

Kurt's clinic

Kurt Hertzog offers some answers to readers' questions

Abrasive storage

Question: My sandpaper is always a mess around my lathe. There are small bits of sheet paper I've cut, used, then set down because they still have life. They wind up in a jumble on the lathe and often fall down in the shavings pile. Suggestions?

Answer: I think most turners and woodworkers struggle with this issue. Quality sandpaper is expensive and most want to get their full utilisation from it. How to store it, keep it readily available, and use it wisely without being overwhelmed with any burdensome system is the issue.

I have a system that works for me. It may or may not be your answer but even with my system's shortcomings, I've not found anything I like better. I have a standard manila office folder that I use for my working stock of sandpaper. My excess paper is left in the original packaging and is stored elsewhere in the shop. The working file folder has a sheet of every grit in numerical order at the front. At the very back of the folder are a couple of full sheets, again in grit order, being the handy resupply material in my working folder.

A cheap pair of scissors, purchased for and dedicated only to cutting sandpaper, is in the folder. Laid on the bed of the lathe when needed, I have all that I need in convenient order. I open the folder, flip to the needed starting grit, flip over that starting grit, and cut off a slice of sandpaper thought to be sufficient. The cut piece is folded in thirds, used, and then discarded, whether completely spent or not. By cutting off only what is needed, there is little waste. If more is needed, another estimated slice is cut off, used, and discarded. That grit having been folded over in the folder presents the next grit and so on.



Organised, easy to use, frugal to an extreme, and easily set aside. I've not found a more convenient way to work through the grits and not be burdened by saving scraps

The process is repeated until I get to the maximum grit needed for that application. When any particular grit runs out, the proper replenishment sheet from the back of the folder is moved forward and put into the proper place.

When sanding is completed, the folder is closed with the scissors inside and it is moved aside until needed. Is this ideal? It is the best I've found. I have my sandpaper handy, quickly brought to bear efficiently, waste little, and have a workable process stepping through the grits until I've achieved the desired sanding results. This being the best I've been able to come up with. I certainly welcome criticism, suggestions, alternate methods, or any more effective alternatives.

Lathe belt tension

Question: I have a question. No matter how tight I tension the belts, they squeal or slip under heavy load. How do I keep the belts in my lathe from slipping?

Answer: Several things come to mind pondering your question. If you have squealing belts or are experiencing slipping, perhaps you are trying to trade off low-end torque for using the appropriate speed. Turning your stock at a higher rpm and using lighter cuts, you can accomplish the same end goal without trying to 'muscle' things through. While there are commercially available belt dressing spray products, I avoid them, opting for trying to find and solve the root cause. Providing you have the proper belt(s) installed as the designers intended and haven't altered the correct alignment in any way, your slipping or noisy belt might simply be beyond its useful life. As belts age, their flexibility decreases and their engagement

surfaces often harden or polish smooth. With the reduced gripping ability, continuing to increase the tension usually doesn't solve the problem. If anything, it just stresses the entire system, adding wear to the motor and other shaft bearings, along with continued polishing of belts and pulleys.

Replacing the belt(s) with new stock of the proper design and length should help the situation. A properly tensioned belt shouldn't be bow-string taut but rather have some finger, easy push deflection mid-belt. Take a few moments to clean the pulleys with a chemical cleaner prior to installing the new belt. One or all of these suggestions should solve the problem and allow you to have a noise-free, properly tensioned belt system on your lathe.



Whether regular V or poly V belt, there needs to be a bit of flex. Finger pressure mid-belt should deflect it slightly when tensioned properly

Tenon problem on a bowl

Question: I was turning a 250mm diameter bowl out of very dry cedar last night and while I was hollowing it the tenon broke completely off. The tenon stayed in the jaws. The exciting part was ducking and watching the spinning bowl/projectile shoot across the shop. My question is: should I try to glue the tenon back on or is there a smarter way to re-chuck the bowl?



The best strength and durability for clamping on a tenon is with the chuck jaws angled to the grain (green) as opposed to on axis and across the grain (red)

Answer: Based on your comments, a couple of things come to attention quickly. It may not be ideal to hold a 'very dry bowl' clamping on a tenon. Also, your bowl blank, being very dry, may have had visible or internal cracks and checks weakening the structure. If you had sufficient stock, a faceplate might have worked better for the work you were doing. You can hollow and shape on the faceplate and then reverse friction mount using the left in place centrepoint to remove the stock ruined by the screws. Very sturdy and secure mounting – in my opinion, far more secure than very dry stock being hollowed on a tenon mount. If you had to clamp on a tenon, what was the orientation of the grain? If you haphazardly clamped the bowl without paying attention to the grain orientation or without cutting a crisp, sharp corner in your tenon to bowl interface, you may have doomed yourself to a failure. A radius in the tenon corner will not allow a proper jaw seating and poor orientation of the grain to jaws invites a weaker clamping, prone to shearing off. At this point, I suggest you hit the burn pile with this bowl and start fresh. If you feel you have to continue, my suggestion is to avoid trying to reattach the tenon for use as a workholding method. It is broken and reattaching it invites another potentially dangerous situation. If there is sufficient stock, you can try to cut a new tenon on the bottom, however if you were



Good practice for chuck mounting is to mount flush on the tenon shoulder with a good tenon depth, without touching the bottom of the chuck

at the hollowing stage, you'll have some difficulty reorienting the bowl properly to cut a new tenon on axis, even if there is enough material. You may wish to visit *Woodturning* issue 242 – July 2012 – Workholding Aids and Chucking, Part 5. It has quite a bit of information on chuck mounting jaws and tenons. •

Send your questions to Kurt's email: kurt@kurthertzog.com