WSWC club meeting – Monday 17th July 2023 Texturing demonstration and talk

Club News

No meeting in August

Just a reminder that as usual there will not be a meeting in August.

Last meeting

Our last meeting held on July 17th was the first part of a series of demonstrations and talks about texturing. It came about from requests made by several members. This demonstration was presented by Stewart Clarke and John Woods and covered some techniques for texturing work primarily on a turning lathe. The presentation was well received and a full report follows in this newsletter.

Next meeting 18th September 2023

As stated, there is no meeting in August. The September meeting starts at 7:30 pm and features a different subject as it will be a talk by the Sutton Hoo Ships Company. This group is building a replica Saxon ship using shipbuilding methods of the period. Their goal is to recreate a copy of the 7th century Anglo-Saxon kings ship that was buried and rediscovered at the Sutton Hoo archaeology site in the 1930's. The group is comprised of archaeologists, historians, experts in construction and shipbuilding and many other skilled volunteers who are working from the Longshed in Woodbridge. The ship replica will be ninety-foot long and the intention is to recreate it with techniques and materials available at the time, the intention is ultimately to have this replica on the river Deben. More information can be found at https://saxonship.org/

That's all for now, have a good break in August.

Neil (Newsletter and website)

Members Table



Above : London Plane Hollow form by the late Mark Baker, finished by Peter Thurston

Right: Laburnum box by Eric Harvey







Right: Pyrography Turtle on yew coaster by Richard Court

Left: Elm dish by Eric Harvey



Left: Fruit bowl in Cherry with Padauk apple, piranha pine and pear wood pears.









Left: Decorated London plane platter by Peter Thurston.

Painted effect created using acrylic colours





Above: Small pierced yew shallow bowl by Eric Harvey

Demonstration about Texturing presented by Stuart Clarke and John Woods

Texturing is described as being any marking applied to decorate your work. It involves marking the timber using tools or objects to create patterning. Texturing methods can be applied while the work is rotating or stationary. This presentation focuses mainly on rotating lathe work.

Stuart explained that we probably all have created a texture on our turnings without knowing it, for example even a catch may result in an unintentional texture pattern! Texturing is to embellish the work with a decorative pattern that either raises, cuts in, or lowers the wood fibres.

A variety of tools and objects may be used to create textures from subtle to really deep and quite harsh. Some are very expensive to buy, but for those on a budget it is possible to make one or two of these tools yourself. Texturing patterns can also be made using items you probably already have in the workshop.

Chatter tool

You may have already experienced chatter texturing when a tool or blank vibrates unintentionally when cutting. A Chatter tool is a handled tool that uses a thin strip of metal that extends beyond a holder on its end. When applied to rotating work at the correct angle it vibrates with the intention of marking the timber with its shaped end.

> This is primarily good for end grain and is not too effective on side grain. The angle and speed of the lathe will affect the final pattern, it is not a tool that can easily replicate the same pattern.

To use it effectively create a slight groove, set the tool rest back from the work so the tool overhangs and raise the handle so that the tool 'cutter' trails and cuts downhill. It is possible to cut on the centre line or above for different effects, similarly rotating the blade will also change the pattern as will inserting or extending the blade length.

A version may be made using bar and a

simple retaining screw. (The bar can even be timber, with a groove cut in the end with two small nuts and bolts either side, chunky but can work well - ed.)

These tools require a raised burr to work well. It is not recommended to sharpen using a grinder, but to simply run a diamond hone around the thin edge face of the profile. The harsher the burr the better the pattern.

The pattern may be enhanced with colour, gilt creams, Milliput or even oil.

Spiralling and texture cutting wheel tools

Spiralling wheels and texturing wheels are very similar in that they are sharp teeth cutters similar to gear wheels or cogs fitted with a centre bearing. The main difference is that texturing wheels have one or both sides bevelled. Spiralling wheels have no bevels to allow the tool to cut the edge into the wood, this means they are not very suitable to be used on curved work.











- Health and safety precautions have to be followed as the rotating wheels can cause very nasty abrasions or cuts to the fingers or hands. The nature of the wheels mounting in the bar means that the rear rotating teeth are not covered and are closer to your hand in use.
- Like any rotating tool the friction also causes the tool to heat up quite dramatically.

The wheels are held in the tool handle using a bolt and its important that you use the tool with the correct rotation to stop the wheel from loosening itself and disappearing into the wood shavings during use!

The wheels come in a variety of diameters and pitch for different patterns. The tools often have a flat plate that attaches to the tool shaft that allows the wheel to be rotated and set at a specific angle since the flat plate is intended to be placed on the tool rest when in use. Simple markings to help set rotation are engraved on the plate, shown left:

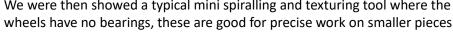
The pitch of the spiral is affected by the rotation and speed of moving the tool along the tool rest whilst the work is rotating, and the lathe speed also affects this.

Stuart then demonstrated by cutting a spiral from the headstock to tailstock. He set the tool rest to a position where the tool wheel centre was on the centre line of the rotting work. He started the cut but applying the tool slightly downwards then raising it to the centre line.

> and towards the direction of travel. If the spiral cut is poor a second pass can be applied but it is often difficult to pick up the original cut. An effective diamond pattern can be made by using two cuts in opposing directions.

He then moved the cutter slowly along the work while applying a light pressure into the timber

We were then showed a typical mini spiralling and texturing tool where the wheels have no bearings, these are good for precise work on smaller pieces.













Throughout the presentation Stuart emphasised that it is better to have a very good finish before texturing. Later cleaning up of marks with sanding can reduce the effectiveness of the texture, and the texturing process itself may often highlight the unfinished or marked areas of your work.

An orange peel effect can be made by cutting on the edge of the tooth vertically to the rotating work and moving the tool side to side.



Texturing wheels



Stuart then demonstrated Texturing wheels set the tool rest so that the wheel was on the centreline and adjusted the speed to low. His first demonstration was on the end-grain but these tools may be equally effective on side grain.

By presenting the wheel absolutely vertically to the end grain work produced horizontal lines as the lathe rotated. Raising or lowering the tool rest will produce more of a radial arc in differing directions.

This effect can be increased by setting the wheel angle either side of its vertical axis through anywhere of a rough maximum of plus or minus forty-five degrees either way. By carefully overlapping cross-hatching effects can be achieved on end grain or side grain.

The end grain demonstration piece (shown right) shows the effects of tool rest height. In all cases the texture wheel was held near to vertical as the piece rotated. The outer ring was with the wheel height on the centreline, the second in was above centre line and the third below. The little spiral was made using the edge of a wheel.



John said that the setting of the wheel angle, tool rest, distance from the rotating centre and speed all contribute to change the patterns and it is very difficult to replicate the same pattern.

When using texturing wheels on curved work ensure you use the bevelled side as this will effectively 'rub' like other tools and allow a controlled pattern cut without digging in. He said to start vertically and rotate the tool to a flatter angle as the cut progresses.



According to the manufacturer's instructions sharpening of these wheels may be achieved by holding the tool on the tool rest at an angle to slowly rotating work whilst applying a diamond home to the wheel bevel. Stuart said he wasn't very confident with this method and choses to manually hone them whilst stationary.



Decorating Elf

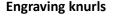
This tool was described as perfect for smaller work. It comprises of a handle, tubular bar with a small bearing inserted at one end to which various shaped burr cutting bits may be inserted. The cutting bits may be ovoid, round or cylindrical to produce different effects. Shown right is a Henry Taylor Bud Cutter https://henrytaylortools.co.uk/

A coving tool and three-point tool are used with this system and a Hogs' hair brush is supplied for cleaning up.

It works well on end grain and to demonstrate Stuart cut a small recess using the cove tool. He then set the tool rest so the rotating Elf tool cutter was just above the centre line and set low speed. By holding the handle low on the tool rest and applying the cutter to the rotating work at differing angles allowed him to produce different patterns. Again, angle and height are paramount to producing differing effects. The cutting time was only a few rotations of the work as the little bearings won't take too much heat build-up.

The final pattern was accentuated by simply 'framing' it by cutting a thin line either side using the three-point tool. Stuart also used a spindle gouge to cut around the pattern and raise it.

It is not a good idea to sand these effects and simple cleaning is usually all that is needed. This was achieved by applying the Hogs' hair brush to the rotating work. Using a brush like this is also effective with spiralling and wheel cutting and they are fairly cheap to purchase.



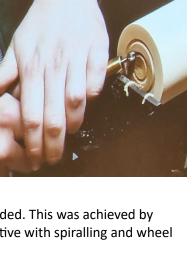
These little metal engineering circular cutters are mounted through a pin in a tool bar. Their edges are rolled with various fine patterns of straight, angled or crossed lines and are used in metal working to create grip patterns on tool handles or decoration etc.



Using them on wood can create fine detailed patterns, albeit parallel to the work, and best applied on the centre line of the rotating work.













Form tools

These can be anything from bead and cove cutters, to specialist shapes (in some ways similar to router moulding bits – Ed.) Even a parting tool is a forming tool that produces a square channel.

These tools allow you to create a bead without rolling your own shape by using a bedan, gouge or skew chisel.

A bead cutter is used inverted and at high angle (with handle down) to the tool rest, in the case of the beading tool the flute edges would be placed on the tool rest.

Stuart applied the tool to the rotating end grain work so the two teeth either side of the bead shape engaged and began to cut two parallel lines. By slowing advancing the tool and rocking it side to side he produced a bead. He advised to withdraw the tool just before reaching the end of the tool cove to create a clean bead.

Engraving tool

These can be brought quite cheaply and comprise of an electrically operated fast oscillating tip, usually used to engrave on metal or glass.

Various tips may be available but for this demonstration it was a simple rounded over version. The toll was applied on the centre line to the slowly rotating work for a few revolutions. This produced a sort of star with trailing line type pattern.





Rotary power carvers

Stuart then introduced us to the 'industrial carving' tool, there are several models available from various manufacturers including the Proxxon model long neck version, as shown here.

• He began with a warning since these tools use a simple latching type on off switch and are not fitted with a no volt release (NVR) safety switch. This means that the tool may be inadvertently switched on before you plug it in. To use this tool safely the use of an auxiliary foot switch to control the mains power is highly advised. Strong PPE and gloves are also advised given the nature of the cutting disks.

This small tool is in effect like a mini angle grinder to which a multitude of rotary cutting, sanding and polishing disks may be attached. They are interchanged by using a simple single Allen key.

Stuart showed us two different cutters, the first was a small disk with six chainsaw teeth around its circumference.



The second was a thin section (4mm) kerfing disk with two protruding carbide tipped flat blades, each diametrically opposite to the other.



The chainsaw version can be sharpened with a chainsaw file by giving each tooth a stroke or two and the kerfing tool version by using a diamond hone on the edge only, not the bevelled side





Stuart demonstrated the chainsaw type blade on the outer of a bowl shape held in a scroll chuck. He set the lathe speed to run slowly and used the tool without the tool rest. Holding it firmly and applying the rotating cutter at an approximate angle of fortyfive degrees to the smaller curved section he then pulled the tool up the section to the largest diameter. This produced an effective slanted pattern of lines.

The tool is very aggressive and not very forgiving of 'punky' or poor timber and the pattern will undoubtably require some attention to cleaning up.

The chainsaw tooth type cutter can also be used with stationary work as a rasp to produce patterns, shapes or cut barley twists.



The cutter was then exchanged for the two-tooth carbide tipped kerfing disk cutter. Stuart used it with the lathe revolving slowly to produce some swept out radial lines on the end grain and some parallel lines on the side grain 'foot' of the bowl shape.



Shaping and carving accessories

Stuart then introduced us to a green Saburrtooth[®] rotary burr two-inch diameter carving wheel. This company specialises in burr tools for power carving and shaping.

These tools are made of tungsten carbide and have been treated through a process of coating, brazing and hardened to ensure long life.







They can be used freehand on Proxxon type tools to shape and add detail or relief to turned work. The different colours denote how coarse they are, in this case green is very coarse.

Thin kerf carving disk

Stuart then fitted a yellow (medium/fine grade) thin kerf carving disk. This has a washer that needs to be fitted with it. These are also treated tungsten carbide.

He then cut a few free hand radial lines in the end grain before demonstrating how a freeform curved pattern can also be made on the side grain by cutting quicky and varying the cutter angle and varying the depth of the cut.

They are also good for undercutting and fast material removal from your tunings. These cutters may be used to recreate Stuart Mortimer's famous spiralling work on his hollow forms, Stuart actually helped to design these wheels. More information at https://youtu.be/fnbZ4_dbX3U







Cleaning up

Stuart fitted a sanding disk that consisted of a multitude of bristles perpendicular to the cutting disk. These rotate flat to the spinning disk with each bristle containing an abrasive that gradually wears away. Four colours are commonly produced to indicate the 'grit' of the abrasive from the purple which is coarse to white extra fine. To use them you may have the work stationary or rotating with the disk also rotating. In addition, Hogs' hair brushes can also be used to clean up. The tool will also accept standard two-inch hook and loop sanding disks using an adaptor disk and foam pads.



Scotch-Brite™ Bristle Disc BD-ZB Image: https://www.3m.co.uk/3M/en_GB/p/d/b40064927/

Using other items to create textures

A simple steel bar or even your knock out bar can be used to produce texture. Apply the edge of the circular bar to the rotating work to produce single fine lines or move it to produce a fine line pattern.

Round or shaped indentations may be created by knocking items into stationary work. Ideas include leather tool punch tools, metal punches, screw ends and threads, nails or any pointed metal can produce texture.

Stuart said you can also use other existing woodturning tools such as thread chasers. These may be held horizontally to rotating work to produce fine annular line textures.

Stuart said this was more of an introduction to the vast subject of on lathe texturing and added that he could have said much more about each and every tool and its use, this was only a brief demonstration of the possibilities.

A very interesting and thought-provoking demonstration and talk, thank you Stuart and John.

