

## David Lowe

### Galloway Woodturners, February 2017

David started off the demonstration by turning his signature ZIPPED VASE. Unfortunately, due to me getting confused and going through Dumfries instead of going around it as planned, and wasting fifteen minutes, meant I was late for the start of the demonstration.

I think he began with reducing some square stock about 300mm long, down to around 130mm diameter. It was stepped turned at one end to accommodate the chuck jaws. The piece was then turned around and held between the chuck jaws and a running centre. The outside of the piece was



Fig 1

turned to the “waisted” shape, typical to David’s vases. (This is where I arrived at the rather warm and comfortable home of Galloway Woodturners in Castle Douglas.)

As shown in Fig 1, David power sanded through the grits to 400 grit and a light spray coat of Acrylic Sanding Sealer was applied and allowed to dry.

David then introduced a fairly new product to the market, (new to me); **Yorkshire Grit**. This was applied with the lathe stationary, allowed to dry off a little, polished and further distributed at 500 rpm, then polished again at a faster lathe speed. This gave a satin finish rather than a gloss finish. The Yorkshire Grit has oils, beeswax and ultra fine powders among it’s ingredients which produces a creamy abrasive. This further smooths the surface and provides a key for any subsequent finishes.

David then advised that the piece should be supported when hollowing it out. The support prevented the piece moving when the side-ways pressure was put on the piece. Even when using sharp tools, good technique and slight side-ways pressure, it didn’t take much for the piece to become dislodged from the chuck and create problems, sometimes even destroy the piece. The support method that David used was his home made “wheeled” steady as shown in Fig 2.

It was made from MDF, sapele, in-line skate wheels and a few nuts and bolts. It was easily



Fig 2

fitted, adjusted, and extremely effective in its performance, the piece was rock steady and only light lines were left on the piece where the wheels were in contact. The lines were easily removed later in the process with an application of Yorkshire Grit.

The hollowing was started with a 40mm diameter forstner bit. David explained his preference of **Colt Forstner Bits**, although they are expensive he maintained they held their sharpness and performed accurately without wandering off centre.

Before using the forstner bit, David removed any evidence of the “dimple” made with the running centre. This was to ensure there was no interference or wandering as the forstner bit entered and advanced into the piece



Fig 3

The bit was only advanced about 60mm into the end of the piece. This was to maintain the strength and integrity of the piece as the bowl gouge was used to form the neck of the vase. See Fig 3.

A bowl gouge was used to expand the opening of the vase down to the bottom of the pre-drilled hole. A thickness of around 5mm was preferred as there may have been movement later when the vase was cut for the zip. See Fig 4 and Fig 5. Not shown in Fig 5 is the side scraper used at an angle in a “shear scraper action” to give a superior finish to the inside of the neck.

The inside of the neck was carefully sanded, (through the grits), with a power sander and finished by hand.

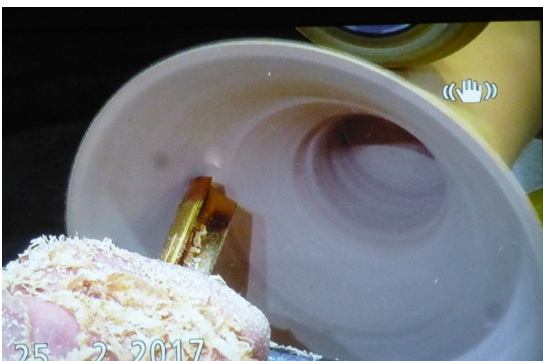


Fig 4

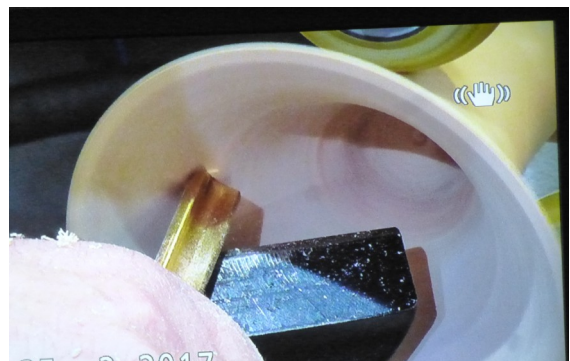


Fig 5

The forstner bit was used in conjunction with the Colt extension bar to drill the vase to the final depth required, this was determined by the use of some tape on the extension bar which indicated the depth needed.

The hollowing was performed quickly and efficiently, using a 6mm carbide tipped hollowing tool. David normally uses a laser assisted hollowing system in his workshop but this equipment is not easily transported and set up for demonstrations. David advised as a rule of thumb, when using tools which may overhang the toolrest a fair distance especially in deeper hollowforms, there should be a one third rest to cutting tool side/to two thirds toolrest to handle side. Fig 6.

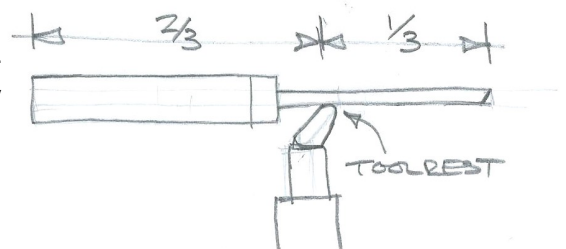


Fig 6

The junction of the recent hollowing of the inside of the vase to the previous hollowing of the neck was carefully blended with the use of the side scraper again, used in the shear scraping mode.

Another tip from David was to ensure that you tried to keep using your tools as close to the area above the stem of the toolrest as possible. This would reduce any vibration as that was the area which gave the best support for the tools.

The inside of the vase was sanded by the ingenious use of a small sanding disc attached to an extension bar then a flapwheel attached to the extension bar, (Fig 7 and Fig8). Finally, a solution to a problem I have been seeking for a while, thank you David.



Fig 7



Fig 8

By using a torch or directed light source you could inspect the inside of the vase to determine the standard of finish. See Fig 9.

Again the neck and inside of the vase was finished with a light coat of Acrylic Sanding Sealer followed by the application of Yorkshire Grit applied with a piece of Nyweb.

If the vase was going to be used for cut flowers then a treatment of **Treatex** could be used to waterproof the inside. A discussion then ensued about the effectiveness of **Treatex**.

After a stop for coffee, David laid out some of the tools and equipment he would need to complete the cutting of the vase and insertion of the zip. See Fig 10.

Micromotor  
Gas torch  
6" Zip  
Stanley Knife  
(Not shown is a Proxon Miniature Jig Saw)



Fig 9



Fig 10



The Stanley Knife was used to cut the Zip as close to the teeth as possible. Some of the material was retained. The Gas Torch was then used to fuse the material which was just cut. See Fig 11.

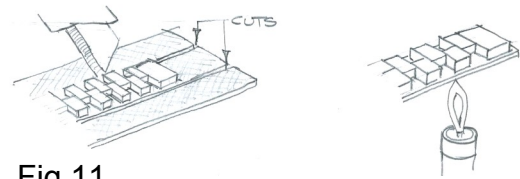


Fig 11

The zip was then opened about halfway down and left to form a natural opening as shown in Fig 12.

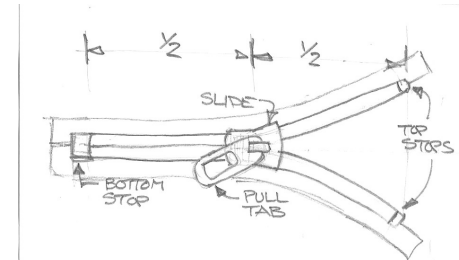


Fig 12

The Zip was then laid onto the side of the vase where you wanted to have the opening. The position of the Zip could be used to conceal, remove or include a feature on the vase. The length of the end, (Bottom Stop), and where the Zip starts to open was marked on the vase. A centre line was carefully marked on the vase. Masking tape could be used to protect the surface finish. David emphasised the need to ensure the centre line is perpendicular to the base of the vase to ensure it looked balanced. See Fig 13.

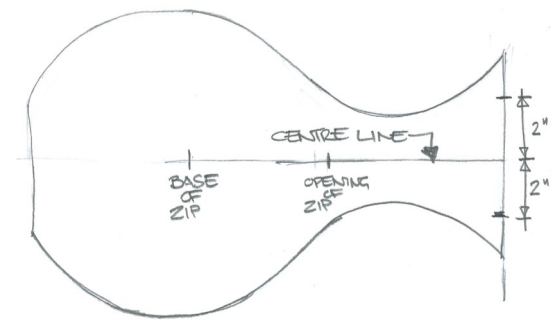


Fig 13

On the rim of the vase measure 2" each side of the centre line. A pencil line was drawn following the line of the opened part of the Zip. Masking tape was used to form the shape of the line. This would protect the vase while the Miniature Jig Saw is used to remove the "V shape". See Fig 14. A coping saw could be used for this task.

You can see the masking tape and just make out the centre line in the middle of the "V", and just beyond the thumb holding the vase.



Fig 14

The cut “V” shape can be seen in Fig 15. The Micromotor with a sanding disc was used to smooth the edges of the cut. Again the centre line can be seen below the cut.

Fig 15



The width of the closed length of the Zip was measured and transferred to the vase below the cut. A small circular saw blade (1/4" diameter) was inserted into the Micromotor and it was used to cut along these lines. The cut did not go all the way through side of the vase, only to the depth of the zip. See Fig 16.



Fig 16

A small Flame Shaped Carbide Saburr Cutter was inserted into the Micromotor and this area was reduced in thickness to allow the Zip to be flush with the outside surface of the vase. Like a shallow routed out housing. See Fig17.



Fig 17

When the Zip is flush with the surface of the vase, carefully mark around the slider with a sharp pencil as shown in Fig 18. You must carefully remove the waste wood to allow for a neat fit of this part of the Zip. This is essential for the overall finish of the piece.

Fig 18



When a good fit is achieved use some Medium Superglue and fix the closed part of the zip and slider to the body of the vase. Do not use accelerator at this stage as it can discolour the finish to the vase. Fig 19.

Fig 19



With the lower part of the zip attached (1st area), apply some superglue to only the front of the lower half of the length of one side of the "V", (2nd area). Carefully attach that part of the Zip. Then apply the glue to the top half of that side of the "V", (the 3rd area) and complete gluing that side of the Zip. Once one side has been completed, then do the other side of the "V" also in two stages. See Fig 20.

Some might consider it is capable for each side of the Zip to be completed in one single task, but approaching it in two stages gives more control to the finished appearance. This is superglue we're talking about here! For extra adhesion and peace of mind a bead of glue can be run down behind the Zips of the "V" after the initial adhesion has taken place.

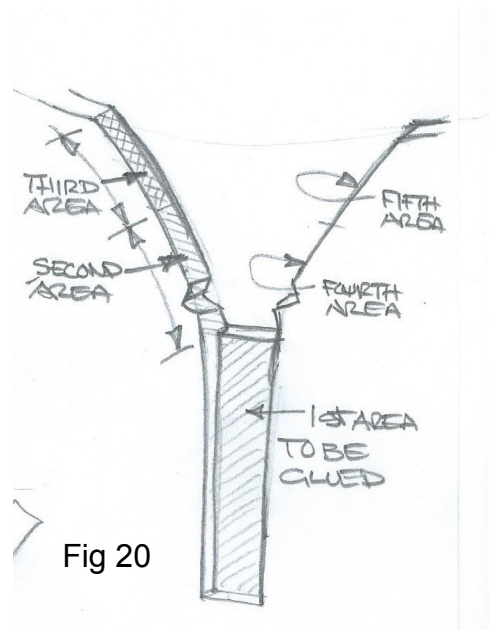


Fig 20

**This is how the finished vase appeared with a close up of the Zip slide detail.**

