

Glenn Lucas

Completing the Bowl.

By Brendan Hogg

This next batch of bowls, all two hundred and eighty of them, just like every piece of work done in this workshop begun its life close on twenty years ago. All the planning, honing, designing and skill development has been carefully put in place for this moment. Every blank, special and unique, is housing what will be the trade mark and the finger print of the craftsman, exposing his blood, sweat and tears for all and sundry to see, examine, criticise and to set the standard by. The process now in place is nearing perfection. I tried to count the number of individual operations from plank to finished bowl and lost count somewhere after thirty five. I should not neglect to emphasise how the success of each individual stage critically depends on the perfect execution of the one previous. There seems to be little or no room for manoeuvre, get it right or risk forfeiting the piece or worse still losing that most precious commodity, time.



Rough turning driving device

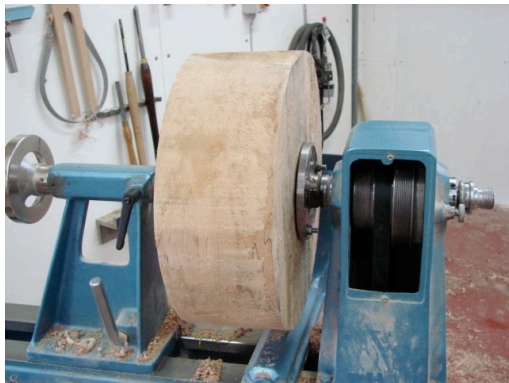
We have already seen the delivery of the planks, the inspection and meticulous selection of each potential bowl in the plank and the eventual band sawing. At the selection stage a large wooden compass, with a pencil attached, is used to mark out each blank.



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Additionally, the point of the compass is used to clearly indicate a centre point. This centre point is highlighted to facilitate its easy location some two days hence. At this centre point on the blank a twenty five mm. hole is drilled vertically to seventy five mm. deep. This is a very clever and time saving technique that Glenn has devised to mount the blank on the lathe for rough turned. The blank is slipped onto the protruding bar and the tailstock is brought into place, tightened up and we are ready for off. There was a time when a face plate was used at this juncture. Consider the time it takes to locate the correct position for the face plate then the driving of at least four screws and also the undoing of all this on completion and consider further if, for some reason, rechecking was necessary the time lost in finding the same centre again. A screw chuck was also tried for a short time but the effort required to remove the rough turned blank proved very costly both in time and physical stamina. If we were doing one or even ten bowls every now and then either of the above two methods would suffice. But when the aim is fifty to sixty blanks per day then the best, the simplest and the most economical

method must be found and employed not only for your own physical well being, which is of the utmost importance, but also for the time saved. Two minutes saved per blank is the equivalent of two hours saved each day. This is the ethos of the professional turner.



Ready for rough turning

The rough turning now begins in earnest. This is done on a Vitmark fitted with a three H.P. motor to Glenn's own specifications. A half inch bowl gouge with a personalised grind is utilised to remove a most serious aggressive wide cut. The efficient execution of this cut necessitates the extra machine power where constant revolutions are maintained and the shavings are then easily directed into the skip with little or no sweep up to do. To fully understand and appreciate the efficiency of this gouge grind a practical demonstration might be necessary but for this purpose we will have to depend on the inadequate use of words.



Hamlet with Rough turning Grind

Firstly, there are two tools on the market that I know of, the Hamlet 2030 and the new Woodcut Replaceable Tip both with the flute ground to the Parabola section. Glenn utilizes both of these gouges almost exclusively. I am of the opinion

that it is this parabolic section of the flute that gives these tools their superior cutting action. Secondly, Glenn starts the grind with the rest set at an angle of 48° and the gouge held perpendicular to the face of the stone. Then, rotating the handle clockwise through 90° and all the while rolling the gouge edge onto the stone producing a vertical and straight cutting edge on the left hand side of the gouge. It is this edge that will exclusively do all the cutting with the right hand side remaining idle



Bowl profile

A specific bowl profile is used for approximately 90% of the work with particular attention given to the size and accurate execution of the spigot. This profile is changed, through necessity, to a wide rimmed bowl with an ogee profile when a wane edge or such like dictates.

Another time saving device Glenn has designed is a Spigot Gauge fitted at the tailstock. This eliminates the need to measure the diameter of the spigot and guarantees the perfect fit to the chuck when remounting.



Spigot Gauge

The rough turned blanks are stacked in columns of eight high and completely enclosed in long plastic covers to restrict moisture loss.



One Way Coring system

Coring, removing the inside of the blank in one piece, is the next operation in the process. Glenn uses the One Way coring system mounted on the bed of another of his Vitmarks. From the 16in blanks the core is large enough to produce the next size 11in bowl and this in turn is cored with the resulting core being offered for sale. When mounting the blank for coring the care taken in making the spigot will now be full appreciated. The coring process itself must be executed with extreme care and with a full knowledge of what is going to happen in the kiln. Remove too large a core and the wall thickness of the blank is too thin, too small a core results in thick walls slowing down the drying and too thick a base could result in the loss of the bowl. The success of coring will depend considerably on the profile after rough turning and on the accuracy of the spigot; each process depends so much on the previous. As the One Way coring system is designed to produce the arc of a circle and the profile of the bowl follows a different curve this will necessitate some minor work on the inside of the bowl after the core is removed. The rough turned bowl will have two end grain areas which will need to be sealed to assist in the drying process. Glenn has decided that it is necessary to seal the outside surface only because of how the bowls are stacked in the kiln; the circulating air hits the

outside surface directly while the inside is well shielded.

After eight weeks of a meticulously planned drying programme the dried bowls are removed from the kiln and stacked in the workshop. Again, each stack is shrouded in the plastic cover to reduce the danger of picking up ambient moisture and to assist matters further a dehumidifier is positioned in the vicinity of the stacks for the duration of the process.

The bowl spigot will have deformed considerably away from its circular section during the drying. This must now be corrected, made circular again and at the same time the rim is positioned to make it run as true as possible. To do this efficiently and quickly Glenn, once again, has come up with the perfect solution.



Jig to reform the Spigot

The radius of this jig is made to suit the diameter of the bowl being worked on. The rebate in the centre is to allow the deformed bowl rim to sit neatly onto the two rubber pads eliminating any annoying rocking. The tailstock is brought up locking the bowl into place. With the rim as centred as possible the spigot may now be cut true. To reduce vibration during the final cuts the spigot is formed as large as the design of the bowl will possibly allow.



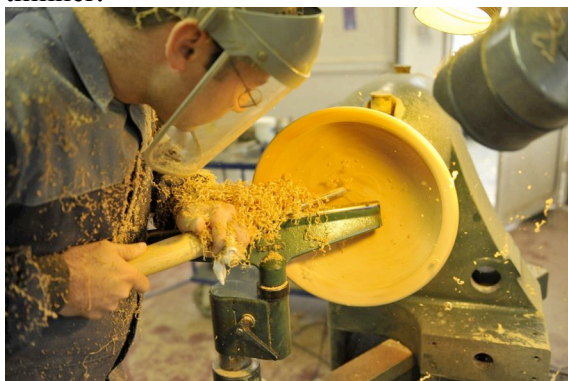
The Woodcut Replaceable Tip

Another Hamlet or Woodcut half inch bowl gouge with the same flute as mentioned above but with a different cutting grind is used to finish both the inside and the outside of the dried rough bowl. The nose angle of 48⁰ is again used. The left hand side of the gouge is formed like a square across grind and is used to cut both the outside and inside of the bowl. The right hand side of the gouge is redundant.



Cutting the outside

While cutting, the handle of the gouge is kept well down and a maximum of three passes are made from base to rim to produce the perfect form and equally perfect surface finish. No further attention is required or given to this surface prior to sanding. The outsides are sanded with the same thorough attention as the other processes starting with eighty grit through to three twenty and the rule is to use each disc only twice. The bowl is now transferred over to the V.B. to complete the inside. Glenn feels that the stability offered by the shaft design of this machine assists greatly in eliminating any vibration that may appear as the wall of the bowl becomes thinner.



Cutting the Inside

The same gouge is used to work the inside of the bowl but this time the handle is held in a horizontal position. Using the nose and the left hand side of the gouge the rim, the end grain and the base are cut beautifully resulting in no lifted grain what so ever, no tool marks and the minimum of sanding required to achieve that perfect flawless surface. The bowls are now ready for oiling. Three coats of Danish oil is Glenn's preferred finish applied with a cloth and sanded between coats with 320 Garnet Paper followed with Blue Line abrasive wool.

The final stage in this long process is to remove the spigot, shape the base, sand and oil. This is done using the vacuum chuck which by eliminating the use of the tail stock allows complete unobstructed access to the base. The two hundred and eighty bowls are individually bubble wrapped and stacked carefully into specially commissioned cardboard boxes. I wonder if this is the most satisfying moment of the process. I would think not because to be a successful production turner each stage must hold its own excitement to encourage the craftsman in the search for the perfect method and that elusive perfect form. Each time a blank is rough turned or cored to expose its colour and grain pattern the craftsman is honoured by being the first human on this planet of ours to witness its beauty. This itself might be enough.

Brendan Hogg