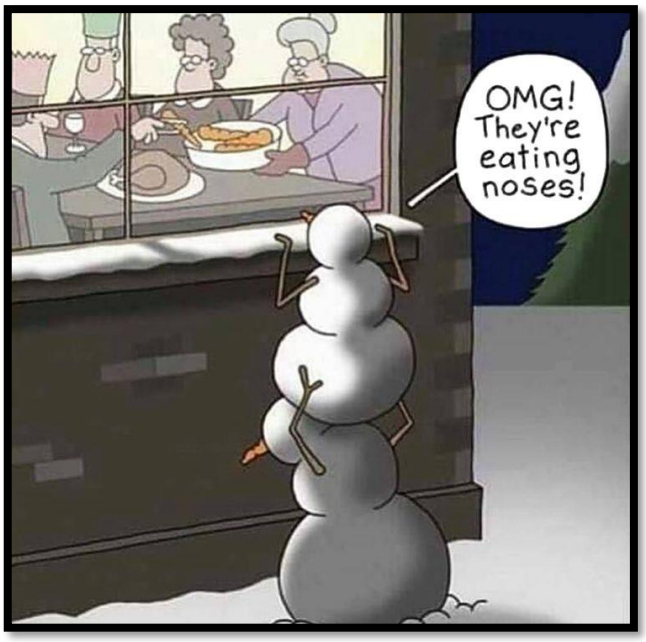
HOLIDAY BREAK

Our next meeting (and newsletter) will occur in January. Here is hoping that everyone has a great holiday season, and that Santa is good to you.

PARTING OFF

Thanks to a whack of people (Chris Leach, Graeme Evans, Mike McEwen, and Virginia Lee) as well as the members of the Executive for hanging in there.

CONCLUDING THOT



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