Lake Charles Woodworkers Club, Inc. April 2008

Jeff Cormier, President Dick Hopes, Treasurer Officers and Directors

Barry Humphus, Editor, Bubba Cheramie George Kuffel, John Marcon, Chuck Middleton

Mentoring Program - If you have a project, a problem in any woodworking area, these members have volenteered to help. Give them a call. Jeff Cormier: 582-3278; George Kuffel: 478-2707; John Marcon: 478-0646; Chuck Middleton: 625-3134; Gary Rock: 433-1679; Eltee Thibodeaux: 436-1997; Dick Trouth: 583-2683. Each has years of experience and knowledge.

March Meeting Highlights

The March meeting was quite special as we had Steve Legrue over from The Cutting Edge in Houston to talk to us about finishes at John Marcon's studio. If you go to Houston, you should always plan to go to the The Cutting Edge as you will find very knowledgeable and friendly sales people who will assist you in selecting just the right tools or equipment for your project. Steve's presentation summary starts on page two.

Jeff Cormier began the meeting with a talk about table saw safety and specifically regarding two simple accessories that limit kickback on table saws. The first is the riving knife. This device is required on all table saws currently sold in the US. The riving knife is a thin metal flange that sits just behind the saw blade and rises and falls with the blade.

A riving knife prevents a phenomenon known as kick-back. This occurs when the wood is caught by the rear edge of the table saw blade, lifted off of the table and propelled backwards toward the operator. Two circumstances usually cause kickback: The closure of the kerf behind the blade due to the relief of stresses in the wood as it is cut, or a binding of the wood between the blade and a vertical fence used to guide the wood into the blade during the ripping operation. When you rip, never remove the riving knife.

The second safety accessory for a table saw is a splitter. A splitter is a stationary blade of metal, plastic or wood that holds the kerf open behind the blade. The safety function of a riving knife is the same as a splitter - it prevents the slot cut into kerf from closing behind the blade on a rip, or allowing the stock that may bind between the blade and fence from getting caught by the teeth on the back of the blade. Jeff showed a shop-made splitter that could be used on any table saw you might own.

The difference between a riving knife and a splitter is that the riving knife does not need to be removed from the table saw when doing cross-cuts because it is mounted on the same mechanism that mounts the blade, allowing it to move with the saw blade as it's raised, lowered or tilted.

Show and Tell brought us a great hollow form vase by Gary Rock of cottenwood, a braclet box from Tom

Bergstedt of zebrawood, walnut and walnut burl, while John Anderson showed a replica saw handle of cherry and a mallet. Jimmy Everett brought a few of his wonderful carved walking canes made of rose of Sharon wood. Mr. Thibodeaux brought a neat Easter scrollwork.

John Perry showed some photos of some cabinet work he has recently done as well as a Butler's table photo. John also suggested that the LCWW's might do a 'garage sale' as a fund raiser project, selling work that the members had done. At the next Board meeting, we will likely discuss this possibility.

Before the presentation got started, John Marcon reminded everyone about house keeping - cleaning your shop after each project or at the end of the day. It is great to walk into your shop, ready to go to work with a clean and orderly shop - the tools are put away where you need them, the floor is clear of debris and you can safely start your project. Every member who has worked at the local industrial plants knows this - it was pounded into to them over many years and it works. A clean and organized shop is a safe shop.

John also passed out samples of Franklin International's Tite Bond II glue and pointed out how gracious they are at answering your gluing questions. If you have a questions about gluing, Franklin is glad to help with your project. If you have a question, feel free to give them a call at (800) 877-4583.

Steve Legrue is a master at woodworking. His vast experience and careful attention to detail results in extremely fine work. His store, The Cutting Edge, is located at 11760 S. Sam Houston Pkwy W., Houston, 77031, and is the best place to go in this region for fine tools, supplies and woodworking equipment. The store has recently partnered with Rockler and now carries many of the specialty items Rockler offers.

As much as we like to build things out of wood, few of us like to tackle the second part of the project -- the finish. Often it takes as much time to apply the finish as it did to product the item. See the article on Page two.

Coming Up... Saturday, April 12 at 9:00 a.m. the shop of J.W. Anderson

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Steve LeGrue, Master Finisher

If you spend as much time doing the finish on a project as you do making it, you will almost always be satisfied with the result. What finishes do is moderate the movement of water into and out of wood. By applying a finish on your project, you protect the piece in many ways including cracking, splitting and surface damage. The former is mostly a matter of water moving into and out of the wood.

To get to the point of finish, you must prepare the surface as much as possible as any finish will magnify surface defects. Surface preparation typically (but not always) involves sanding the surface with varying grits. You should always use finer and finer grits as you progress through the sanding process, carefully wiping off after each application and Do Not skip grits. Skipping a grit only results in higher cost of sand paper and more labor for you. The key to sanding is to sand to a grit that is approximately the same size as the cell width of the wood. Further sanding is generally a waste of time and sand paper. For example, soft woods such as pine need a grit of about 220 for the final sanding whereas harder wood, such as maple may require only about a 150 grit.

What you want to do is open the wood only enough to take a finish.

LeGrue suggested that one of the better surfacing techniques is to use a scraper or a plane rather than sand paper. These devices leave a better surface than sanding and of course, no grit than could require re-sanding if large grit particles are left behind.

What remains after sanding, scaping or planing may be filling the pore of the wood, largely depending on the surface you want to achieve. If your goal is to have a so-called 'natural feel' to the surface, you don't need to fill the pores. If you want a glassy smooth finish, you will need to use a pore filler. These are used across the grain of the wood and not with the grain as with a typical final finish. The trick is to follow the instructions that come with the product. Choose one that closely matches the wood color. You can also use artist's tints (Hobby Lobby and others) to precisely match the wood's color.

Another colorant for finishes are dyes and pigments. Dyes color the wood from inside out, that is, they are absorbed into the wood, changing its color. Pigments are surface colorants, covering the wood on top to achieve the desired result.

A variation on pigments are so-called Gel stains. These sit on the surface, alter the color of the wood and are easier to apply than many of the traditional pigment stains and colorants.

Dyes and pigments vary a great deal in terms of availability, what they do and how they are applied. Again, always read the product container before you purchase to make certain you are getting what you want. For example, if you use the same brand of finish throughout the project, you are most likely to achieve product compatibility. But there are some products that are universal. The one product that is compatible with every finish is shellack.

Because shellack uses alcohol as it's reducer, it is fast to dry and safe. Shellack is in fact used to coat medical products such as pills and candies and is therefore safe to use on any surface that comes in contact with food. If you have to use finishing products that are not compatible, you should use shellack between them.

Another point LeGrue made is that all oil-based finishes are generally compatible. For instance, if you are using an oil-based pigment, you can safely use a polyurethane coat over that so long as you prepare the surfaces correctly.

LeGrue also discussed catalytic and evaporative finishes including standard polyurethane and so-called water-base polyurethane.

He recommended using glossy polyurethane of all coats but the last (if you want a satin finish). The first coat should be reduced should be reduced to one part poly to two parts thinner (paint thinner or mineral spirits depending on the container - they are exactly the same. Note that you can also use turpentine - smells better). In other words, do not use polyurethanes straight out of the can, reduce it with paint thinner regardless of your final finish.

For the final finish if using poly, use a 1 to 1 reduction, that is, 1 part poly to 1 part reducer. As a side note, I like to use poly, reducer and boiled linseed oil at a 1 to 1 ratio with a few drops of a dryer. Three coats of this will produce a very fine finish.

LeGrue also discussed lacquer as a finish. For the most part, this must be sprayed on your project using a HVLP spray gun system. The true advantage to lacquers is the extremely fast drying times which is why it is used for high production work in furniture factories. However, Deft makes a brush lacquer that can be used in a normal shop. Liqueur is a so-called 'hot' finish as the second coat melts into the first, much like shellack.

The final finish that Steve described in his presentation was wax. Wax is not a very good protective finish despite that most are very easy to apply and leave a soft look to the peice. Despite the ease of use, you should avoid those waxes that contain toluene and benzine as they are very toxic and you should use a chemical respirator when applying them.

Gel and Thin Bodied Stains

There are many types of stains on the market but all of them fall into two general categories: gel and thin. Of the later, there are several carriers or reducers such as mineral spirits, oil and water so they penetrate the wood to varying degrees depending on the wood grain structure. Gel stains, however, do not generally penetrate and sit on the surface of the wood. By the way, there is one other general stain-like product set – chemicals that change the color of the wood by reaction to the tannin in the wood. But that's another story

To understand how these two general types of stains behave differently, imagine a piece of wood as if it were a slice of bread. Applying a gel stain to wood is like spreading jelly onto bread. The jelly sticks, but it doesn't penetrate the porous surface of the bread. You can spread the jelly, but you can't apply it in a thin or translucent layer the way you can, say, warmed butter. Like fluid butter, thin-bodied stains go on thin and penetrate the surface.

Because gel stains lie on a wood surface instead of soaking into it, they uniformly color porous and nonporous areas alike. That makes them relatively goof-proof, and a great help to many woodworkers. In addition, they don't run or splatter, and are especially handy for applying to vertical surfaces.

Nevertheless, gel stains do have certain drawbacks. You want avoid them on projects with lots of tight corners and crevices because the stain collects in these tight spots and is hard to remove. Thin-bodied stains don't have this problem because they wick into tight spots and the areas adjoining them. Because gel stains don't penetrate as well as thin-bodied stains, they don't bring out the depth of the wood grain as well as thin-bodied stains. That's why many woodworkers prefer thin-bodied stains for porous woods such as oak, ash, mahogany, and walnut.

Species such as pine, maple, cherry, and birch have relatively nonporous surfaces that don't absorb stains well. These woods have areas where edge or end grain pops to the surface. So, when you apply thin-bodied stains to them, you can get splotchy areas of light and dark staining because of uneven absorption.

Therefore gel stains help you achieve uniform coloration on these woods. Although you can buy conditioners specially made for sealing hard-to-stain woods prior to staining with thin-bodied stains, that combination generally do not give you as good a result as gel stains do in many tests we've seen..

Some-times you can't avoid combining woods of slightly different coloration or mismatching grain patterns in the same project surface. For example, various red oak Page 3 Lake Charles Woodworkers Club, Inc.

boards may vary from pale white to pink in tone, and they may have flat-sawn or quarter-sawn grain patterns. If economics dictate that you must use such boards together, you can help give the surface a uniform appearance by using gel stains.

Today, you can buy fiberglass and hardboard doors with a wood-grain embossed surface, and steel doors with non-embossed surfaces. Gel stains help you give both types of surfaces a grain-like appearance.

With embossed surfaces you simply apply a gel stain. Because it doesn't spread out, the stain stays on the flat surfaces and collects in heavier amounts in the embossed crevices of the grain. This same non-spreading quality makes gel stains ideal for applying artificial wood grain to flat surfaces, such as steel doors, with a wood-graining tool. Note that Zar brand wood stain, although not a true gel stain, is thicker than thin-bodied stains and also works for wood graining.

Because gel stains collect in crevices, they also help you give some projects a faux patina. You simply wipe on the stain, then wipe it off, leaving the stain in crevices and other spots where dirt would accumulate over the years.

Three gel stains recently tested by Wood Magazine varied considerably in thickness. The Minwax product was just slightly thicker than the Bartley product, and the Wood-Kote stain was considerably thicker than the other two. So, the Wood-Kote product possessed all of the qualities and the drawbacks of a gel stain to a greater degree than the others.

For example, the Wood-Kote did the best job of masking uneven wood coloration and graining, but it was also the hardest to apply and wipe off. Removing it from crevices was a chore according to their tests.

If you like the goof-proof nature of gel stains, they recommended using the Bartley and Minwax products for all of your staining work. Regardless of your skill level, the Wood-Kote seemed best suited to the tasks as described in the Wood Magazine article.

So go ahead and give gel stains a try. Just remember to always test your stain on a sample piece before applying it to your project. *From Wood Magazine*, *edited by Barry Humphus*.

DUES!

Make certain that you have sent you annual dues to Dick Hopes, 1139 Green Road, Lake Charles, LA 70611, as this is the last Newsletter that you will recive without paying. It's just \$20 per year for a family membership and you really can't go wrong with this deal.