

Crosscut



◀ Detail from the wooden TLB model made by Douw

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Next Turners Meeting on Monday, the 6th March 2017 from 18h00 at the Living Link Hall – Using resin in woodturning – by Herman Potgieter

Next General Meeting on Wednesday, the 8th March 2017 from 18h00 at the Living Link Hall – Finishing with Annie Sloan Chalk paint by Karen Reina from Silk and Slag.

News

6th February 2017- Turner’s meeting. Wood identification tools. Chris van Heeswijk detailed eight factors to consider when attempting to identify wood. These take into account whether wood is solid or veneer, whether it has been stained; the grain pattern; density and hardness; source; odour; UV fluorescence; chemical tests and heartwood extractives. Chris and Herman showed samples of different woods and used a UV torch to show how some fluoresce.



8th February 2017- General Club meeting. Dave Drummond showed a dovetailed chest he made. He is looking for a source of hand-forged strap hinges, so if you know who could make these, please contact him.

Douw showed some of his remarkably detailed models of earth moving machines. Douw uses photographs to scale drawings of the machines, from which he makes the models. The tyres are turned and hand



carved. Each model takes between 100 to 200 hours to complete. He has a Facebook page if you wish to follow his work.



Matt Hoffman gave an introduction to Sketchup Make which is a 3D drawing program that can be used to quickly design 3D objects such as cabinets. The ability to quickly change proportions and view the designs from different angles allow easy design changes. Go to www.sketchup.com for more information and to download the free version. The professional version costs \$700- in case you wondered.



Herman showed how he made a run of small boxes using fixtures and how he uses magnets to hold the lids in place.

Alistair shared a tip on how to stop glue joints sliding out of alignment while the clamps are being tightened.

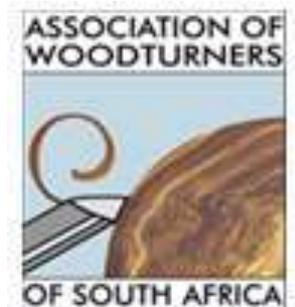


Club Notices

Hobby-X – 2nd to 5th March 2017 at the Dome, Northgate,

Randburg. The lists to volunteer to demonstrate and man the WWA stand at Hobby-X have been circulated and finalised. We expect to have two club lathes (A Nova Comet 2 and a Jet Mini) in action as well as Frans' Jet Mini, and Wally's Hegner Scroll saw, as well as a display of items made by members to stimulate interest in the club. If you are visiting Hobby-X, please make a point of visiting our stand!

AWSA Annual Congress – the date for the 2017 AWSA congress has been announced – it will again be in George from the 22 to 25 Sept 2017.



IMPORTANT DATE CHANGES

Due to public holidays the following changes will be made to meeting dates:

1. The Turners meeting in May will take place on Tuesday **2nd May 2017**,
2. The Cabinetmakers meeting in August will take place on Thursday **10th August 2017**.

Poena Coetzee has donated a week at the Castleburn Resort, Underberg to the club and the committee have decided to raffle the prize.

The winner will have a choice of 24 to 31 May or 6 to 13 December 2017.

It is a one bedroom apartment with two sleeper couches for children.

<http://www.castleburnresort.co.za>

We will sell a maximum of 250 R20.00 tickets. Thank you Poena for the generous donation!!!

Regular Events:

Toymakers. The toymakers meet on the first and third Mondays of every month, at 09h00 till 12h00 at the Albertskroon workshop. Meetings will be cancelled if they coincide with a public holiday. Contact Eddie Marchio on 011-678-8062 or [rm22 AT mweb.co.za](mailto:rm22@web.co.za) for more information.

Ken's Saturday Workshop. Ken Bullivant holds a Saturday workshop at his house in Boksburg. The location is 13 Franklin Avenue, Comet, Boksburg on the first Saturday of the month from 09:00 to 12:00. They decide on an annual project and work throughout the year making it. Individual projects are discussed and problems solved. Ken also offers private lessons too. Contact Ken on 082 809 0020 if you wish to take part.

Friday Morning workshop - Winston Klein will be convening a workshop at the Albertskroon work shop on the 1st and 3rd Fridays monthly from 09:00 to 12:00. Contact Winston at 072 553 5045 or [kleins AT iburst.co.za](mailto:kleins@iburst.co.za)

SPIRIT OF THE WOOD - WOODTURNERS

Offering Woodturning lessons, One-on One Training, Classes and Club, Willing to assist persons with limited physical/intellectual abilities. Contact Johan Kramer on 083 251 0183 or Johankramer300@gmail.com

Saturday meetings

1. Second Saturday of month - Eddie will open the workshop – 011 678 8062 [rm22 AT mweb.co.za](mailto:rm22@web.co.za)
 2. Third Saturday of month – Clive will open the workshop – 083 407 8008 [stacey AT netactive.co.za](mailto:stacey@netactive.co.za) Clive will also open the workshop during the week “BY ARRANGEMENT”
 3. Fourth Saturday of month – Graham will open the workshop – 082 900 0242 [grahamcr AT mweb.co.za](mailto:grahamcr@web.co.za)
- Please can the conveners complete the attendance register on the bar counter, so we can gauge attendance?

Repurposing Old Files as Turning Tools

Trevor Pope

Reusing worn files as turning tools is a controversial topic.

Bobby has been reusing old files as turning tools for his whole woodworking career, without incident, so he maintains that this is safe to do. Bobby only uses large, thick files to ensure that they are strong enough. He grinds down the teeth and grinds a profile on the cutting end. A proper wooden handle is fitted to make the file fit for its new purpose.

In support of his position, Bobby provided some references, one of which is reproduced here for your information. The other two discuss how to grind the files, but not the merits of doing so.

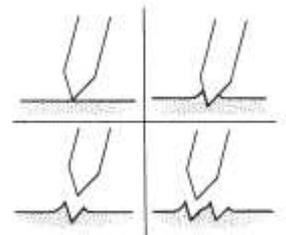
- How-to article posted on the Fine Woodworking web site:
<http://www.finewoodworking.com/2013/06/03/turning-tools-on-the-cheap> - it is also instructive to read the comments at the end of the article, where the risks are discussed.

This has always been a controversial subject, leading to some lively discussion. Here is some additional back-ground for your information:

Why do people reuse files? Essentially a hand-file is a length of high-carbon steel with cutting teeth impressed on it. Once the teeth are worn, the file is useless for its original purpose, so it is only natural to seek another use for it. There are tricks to refresh a file by dipping it in acid, which etches the teeth, to extend its life, but eventually it will become blunt again.

One popular reuse of old files is for turning tools, particularly scrapers.

How is a file made? File steel is typically 1.0 to 1.25% carbon steel, chosen for its hardenability. Hardness at the tooth tip and toughness of the overall tooth are prized for a longer working life. The blank is forged to the required shape and then annealed so that the tooth pattern can be cut. In the past the tooth pattern was cut by hand, particularly for rasps. Nowadays, it is mostly done by machine.



(Picture from the Nicholson Guide to Filing)

The blank is then carefully reheated and quenched to achieve the optimum balance of hardness and toughness. The tang is annealed so that it is not brittle, otherwise it would be a weak point. Distortion in the body must be controlled to ensure the file remains straight.

[https://en.wikipedia.org/wiki/File_\(tool\)](https://en.wikipedia.org/wiki/File_(tool))

Here are some more sources that you may wish to consult:

From <http://www.woodcentral.com/russ/russ10.shtml>

OTHER SOURCES OF STEEL Old Files

They are a readily available source of hardened steel, there have been a lot of articles published that describe using them, and every gathering of woodturners has at least one "expert" on the subject. This doesn't make them a safe woodturning tool, and I am an advocate of NOT using an old file for making a cutting tool. Yes, we can anneal, harden, and temper them just as we would

another piece of high carbon steel. But, the difference is that every groove in the surface of the file is a stress concentration where a crack into the steel is waiting to start. Many of these files may already have hairline cracks that have started to migrate into the steel. We can grind the surfaces, and we can do all sorts of heat treatment to temper the steel to a useable hardness, but it is impossible to remove a hairline crack. We cannot see them, and it only takes one (1) to make it a dangerous tool.

This is from a Health and Safety manual of training workshop:

<https://www.midaslab.ca/wp-content/uploads/2016/09/MIDAS-Safety-Manual-for-Waiver.pdf>

Files

Selection of the right kind of file for the job will prevent injuries and lengthen the life of the file. The extremely hard and brittle steel of the file chips easily, the file should never be cleaned by being struck against a vise or other metal object. A file-cleaning card or brush should be used.

For the same reason, a file is not to be hammered or used as a pry. Such abuse frequently results in the file's chipping or breaking causing injury to the user. A file should not be made into a center punch, chisel, or any other type of tool because the hardened steel may fracture in use.

A file is never to be used without a smooth, crack-free handle; if the file should bind, the tang may puncture the palm of the hand, the wrist, or other part of the body. Under some conditions, a clamp-on raised offset handle may be useful to give extra clearance for the hands. Files are not to be used on lathe stock turning at high speed (faster than 3 turns per file stroke) because the end of the file may strike the chuck, dog, or face plate and throw the file (or metal chip) back at the operator hard enough to inflict serious injury.

See also <http://www.ukworkshop.co.uk/forums/wt-tools-from-old-files-t67331.html> for another discussion on the merits of reusing files.

Frank Pain, author of *The Practical Wood Turner*, has this to say about using files (Page 58, 1965 edition, published by Bell & Hyman):

“Scraping tools. We will now consider scraping tools made out of files, and let me say at once we use them as they are without altering the temper, for all thick files are softer inside and are ideal. They are not liable to snap off if you use thick ones. The bevel is not important but it is certainly not acute – in fact it could be nearly square across. ...”

Frank then goes on to describe various grinds and shapes for scrapers. The important point is the use of thick files. In the manufacturing process, these are not through-hardened, retaining toughness in the centre. Thin files are more likely to be through-hardened, and liable to snap. This has been my personal experience, with a small file snapping while hand-filing.

Health and Safety.

Woodturning does have risks attached to it, but with the right precautions the risks can be avoided. Any woodturning tool can fracture in use, particularly if you have a “catch”. WWA members can relate experiences with reputable HSS tools breaking, so all tools can break. You must wear eye protection, using proper impact rated safety glasses. A full-face visor will provide additional protection, as safety glasses do not provide full facial coverage against heavy impacts.

To summarise the discussion above, it seems that many people have reused files, and only a few have reported failures. Using **thick**, well-made files that have been reground as scrapers seems to be relatively low risk – remember that a scraper is used nose-down! Using a scraper with the point upwards, riding the bevel on the work is inviting a catch, and doing so with an old file is high risk – in the event of a catch, the tool is much more likely to fracture.