



# 12 top tips for pen turners

This month Kurt Hertzog offers some tips and tricks to help you make better pens

**Many woodturners relegate pen turning to the grade school students as their entry into turning. Of course, pen turning is many turners' entry point into the woodturning world whether young or old.** That doesn't make pen turning a newbies-only craft. You can make pen turning as creative and challenging as you wish. Moving beyond the kit offerings, creating your own blanks, custom-made fittings, special presentation and more will offer many years of challenges and potential growth. This kicks-off of a short series on pen turning will capture the most important points as I see them. I'll use the two-piece, 7mm kit as an example for most of these tips but they are universally important to any of the kit or non-kit pens.

## Safety

Pen turning is probably the safest of all woodturning because of the size of the turning workpiece envelope and the mounting techniques. Turning pieces of wood or other pen blank material that are usually sized 20mm square and 125mm long and held captive between centres presents a relatively low-risk situation when compared to other turning projects. Especially when they are captive on a pen mandrel. Even with smaller materials and very secure mounting, don't become complacent about safety. Fractures can occur and projectiles of material can still happen. The sanding dust and finishing chemicals offer the same concerns as larger woodturning projects. Eye, face and lung protection are always in order as well as chemical-handling safety gear.

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The small size of the turning doesn't exempt you from good turning safety techniques and use of the appropriate PPE.

## 1 Fit is paramount

If I could offer only one tip, it would be to pay attention to the detail of fits. There are many more fit interfaces on a pen than there are on most other turnings. With the turning aspects of pens being easier than most other turnings, these fits of turned and provided components are what will separate your work from that of others. Of all of the fits, the fit at the interface of the nib is the most critical. Your end user will feel that interface each and every time they use the pen. You should make every effort to make this fit absolutely perfect. Any flaws, physical or perceived, in this area will definitely degrade the quality of the pen.'



**The most important fit of any pen is where the users hand will feel the interface with every use**



Not only will a quality inkfill write well but exact replacements can be found around the world

## 2 Make it write well

Any pen that you make intended to be used can be less than optimal if it doesn't have a great writing inkfill. For most kits, the factory provided inkfill is adequate but certainly not ideal. The inkfill, being just one component of many, must hit a price point. In our environment of intense price competition, the quality of the inkfill usually is low on the priority list compared to the visible parts. I suggest you replace the kit-provided inkfill with a quality inkfill from a company whose reputation is based on its high standards of writing. Not only will you provide the pen with an inkfill that writes nicely but also with one that can be readily replaced. The inkfill projection through the nib that you commit to on assembly may change when a different inkfill is used for replacement. If, for example, you change the inkfill and provide a genuine Cross, Parker, Shaeffer, Hauser, or other brand name, the end user will be able to find the exact replacement anywhere in the world.



The most noticed difference in the quality of the kits is the construction of the clip. Durability also varies

## 3 Don't scrimp on quality

In the frenzy to save when buying kits and blanks for pen turning, the area that suffers is quality. The race to the bottom for pricing usually entails lesser quality in plating and stamping that might not be apparent until the pen has had some use. When you calculate the value of your time to create the finished pen, the few dollars you may have saved on kit purchase are false economy if the pen is flimsy or doesn't hold up to use. Don't take this advice as encouragement to buy the most expensive or be oblivious to price. It is intended to caution about being blinded by low price. Buy wisely to get the best value and the quality level that is appropriate for your work, time invested, and appropriate for the end customer. There are higher-quality offerings from every manufacturer/reseller. They are only modestly higher in cost. That material cost increase will probably be inconsequential when you put it into the context of true total cost.



My personal pen. The hardware has been replaced four times yet the CA finish over the body endures



CA finishes are easily done. Sand to desired grit, clean and add a few drops of thin CA on the corner of your applicator towel



With the lathe off, wipe on your thin CA application axially then rotate by hand to cover entirely



Use a clean corner of the paper towel and repeat. Thin coats. Repeat until you've reached the desired look

## 4 Not all finishes are equal

Of all of the turnings you might do, a pen has the toughest life. Bowls, platters, ornaments, lidded boxes and other turnings might see use and handling but rarely need to endure the harsh conditions a pen often does. Pens will be buried in the bottom of a purse, put into a pocket with change and car keys, thrown into the glove box of a car, used to pierce the packaging tape on a box,

and a myriad other abusive situations. The extremes in environment, along with constant handling, will stress any finish to the limit. I don't believe there is a finish applied to a pen that is overkill. Any finish that goes on quickly and easily often comes off quickly and easily. My first choice of finish for a 'working' pen is cyanoacrylate. Properly applied, a CA finish looks good and provides great protection for the pen.

Cyanoacrylate adhesive is a plastic. When applied and cured it creates a plastic protective coating over the pen blank. It will provide excellent chemical and mechanical protection for the pen for years. Lacquer and epoxy are other finishes that I think are good looking and very protective. Pick any of the three that you favour. Using one of these will keep the pen in good stead for years.

## 5 Lose the centre band



The centre band in the kits really constrains your shapes. The same kit hardware with the centre band removed frees your designs



Live with a slightly shorter pen or get creative about making up some of the length lost removing the centre band



Make up as much or as little of the lost length as you wish. Here a couple of plastic shims add accent too



You can also make up the lost length and more if desired by leaving part of the interface ends partially unsupported by brass tube

The traditional 7mm kit uses a provided centre band. Once you've mastered the basics of pen turning, I recommend you create your pens without a centre band. The purpose of the centre band is to aid the newcomer and help them be successful. It provides the mechanism to turn and complete pens providing very forgiving fits between the upper and lower barrels. Pens with a centre band label the maker as a newcomer. The dimensions and shapes that the centre band force you to

follow severely compromise your design freedom. Eliminating the centre band will let you use the 7mm kit components in a variety of sizes and shapes of your own design. The loss of overall length from the missing centre band can be compensated for if desired but it really isn't necessary unless the original length is important to you for aesthetics. The pen can be completed and will work quite nicely without compensating for lost length.

## 6 Don't waste time on losers

I think pen turners are hesitant to accept defeat. If a bowl turner has a catch, it is viewed as a design opportunity. The shape or size of the design will be altered to accept the new constraints of the blank. Pens are not as forgiving. If you have a blowout of a blank, turn to a shape that you can't recover from, find or create a flaw that needs filling or repair, or some other problem when working, you are tempted to try to fix it. There are many ways to recover from these issues and

often without leaving any or too much evidence of your repair. If your problem is minor, go ahead and try to fix things if you think your success rate is good. I suggest you assess the situation early on and decide when to walk away. The type of flaw and the skills you possess for making repairs will dictate how likely your repair will let you produce a pen you can be proud of. If you spend the time and energy performing a repair that will always show evidence, I think

you've thrown good money after bad. If you don't think your fix will yield a great result, give it up. Don't waste time on losers. Your investment in time and materials only increases as you progress. To take a pen to completion, or near completion, and then decide it isn't acceptable is maximising your loss. The moment you see or know you've got a problem that has a low percentage of success, accept the loss, toss the non-recoverable pieces and move on.

## 7 The magic isn't in the tool

Virtually every toolmaking company has a pen turning tool, or sometimes a family of pen turning tools. New pen turners often get wrapped up in the tool aspect. You can turn pens with just about any properly sharpened tool. While I don't often use a scraper, just about any other turning tool can be easily used to turn a pen. Not to trivialise the turning aspect, but all you are doing is knocking the corners off the blank and getting it close to dimension. Get the corners turned off, get close to size with pleasing tapers, then sand and finish for assembly. My favourite tool, which can be

used for any pen I've ever encountered, is a 20mm spindle roughing gouge. If that isn't available, an 1/8in parting tool will substitute nicely. In demos I've used everything from carbide pen tools to sharpened screwdrivers to illustrate this point. Sharp and properly presented, any turning tool is capable of creating good results. The magic has never been in the tool – it's in the hands of the user. Don't agonise over not having the latest whizzbang tool. If you can't be successful with the run of the mill turning tools, the new whizzbang one won't solve your problems.



A ground discount store screwdriver illustrates that a properly sharpened and presented tool will cut wood very nicely. This is done just to prove a point – don't do this at home, buy correctly made blades



Whether kit or custom-made, never let anything out of your hands unless you can be proud of it

## 8 Nothing but top shelf

Pens are easy to do well. In my opinion, if your pen doesn't exhibit your work at its finest, it should never see the light of day. If you have to explain what went wrong or apologise for any aspect of the pen, you've put a mistake out that shouldn't have been seen. Tied in with cutting your losses early, if you have anything other than top-shelf results, pitch them into the scrap bin. If you have less than perfect work out there, your reputation will be determined by that. That doesn't mean you shouldn't have work going out as you master the art of pen turning. It means that if you aren't putting out only the work that is the best of your abilities, you are making a mistake. For those who are making pens by the skidload for sale in their booth at the craft fair, their price point may dictate a time and material commitment they can afford. For those who are not in the price-is-the-only-important-thing category, I suggest you let nothing out of your sight that isn't flawless.



Measure your accomplishments by the quality of your results, not the number of species you've turned or how far you've sanded

## 9 Measure important accomplishments

The number of pen turners who brag about how many pens they've made or how many species of wood/plastic/other materials they've turned puzzles me. The quantity of pens created is far less important than how far you've progressed and the calibre of your results. I think some pen turners get lost in the wrong measures. I believe the true measure of accomplishment is how much better the fits and finishes have gotten and how far the maker has progressed separating themselves from the masses. Their own unique take on altering things or using any particular material extremely well is far more important than bragging about having turned petrified animal body parts. If the maker's selling point is explaining they have sanded through 12000 Micromesh, I believe they have missed the boat. Presenting a well-executed, well-fitting and well-finished pen lets the recipient know you are a penmaker. Sanding through 12000 Micromesh doesn't.

## 10 Practice, practice, practice

Mastery of any skill comes with practice of fundamentals. It is rare that woodturners, and particularly pen turners, ever practise their skill sets. They may spend time in the shop but they are working on a project with an end point. Whether a bowl or pen, the focus is doing what it takes to get to a successful end, not refining skills. I

believe that some focused practice will pay dividends. Necessary skills from sharpening to finishing, including cutting and sanding, improve with practice. Honing those skills on practice pieces will refine your techniques. Over time, it can speed your work if you wish. Even if time is not an issue, your results in quality and

uniformity will improve with practice. Pen turners tend to think that learning to refine their general woodturning techniques isn't of value. I suggest that your woodturning skills apply directly to all of your turning projects, including pens. The better your turning skills, the better your pens will be.



Grow your skills by doing different kits and personal design variations. Using every species on earth in the same kit won't move you forward



Experiment with non-kit designs. Develop stands and presentation ideas. Work with different materials. Failing still is learning

## 11 Attention to detail is telling

Creating a well-turned and finished pen is the end goal. Even having done that, there are many other details that can help distinguish your work. All of them are easily done once you begin paying attention to them. Second only to the fit at the nib is the orientation and match between the upper and lower body. With solid coloured acrylics or plain Jane woods, it doesn't require any special attention. With figure or colourations of the blank, care should be taken to minimise the kerf loss and maintain top and bottom orientation to provide the best grain match.



It might seem minor and silly but the attention to detail shows your skills. Here the extension of the inkfill is pleasing and uniform

## 12 Don't quit your day job

With the exception of a very few, not many pen turners make a living creating and selling pens. To the starry-eyed newcomer, it seems like easy money. Crank out pens with only a small outlay for kits and materials and sell them to all of your friends, family and co-workers. This appears to be a great money maker. The truth is that if you calculate your true costs as a for-profit business would have to, you are in a financial spiral downward. Initially you have easy sales and can recover some of your outlays but a sustainable sales volume factoring in the real costs isn't a winning proposition. Keep your day job to pay the mortgage and use your pen sales as pin money. Cranking out tons of mediocre work is a sure way to turn an enjoyable pastime into drudgery.

## Conclusions

Pen turning can be exclusively your woodturning endeavours or just one of many. Regardless of which it is, you can make it as simple or complex as you wish. Whether you are content with doing kits and creating a few gifts or want to drive the state of the art by designing and fabricating your own pens, pen turning can offer a fun and enjoyable pastime. Modest equipment and tool needs as well as fitting into a small space make it far easier to get involved than other forms of woodturning. As we go forward with this series, I'll offer ways to improve your results and challenge your horizons.

### Interesting things to remember

- Using lesser-quality kits is false economy
- The fits and finish never improve with age
- The recipient will remember you by your worst work, not your best
- The same kit, same woods and perfection don't separate you from the crowd
- Practising and developing your skills isn't wasted time
- There isn't too tough a finish for a working pen
- Your design and execution will be more important than bizarre materials ●



When you think you've arrived, tackle your own design, fabrication of parts and turnings. From my personal collection by Brian Gisi