Eurobodalla Woodcraft Guíld Inc

MEMBERS NEWSLETTER February 2023

President's Report

Welcome to 2023. Hopefully all our wishes for the new year will come true and our new shed is not a pipedream anymore.

Under the guidance of Eric, our architect Katrina, who is also representing the other two clubs, developed the site plans and building drawings for the proposed artisan centre in Mogo. This is already revision two as fortunately Pete Mc. found that the main optic fibre cable for the south coast runs under our proposed shed. After consulting with the authorities, it was clear that we could not build within two metres of the cable. We can thank Pete and his experience as a builder that the cable was found and not at a later date when the bulldozer was clearing the land. The new drawings will be discussed with the other two clubs this week and if agreed they will be presented to the council.

Late last year we welcomed two new members to our club, Kenneth Jamieson & Ronald McKeown. At our last general meeting we also welcomed another new member, Peter Stubbs.

Please make them feel at home and assist them whenever possible in their endeavours to be safe and comfortable around the workshop. We slowly have a problem with the 'Peters' but I hope that we will come to some agreeable compromise on distinguishing them..

We always talk at our meetings about our members or families who have health issues which is not unexpected in our age group. Some have a monumental struggle and need our support and help through their recovery. Please let us know if we can help in any way possible to make life a bit better.

The other week on a Wednesday we had about twenty members in our workshop which is fantastic to see. Sometimes there is a wait to get onto a machine, but we need helpers to enhance our sales stock for our upcoming market at Easter in South Durras. Nothing official has been forth coming as yet but the first meeting of the



Durras Market committee has been held which indicates that everything is on track.

We received a substantial load of timber which Eric priced and is available to members for a very reasonable price. Another load has been picked up from a donor which will also be made available to members.

Our timber slabbing team recommenced their activities on the 20th February at JJ's place with a large Ironbark tree. Malcolm reported our saw mill made short work of the logs cutting them into very useable planks.

Stay well, stay safe Helmut



Next General Meeting - Saturday 4th March at Workshop, Dunns Creek Road at **1.00 pm** following BYO lunch at 12.00

Proposed Sales Days 2023 :

8th April (Easter Saturday) - Durras Handmade Market

10 & 11 June (June Long Weekend) - Tilba Woodwork Exhibition , Tilba

NOTE: Members seeking further information contact : Secretary Eric Simes (02) 4471 5086

SHOW 'N TELL

This year our EWG boys scooped the pool at the recent Eurobodalla Agricultural Show. **Peter McDowell** and **Peter Brotherton** both won First Prize in their respective classes and Peter McDowell also picked up the Best Exhibit and Champion prize with this amazing elaborately turned and carved lidded vessel. Peter used walnut and Huon pine, and finished the piece with EEE and Shellawax.





Peter McDowell also entered this carved sculptural form using white cedar and finished with Kunos oil. This piece won First Prize in Class 5 at the Show



Peter Brotherton's Second Prize entry in Class 1 at the Show was a turned lidded bowl, using N.G. Rosewood, Jarrah, and a veneer inlay, finished with EEE and Shellawax. Pete brought this piece along to the November EWG meeting and was in the October/ November newsletter.





Peter Brotherton's First prize entry in Class 4 at the Show was a beautiful jewellery box crafted from N.G. Rosewood, Jarrah and Mountain ash, with veneer inlay top. He finished it using Kunos oil.

Congratulations to both Peters on your amazing entries and prizes

It's coming up to Tilba time again—yes, the annual Woodwork Show held at Tilba over the June Long weekend. Over the past months we have seen some very fine work being shown at the monthly meetings, and we are hoping these will be entered in the Show Exhibition. If you haven't yet created your very special masterpiece, you still have heaps of time so get cracking!!

SHOW 'N TELL CONT'D ...



Jenny Barnes turned this hollow form bowl using Himalayan cedar which was finished with EEE, Shellawax and Aussie Oil. This bowl below was turned by **Helen Warland** using cedar. Helen inserted a disc of huon pine in the base for an interesting effect.





Both Helen's and Jenny's pieces were turned under the patient tuition of John Tanner at his home workshop. John continues to inspire both new and long term EWG members in the art of turning in his "spare time". Thanks John, as one of your pupils, I can say we all appreciate your generosity of time and sharing of a great skill.



This is a money box made by **Eric Simes** using Japanese cedar and trimmed with walnut.

Eric had us all a bit puzzled at what this slotted disc could be, but it was obvious when he explained it is a boat steering wheel made from Huon pine and set on a 1925 brass wheel, which has been restored.





Being the first General Meeting of the year, the committee decided the Club should put on a BBQ sausage sandwich for lunch to celebrate being together again. Here are the hard working chefs, obviously enjoying themselves.

CLUB SALES STOCKS !!

DON'T FORGET..-THE CLUB NEEDS YOU ALL TO HELP REPLENISH OUR STOCKS OF TOYS, BOWLS KITCHEN UTENSILS OR ANYTHING YOU WOULD LIKE TO MAKE TO BOLSTER OUR SALES STOCKS FOR THE FORTHCOMING DURRAS HANDMADE MARKETS AT EASTER AND THE SALES TABLE AT THE WOODWORK SHOW AT TILBA, JUNE LONG WEEKEND.

A History of Nails

Nails go back at least to the Ancient Roman period. The provision of iron for nails by King David for Solomon's Temple is mentioned in the Bible. Until the end of the 18th century, they were made by hand, an artisan known as a Nailer providing them with a head and point. Until the early 17th century there were workmen called Slitters who cut up iron bars to a suitable size for Nailers to work on, but in 1590 the slitting mill was introduced to England, providing a mechanical means of producing rods of uniform cross-section. In the 19th century, after the invention of machines to make "cut nails", some nails continued to be made by hand, but the handmade nail industry gradually declined and was largely extinct by the end of that century.

Just prior to the American Revolution, England was the largest manufacturer of nails in the world. Nails were virtually impossible to obtain in the American Colonies so it was quite common for families to have a small nail manufacturing setup in their homes by the fireplace. During bad weather and at night, entire families made nails not only for their own use but also for barter.

This was not a practice restricted to the lower classes. Thomas Jefferson was quite proud of his hand made nails. In a letter he wrote,

"In our private pursuits it is a great advantage that every honest employment is deemed honourable. I am myself a nail maker." From the president to the pioneer, nail making was an important facet of life. Jefferson was among the first to purchase the newly invented nail-cutting machine in 1796 and produce nails for sale. Such value was placed on nails that it was common practice, when moving, to burn one's home in order to retrieve them.

The invention of the nail cutting machine rapidly put the United States in front in the manufacturing of nails and has lead the world ever since.

In the 1850's several manufactures were established in New York which made wire nails. These machines were most likely imported from France. The earliest wire nails were not made for construction but for the manufacture of pocket book frames and cigar boxes. It was not until after the American War between the

States that wire nails began to gain acceptance in construction. Even through the 1890's many builders preferred using cut nails because of their holding power. It was well into the twentieth century before wire nails became the dominate type and only then because they were so much cheaper. It is because of the tremendous holding power and hardness that cut nails are still used today for specific functions such as flooring nails, boat nails and masonry nails.

(Condensed from various internet sources)

How To Choose The conceptor of the appropriate chart check the alphabetical list for your project. 1. Define whether your project is for External or Internal use. 2. On the appropriate chart check the alphabetical list for your project. 3. Read across to determine the correct nail for fixing into either Hardwood or Softwood.							
INTERNAL]	EXTERNAL			
FIXING V TO ►	HARDWOOD	SOFTWOOD		FIXING V TO -	HARDWOOD	SOFTWOOD	
ARCHITRAVES	BULLET HEAD	BULLET HEAD		BRACKETS (e.g. DOWNPIPE)	BRACKET NAIL	BRACKET NAIL	
BEADING	BULLET HEAD	BULLET HEAD		CLADDING (CORRUGATED IRON)	ROOFING NAIL PLAIN OR TWISTED	ROOFING NAIL PLAIN OR TWISTED	
CABINET WORK	BULLET HEAD	BULLET HEAD		DECKING (TREATED PINE)	FLAT HEAD GALV	TIMBERLOK	
COVER STRIP	BULLET HEAD	BULLET HEAD		DECKING (HARDWOOD)	BULLET HEAD GALV	TIMBERLOK *	
COVER STRIP (FIBBE CEMENT)	SOFT SHEET NAIL	SOFT SHEET NAIL		FENCING WIRE WELD-MESH : NETTING	STAPLES	STAPLES	
FIBRE CEMENT SHEET (4.5mm)	SOFT SHEET NAIL FIBRE CEMENT NAIL	SOFT SHEET NAIL FIBRE CEMENT NAIL		FENCING PALINGS	FLAT HEAD GALV.	FLAT HEAD GALV.	
FLOORING (TIMBEB)	BULLET HEAD	BULLET HEAD		FIBRE CEMENT SHEET (4.5mm)	FIBRE CEMENT NAIL	FIBRE CEMENT NAIL	
FLOORING (PARTICLEBOARD)	FLAT HEAD	FLAT HEAD		FRAMING (HARDWOOD)	BULLET HEAD GALV.	TIMBERLOK *	
FLOOR COVERINGS	BLUE CUT TACKS	BLUE CUT TACKS		FRAMING (SOFTWOOD)	FLAT HEAD GALV.	TIMBERLOK	
FRAMING (HABDWOOD)	BULLET HEAD	BULLET HEAD *		HARDWOOD	BULLET HEAD GALV.	TIMBERLOK *	
FRAMING (SOFTWOOD)	FLAT HEAD	FLAT HEAD		PROFILED METAL CLADDING	CLOUT	CLOUT	
HARDBOARD (E.G. MASONITE)	HARDBOARD NAIL	HARDBOARD NAIL		ROOFING (GENERAL)	ROOFING NAIL PLAIN OR TWISTED	ROOFING NAIL PLAIN OR TWISTED	
HARDWOOD	BULLET HEAD	TIMBERLOK *		ROOFING (HIGH STRESS)	ROOFING NAIL SUPA HOLDFAST	ROOFING NIAL SUPA HOLDFAST	
PANELLING (PLY-NAT TIMBER)	WALLBOARD NAIL	WALLBOARD NAIL		SCREENS (WIRE - F/GLASS)	BLUE CUT TACK	BLUE CUT TACK	
PANELLING (E.G. BANDOM GROOVE)	WALL PANEL NAIL	WALL PANEL NAIL		SHADE CLOTH	CLOUT	CLOUT	
PARTICLEBOARD	FLAT HEAD	FLAT HEAD OR PARTICLE BOARD NAIL		SHEET METAL	CLOUT	CLOUT	
PARTICLEBOARD	TO PARTIC	LEBOARD EBOARD NAIL		TREATED PINE	FLAT HEAD GALV.	TIMBERLOK	
PLASTERBOARD	LATTICE HEAD NAIL •	LATTICE HEAD NAIL •		TRELLIS (TIMBER - PLASTIC)	CLOUT	CLOUT	
SOFTW00D	FLAT HEAD	FLAT HEAD		WEATHERBOARD (TIMBER)	BULLET HEAD GALV.	BULLET HEAD GALV.	
UNDERLAY	UNDERLAY NAIL	UNDERLAY NAIL		WIRE (BARBED - PLAIN)	STAPLE /	STAPLE	
BROWN FINISH • REFER PLASTERBOARD MANUFACTURER'S SPECIFICATIONS * PREDRILL TOP PIECE.							

The hardness of tools and chisels is often expressed in terms of Rockwell scale hardness. What is it? How is it determined?

The Rockwell scale is a hardness scale based on indentation hardness of a material. The Rockwell test determines the hardness by measuring the depth of penetration of an indenter under a large load compared to the penetration made by a preload. There are different scales, denoted by a single letter, that use different loads or indenters. The result is a dimensionless number noted as HRA, HRB, HRC, etc., where the last letter is the respective Rockwell scale.

When testing metals, indentation hardness correlates linearly with tensile strength. This important relation permits economically important non destructive testing of bulk metal deliveries with lightweight, even portable equipment, such as hand-held Rockwell hardness testers.

The determination of the Rockwell hardness of a material involves the application of a minor load followed by a major load. The minor load establishes the zero position. The major load is applied, then removed while still maintaining the minor load. The depth of penetration from the zero datum is measured from a dial, on which a harder material gives a higher number. That is, the penetration depth and hardness are inversely proportional. The chief advantage of Rockwell hardness is its ability to display hardness values directly, thus obviating tedious calculations involved in other hardness measurement techniques.

The equation for Rockwell Hardness is H R = N - d / s where d is the depth (from the zero load point), and N and s are scale factors that depend on the scale of the test being used (see following section).

It is typically used in engineering and metallurgy. Its commercial popularity arises from its speed, reliability, robustness, resolution and small area of indentation.

In order to get a reliable reading the thickness of the test-piece should be at least 10 times the depth of the indentation. Also, readings should be taken from a flat perpendicular surface, because convex surfaces give lower readings. A correction factor can be used if the hardness of a convex surface is to be measured.

Very hard steel (e.g. chisels, quality knife blades): have a hardness of HRC 55–66 (Hardened High Speed Carbon and Tool Steels). as well as many of the newer powder metallurgy Stainless Steels.

Axes: about HRC 45–55

Brass: HRB 55 to HRB 93







High Speed Steel

High speed steel (HSS or HS) is a subset of tool steels, usually used in tool bits and cutting tools. It is often used in power saw blades and drill bits. It is superior to the older high carbon steel tools used extensively through the 1940s in that it can withstand higher temperatures without losing its temper (hardness). This property allows HSS to cut faster than high carbon steel, hence the name high speed steel. At room temperature, in their generally recommended heat treatment, HSS grades generally display high hardness (above HRC60) and a high abrasion resistance (generally linked to tungsten content often used in HSS) compared to common carbon and tool steels.

The main use of high speed steels continues to be in the manufacture of various cutting tools: drills, taps, milling cutters, tool bits, gear cutters, saw blades, etc., although usage for punches and dies is increasing.

High speed steels also found a market in fine hand tools where their relatively good toughness at high hardness, coupled with high abrasion resistance and fine, made them suitable for low speed applications requiring a durable keen (sharp) edge, such as files, chisels, hand plane blades, and high quality kitchen and pocket knives.

High speed steels belong to the Fe-C-X multi-component alloy system where X represents chromium, tungsten, molybdenum, vanadium, or cobalt. Generally, the X component is present in excess of 7%, along with more than 0.60% carbon. (However, their alloying element percentages do not alone bestow the hardness-retaining properties; they also require appropriate high-temperature heat treatment in order to become true HSS.

The addition of about 10% of tungsten and molybdenum in total maximises efficiently the hardness and toughness of high speed steels and maintains these properties at the high temperatures generated when cutting metals.

Thanks to Paul Nolan who researched and found these interesting articles giving the explanation of steel hardness and it's various applications. These unseen qualities impact our use of tools and equipment, not only at the workshop but in our daily lives. Keep an eye out for more articles from Paul as the year progresses.



Note the polycarbonate sheeting recently installed by Peter McDowell. Both these sides copped both the wind and rain on bad weather days, limiting the available bench space in the workshop. With the increase in members of late, and increased attendance at the workshop, this improvement will enable full use of all areas - thanks Pete!

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