

Involuted and Eccentric Turning

For the August meeting, members were treated to a demonstration of involuted and eccentric turning by Peter Castle. What do we mean by these terms? Sometimes referred to as offcentre turning which may also be multi axis, and insideout turning, also split turning, usually more simplified for producing identical halves. In the latter, two pieces of wood are glued together using a paper joint (pva and newspaper between the wood). The profile is then turned and finished and on completion is split down the paper joint resulting in two halves with a flat back. On the clock below the resulting beaded profile has been used for a simple trim.

Eccentric turning has various applications and can be used in different ways. In Peter's beautifully turned platter below he has turned the back conventionally then turned the front using four equally spaced offcentre positions completing it by turning on the original centre. This is known as multiaxis turning.

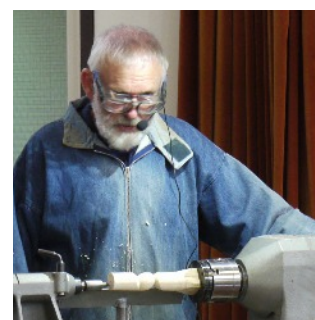
Peter's pair of candlesticks below, seen from back and side, is an example of involuted turning.



Involuted candlestick
from side and front



Multi centred dish Left from front, right from back



Peter turning an eccentric spindle

Peter began his demonstration by turning a pendant from birch ply, essentially face plate turning. He removed two opposite chuck jaws and mounted a scrap of wood as a chuck in the remaining jaws. Using only two jaws would enable him to reposition the work offcentre. He then attached his birch blank to the scrap timber using hot glue. There was some discussion as to the type of glue stick used. Yellow sticks are stronger but members have found the white glue adequate. Once cooled, Peter turned the blank to round and shaped the profile. He then moved it up in the chuck and turned it away blending the shape from one centre to the other. The centre was registered and drilled through. This can be done with a small gouge or a drill bit in a handle supported on the tool rest. The piece was then split away from the chuck and reversed having first cleaned up the face of the chuck. Peter then completed the back of the pendant in the same way.

The next part was a demonstration of eccentric spindle turning. This involved roughing the blank to round and then adjusting the centre to one side. This was then done again in the other direction. Peter stressed that it is most important to check that the toolrest will not foul your work after making the offcentre adjustments.

The demonstration continued with involuted turning. Peter had previously screwed two pieces of wood together and turned away a heart shape. The work was then refixed back to back resulting in the inside out shape. The outside shape of the heart was then turned.

Involuted techniques can be used to produce multiple pieces with the same eccentric shape or to rejoin the pieces to produce open shapes such as Peter's heart. The heart comprised two pieces of wood but any number can be used according to the project. The critical element for success is the accuracy in joining and rejoining in order to maintain symmetry.

Fixing methods include paper and glue joints, screws and even jubilee clips. When using glue joints it is best to use ring centres to hold work as a pointed centre could force the joint apart.

Peter however, has devised his own method for fixing which he described as a conclusion to the demonstration. He has made an adaptor to hold a chuck in the tailstock at the same time as one in the headstock. This enables him to accurately hold four pieces of wood together without the need for screws or glue. The ends of the wood must be left square to enable accurate repositioning of the pieces.

Thank you Peter for an interesting demo. We look forward to seeing how many members have a go at the techniques.



Peter's birch pendant



The unfinished heart. Note the join which can be seen in the spigots

Members' Work



Jim Moger



Gareth Garner



Fred Mitchell



Paul Filsell



Mike Pollard

September Meeting Thread Chasing

September 16th 10.00-4.00

Please note a change in the programme.

This month's meeting will cover thread chasing beginning with a video by master chaser Alan Batty followed by a hands on session.

Please bring your tools including thread chasers if you have them and suitable material for chasing such as boxwood, close grained hardwood or resin.

Please also bring a couple of pieces of your work for a display as Maggie Wright has been asked to write a piece about our club for the Woodturning magazine and would like to include photographs.



Robert Hollands



John Turner

Subjects for the Winter Competition

- Novices. A diabalo or yoyo (working)
- Intermediates. An item involving a twist.
- Advanced. A decorated bowl

October Meeting

October 21st 10.00am - 4.00 pm

Mick Hanbury demonstrating

Chairman	Maggie Wright
Vice Chairman and Competition Secretary	Peter Castle
Secretary	Anne Smith
Treasurer	John Turner
Events organiser	Greg Collett
Librarian	David Spice
Newsletter editor	Sandra Day
A-V co-ordinator	Brian Rowson

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