

MASSIVE BURLS & Miniature Microcosms

The World of Randy DeGraw

In some creative pursuits, the ability to execute a finished work is less important than the ability to conceive it. In writing for example, the execution of the work is little more than mechanical, the creative content being largely confined to the way in which the words are structured into sentences and the sentences into paragraphs.

The success of a piece of woodworking, however, certainly doesn't rest upon its design alone. The execution is at least as important.

Indeed, a prosaic design, flawlessly executed, may sometimes be preferred to a brilliant design that is inadequately realised.

The matter of execution becomes particularly important when there are specific constraints — when, for example, the wood being used is particularly large and heavy, and even more so, when it also exhibits wild grain.

Therefore, if, like Randy DeGraw, you have a penchant for conceiving things which are far from mundane that you wish to create from massive burls and other wild grained timbers, then you must also devise special methods by which to execute your designs.

Randy's gallery and workshop at Witta, near Maleny, in south-eastern Queensland, are proof that he has done just that. His often dramatic, eye-catching pieces are clearly the result of a vision that transcends the ordinary to produce exceptional work that has earned him an enviable reputation both in Australia and overseas.

The magnitude of some of his pieces — in particular, the sheer size of the massive burls with which he frequently works — has demanded machinery that is a far cry from that used in the workshops of most professionals.



The fact that much of his raw material exhibits grain that is difficult to work has also meant that he has focussed on modifying his equipment to handle this with more than common ease. (See: *Shelix Conversion Stops Tear-Out*)

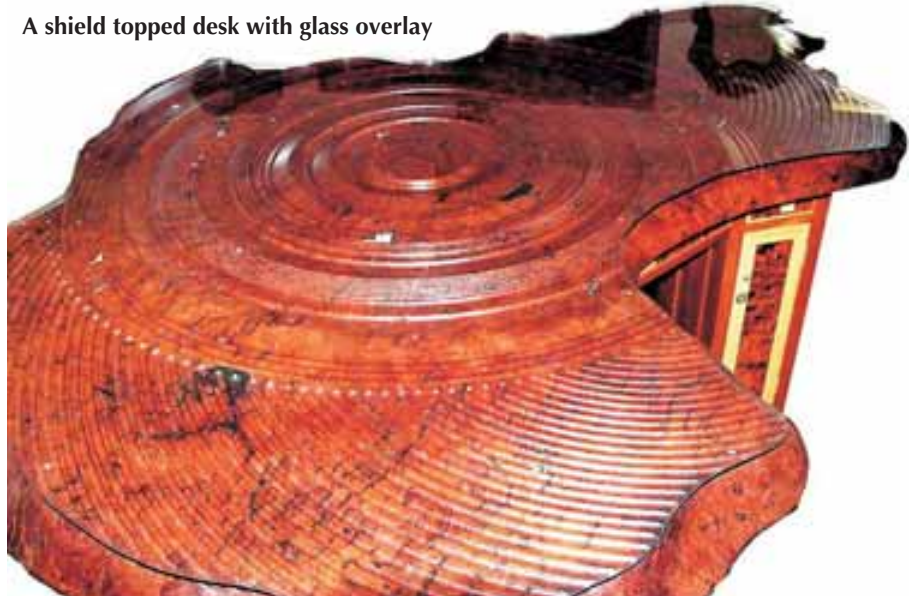
Concept

Even a casual glance at the work that Randy has produced over the past two decades shows that he has a flair for the design of pieces that are both impressively large and meticulously detailed.

Randy's shields are among the most visually spectacular of his works and not surprisingly, they now reside in collections all over the world. When talking to him, it doesn't take long to learn that while formulating his designs and realising the end product, he has become expert in the origins of shields and their diversity.

The word shield, he told us, is the generic name applied to anything that a combatant used on the arm opposed to the one in which the weapon was held and the use of shields dates a long way back — to at least as early as the Bronze Age.

A shield topped desk with glass overlay



Later, says Randy, the shield was not only used in personal armament, but was mounted at the door of communal buildings, the shield itself signifying strength and perhaps unity, while its ornamentation displayed the device that identified the clan or tribe.

Today, he says, the remnants of those shields can be seen in the heavily wrought and engraved door handles fitted to the monumental entrances of many city buildings.

The abstract designs that Randy uses for his shields are determined by his response to each specific piece of wood with which he works, as he constantly strives to release the inherent beauty of the surfaces that are revealed.

When the major shaping and sanding have been completed, he begins to prepare counterpoints to the overall design — work that may involve hours, days, even weeks of constructing details that demand patient development and painstaking care.

Shields are, of course, only a part of Randy DeGraw's output. He currently works on commissions that range from his unique burl-topped coffee tables to doors, desks, display cabinets, dining tables and entertainment units.

Execution

To understand the methods that Randy uses to execute his work and the way in which they have evolved, requires a little history of Randy himself.

Born in the United States, Randy's earliest jobs were as an oil field rough neck and motorman. It was hard work in an aggressive environment and was followed by periods in truck driving and construction, all of which gave him an understanding of heavy machinery which would prove immensely valuable when he became a professional woodworker some two decades later.

Before that happened, however, he worked as a telephone technician, first in the US, then in Australia. Again, he acquired experience that was to prove



valuable in the development and modification of woodworking machines.

Throughout this time — since 1969 — Randy had taken an interest in wood, but when he arrived in Australia in 1982 (while still working for Telstra — or Telecom as it was then), he became enthused by the new resources available to him. He was excited by Australian native timbers which he often collected in the form of old stumps or other recycled material.

It was at that time that Randy met his wife, Maree, and they began to make expeditions to find unusually shaped pieces of wood that he would bring home to mill, grade and dry.

Randy found that the nature of the wood itself inspired his designs and he started to create furniture which, although modern in appearance, was enhanced by the natural curves of the tim-

Close up of a shield shows the interplay of patterns formed by the overhead router on Randy's Levelling Machine

ber and its rich depth of grain and colour. At first it was clocks and coffee tables that attracted his attention but he soon began to offer a much wider range.

Like many, probably most, professionals today, Randy DeGraw is largely self-taught and cites a short woodcarving course with Don Powell as his only formal training in the craft.

In 1995, after 10 years in Maryborough (Qld), Randy and Maree looked for a location that would provide them with the country lifestyle they wanted, while also allowing them access to the city (Brisbane) and its freight ports. They found their present home in Witta where they have built not only a gallery and workshop, but also a luxury Bed & Breakfast business.

Randy's Levelling Machine

Randy's workshop contains conventional machines such as a bandsaw, a thicknesser, two lathes — one a top of the range Jet, the other a Jet mini lathe, heavily modified with electronic control — but the largest and most unusual is his custom-made Levelling Machine — a giant turntable that took over 10 years to develop, weighs upwards of 2500kg and cost, in all, about \$50,000.

The machine provides a huge base onto which burls as heavy as 1 tonne can be secured.



Overhead, an articulated router can be set-up to move outwards from the centre along its mount, carving away the wood as the burl rotates on the turntable beneath the cutter. While this is the primary function of the machine — to simply level large slabs or burls, ready for sanding — it can do much more than that.

As shown by the photos, the articulation of the router permits circular cuts to be made similar to those that might be achieved if the burl could be mounted in a monster lathe. T

he centres of these cuts can be changed to give the effect of multi-centre turning and it is also possible to make spirals.

A variety of cuts can therefore be combined into an abstract design that would



be virtually impossible to obtain in any other way.

Once a burl or slab has been levelled, it is moved to an overhead belt sander. This sander, with its 750kg movable table, is almost as impressive as the Levelling Machine. Made in 1877, Randy bought it from a defunct woodworking company in

This large hallstand combines natural and formal shapes

Maryborough; it works as well today as it did back in the 19th century.

Divergent Microcosms

When the flat surfaces of the burl have been sanded and the edges cleaned, Randy sets about filling the natural cavities. He may inlay the smaller ones with resin in which he might embed opals, or sometimes pieces of gold or silver.

He uses the largest of the cavities to explore another aspect of design, decorating them with tiny objects that might, for example, suggest a bush scene along a waterway.

Moss and lichen are fashioned into miniature trees to which he may add tiny (real) crayfish, or a model platypus (made by Peter Smit of Brisbane). These tiny artefacts are overlaid with coat after coat of resin, entirely encapsulating the minia-



This roll-top desk demonstrates a more conventional aspect of Randy's work

Randy DeGraw adjusts the articulated overhead router on his custom-built Levelling Machine

ture scene while eventually achieving a surface that is level with the surrounding wood.

At first obscured by the overall impression of the piece, these little scenes offer a further dimension as the observer looks more closely and discovers divergent microcosms that lead the eye away from the central theme.

Development

It is impossible to look at the work of Randy DeGraw and not ask how and why the designs have developed.

The answers are probably to be found in Randy's replies to questions regarding why he became a professional woodworker. He chose his craft, he says, partly because of a need for self satisfaction, partly because it gives him the freedom to create and partly because he likes to make clients happy. The latter may be more important than it sounds.



For Randy, making clients happy has often meant doing things that he hasn't done before.

'Clients would ask: 'Can you make this...?' and I would say: 'Give me a few days...'

Whatever the source of his inspiration, it has been sufficient to sustain him for more than 20 years, allowing him to do his chosen work and bring enjoyment of his innovative designs and Australian timbers to an international audience.

Shelix Conversion Stops Tear-Out

The most recent addition to the DeGraw workshop is a modification to his thicknesser. Randy is excited by the Shelix head re-fit to his 10 year old, conventional Taiwanese thicknesser — a re-fit that he says has been so successful, it has paid for itself in only a few weeks.

When well-known woodworking identity, Robert Gregory, came back from the US in 2007, he told Randy about a new type of cutter that could be retro-fitted to many of the commercial planers and thicknessers now in use in Australia. These Shelix cutters have a large number of small cutting heads — each held by a single screw — arranged in a dense spiral configuration around the cutter cylinder.

A number of benefits are claimed for the Shelix head. For example, the cutters never have to be adjusted and if one happens to get chipped, it takes only a few moments to unscrew it and turn it through 90 degrees so as to present a new cutting face to the wood. But the benefit that appealed most to Randy was the ability of the Shelix head to plane even wild grained timber with little or no tear out and with none of the conventional scalloping down the length of the board.



Photo: Tear-out often occurs on areas of wild grain when using a conventional cutter on a planer or thicknesser

Robert Gregory arranged for the supply of a Shelix head for Randy's 500mm thicknesser. When it arrived, it took a couple of hours to install before Randy could start testing it. He says he tried every board he could lay his hands on — thick, thin, wide — and there was no difference in the result. The thicknesser now produces close to flawless surfaces even on curly grained Maple and Jarrah.

Later, having gluing some of the tested boards into a panel, Randy found that the necessary sanding time had been cut by roughly half — a huge saving that has translated into substantial savings.

Randy told us there have been other benefits as well. The first of these is that the shavings come off as chips, never as the long, filter clogging shavings that normal cutters can produce from some



Photo: Tear-out in wild grain areas is minimised and may be eliminated when the planer or thicknesser is fitted with a Shelix head

species.

Then there is the reduction in noise:

'While we were happily thicknessing away, the noise level had been reduced by maybe 40-50% (due to the spiral cutting action of the head). I know, you should wear ear muffs while running machinery. However, we could carry on a conversation and thickness my boards at the same time without them. I can see this being one of the most important features of the Shelix conversion for woodworkers who have neighbours close enough to be affected by the usual noise, or schools, or even when the thicknesser is used in a multi-person workshop.

The accompanying photos show the results of the Shelix conversion. (Photos by Randy DeGraw.)