

Jeff Cormier, President
Dick Hopes, Treasurer

Officers and Director

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 volunteered 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 Trough: 583-2683. Each has years of experience and knowledge.

January Meeting Highlights

George Kuffel was our host this month at his fine shop. George thanked Barry Humphus for coming by to help with the cleanup on Thursday.

New LCWW President Jeff Cormier, outlined the agenda for the meeting. There was a discussion and request for meeting ideas solicited from the members present - Jeff reminded those present that it is everyone's club and everyone should always voice their opinions about woodworking matters. Jeff also reminded members the final deadline for dues is coming soon and to send your \$20 to Dick Hopes, our treasurer.

Safety should always be on your mind when in your shop or doing any project that involves power or hand tools. A brief discussion was held on shop saw safety. Jeff reminded everyone about the new LPB program that airs on Saturday at 2:30 P.M.. - The Woodsmith Shop.

The drawing for the Door Prize was won by Larry Eagle - we think he won one of these recently as well - so stand next to him at the slot machines.

While there was Show and Tell items, notes or photos were not taken so we hope you will bring them back at a future meeting so that the photos may be added to the web site.

The main program this month was about plate joinery using a biscuit joiner. The biscuit joiner provides fast, accurate and strong joinery in much less time than it takes to lay out a mortise and tenon or even just a mortise. Modern plate joiners can be used right out of the box in only a few minutes.

Premium biscuit joiner manufacturers include Lamello, Porter-Cable, Dewalt, Makita, Ryobi, Freud and Skill.

The principle of plate joinery is the same as mortise and tenon. The biscuit joiner cuts a mortise while the biscuit itself provides the tenon - without having to allow for extra material for the tenon (and cutting it) or the trouble of making the mortise (and cutting that).

Common uses can be for edge joining to make wide panels, but joints, surface joints, and miter joints. There are three common sizes of biscuits - #20, #10, #0, and specialty

size FF. For best results, you should use largest biscuit possible for the joint. FF biscuits and some other special sizes may require changing to a smaller blade in the unit. In addition, special biscuits made of plywood are now available.

Traditional biscuits are made of compressed beechwood. When the beechwood biscuit is exposed to moisture, it swells. The swelling combined with the moisture-containing adhesive results in a compression fitting that is very strong - most say, stronger than conventional mortise and tenon joinery.

One of the cautions, however, because of the swelling, you should not cut and install a biscuit close to the surface of your work piece. As the biscuit swells, it can telegraph its presence to the surface of the piece - especially large flat panels. In other words, you end up with a biscuit shaped bump on the surface of a panel that will not sand out. Plywood biscuits reduce this effect, but because they don't swell very much, they may have slightly less holding power compared to conventional beechwood biscuits. Always consider the joint you are making. In fact, you need to rethink every joint you are making if you are converting from M/T to biscuit joinery.

The biscuit joiner offers two referencing planes - the base of the tool against table and the fence. On the better biscuit joiners, the fence can be sloped or angled to a range suitable for the joint you are making.

One of the important things to consider is accurate referencing using offset surfaces. Some of this can be helped by using thinner biscuits. One caution is to keep the biscuits dry (so store them in a tight container) because if they swell, they won't fit the slot cut by the biscuit joiner blade. You can carefully dry them in a microwave oven. You should also use dust collection if possible with a biscuit joiner as they will really blow the saw dust all over the shop and you up your nose. There is more on setup and layout for biscuit joinery in the article on the next page.

Coming Up . . . Studio of John Marcon on Saturday, February 9, 2008 at 9:00 a.m. John will demonstrate a carving restoration of two statures damaged during Rita as well as gouge sharpening techniques.

The Woodworking Shows

The annual Woodworking Show in Houston will be held April 4-6 at the Reliant Park Exhibition Hall. These are a really great place to see your friends, see the latest tools and techniques, and find great bargains on a number of woodworking products from finishes to tools of all kinds.

There are also prizes (register on-line or at the show) and classes given by well known woodworkers. You can get a discount coupon worth \$2 off the admission price by going to their web site at www.thewoodworkingshows.com. The cost is \$6 for a single day ticket or \$9 for a multiple day ticket.

Ultimate Bragging Rights

Your shop in a national magazine

Do you have the kind of shop other woodworkers like to visit? Is your shop filled with clever ideas that help you work smarter, faster, or safer? Have you designed and built special tool racks, machine bases, cabinets, jigs, or other shop helpers you think your fellow woodworkers would find interesting? If so, the editors at WOOD magazine invite you to submit your workshop or individual shop projects for review for possible publication in future editions of America's Best Home Workshops. Your shop doesn't have to be big, or nit-picky clean. The ideas could be storage solutions, task-specific jigs, shop tips, or the special way you designed, built, and outfitted your shop. To submit your shop visit www.woodmagazine.com/homeshops.

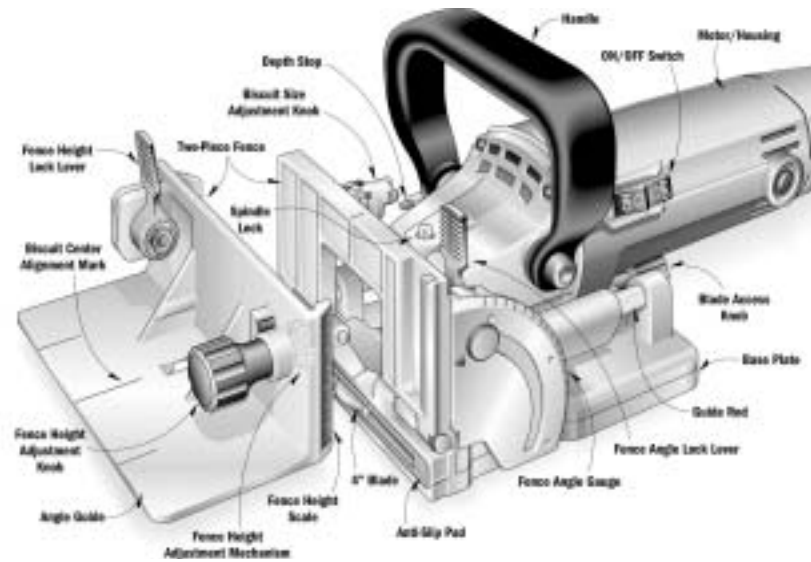
Biscuit Joiner Reviews

Workbench Magazine reviewed seven plate joiners a couple of years ago and all are still available or have equivalent models. The details of what to look for in a plate joiner are key and that will be the focus of this summation. At the end, we'll show the results of their tests.

If Jeff Cormier sold you on the idea of owning a plate joiner or after watching his demonstration, you realized that you need to replace your old one (like me), here are some things to consider before going to the hardware store to get one. You just need to know what makes one joiner better than another.

In a word, the fence. Why is the fence so important? All plate joiners will cut a slot in the edge of a board with absolutely no problem. In fact, based solely on this type of cut, we couldn't recommend one tool over another. However, when cutting slots in bevels or miters, or joining face frames, it becomes clear that the fences on these joiners are not created equal. The difference lies largely in how the fences register on a work piece. There are also major differences in

the ease of adjustment and accuracy of the fences. There are other important factors, such as how well a joiner grips a work piece while making the cut. (Imagine trying to cut a slot in the end of a piece of stock only to have the joiner "slip" and cut through the edge of the work piece.) Other aspects



that affect performance are things like sight lines, registration marks and ergonomics.

ONE-PIECE FENCE. This type of fence, found on the DeWalt, Craftsman, and Ryobi, gives you two choices for joining miters. The first is to register off the outside face of a work piece. This generally works fine, but can be a bit "tippy." One other limitation to this fence type has to do with board width. The wide opening in two of these fences (the DeWalt and Craftsman) lets any board narrower than 2 1/2" slip through the fence. In that case, the second option is to register off the *inside* face of the board. The problem here is that any misalignment will be visible on the *outside* of the joint. (The inside faces are guaranteed to line up since the tool is registered on them while cutting the biscuit slots.)

TWO-PIECE FENCES. The Lamello, Freud, and Makita plate joiners are equipped with two piece fences. One part of the fence is permanently attached to the joiner. The second part, called an angle guide, can be removed for some types of cuts (*see the drawing*). For joining miters, these fences also offer two options. The first option is to set the fence to 45° with the angle guide attached, as shown in *Figure 3*. This "traps" the work piece and holds the joiner securely during the cut. This design does have one serious limitation, though. When you try to use this configuration on a board that's thicker than 3/4", the "tip" of the miter holds the joiner away from the board. For thicker stock, the solution

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is to remove the angle guide and use the joiner fence to register off the inside face, just like the one-piece fence.

TWO-STAGE FENCE. Porter-Cable's fence is best described as a two-stage design (which is different than the *two-piece* fences covered earlier). The first stage adjusts from 0° to 90°. In this stage, it functions just like a typical one-piece fence. However, unlike regular one-piece fences, this fence provides a positive hold on even the narrowest boards. The second stage allows the fence to adjust from 90° to 135°. Using this setup, the two-stage fence “traps” the work piece, much like a two-piece fence. But what's better about this fence is that it's not limited to 3/4"-thick stock.

HEIGHT & ANGLE ADJUSTMENTS. One final consideration that affected our opinions of all the fences we looked at is how easy it is to set the angle or height of the fence precisely. The two-stage fence of the Porter-Cable has the best adjustment qualities overall. The height and angle scales are clearly marked, which makes alignment easy. And a fine-threaded jackscrew allowed for exact height adjustments. We also liked the rack-and-pinion height adjustment on the Makita (*see the drawing on page 2*). This fence adjusts quickly, stays square, and locks down solidly. The fences on the Freud, Lamello, and Ryobi plate joiners are moved up and down by hand, which is a less refined adjustment system.

ANTI_SLIP DEVICES. It's important that a plate joiner doesn't “slip” as you plunge the blade into a work piece. The reason this “slippage” happens is simple. As the joiner plunges forward, the spinning blade makes contact with the wood and drives the tool in the direction opposite of the blade rotation causing the tool to slip. Each of these plate joiners has some device to help control slipping. Some are better than others. One such device is a pair of anti-slip pins. These are designed to “bite” into the work piece. The pins can be retracted so they don't scratch a work piece on a visible surface. These generally work well. One weakness of these pins, though, is their placement — usually far apart. They offer no hold when working with narrow stock. A second type of anti-slip device is the abrasive strip used by Porter-Cable. This doesn't have the same gripping power as pins, but it does cover the entire face of the joiner, so it engages even the narrowest stock. Lamello's silicone pads had one of the best grips in the group. Unfortunately, this design has the same limitation as the pins — they're spaced too far apart to do any good on narrow work pieces. Ryobi covered the face of their joiner with a material similar to a router mat. This held the joiner quite well. However, one of the testers

said the material made it difficult for him to know when the tool was set firmly against the work piece.

The **Porter-Cable 557** plate joiner seems to have been designed to avoid every weakness found on many of the other tools in this test. The two-stage fence on this plate joiner is clearly the best fence in the group. The angle of the fence adjusts across a 135° range, making it easily adaptable to any joint. Adjusting the fence height by using a fine threaded jackscrew is also an excellent design. The Porter-Cable also has the best ergonomics of the test group. The Porter-Cable 557 plate joiner is virtually flawless, and an easy pick for the *Workbench Editor's Choice* award. \$200 at most retailers.

The exceptional quality of **Lamello's C2** plate joiner is evident in everything from its super-smooth plunge, a depth-setting knob that operates silky smooth, and an overall fit and finish that is unrivaled in this group. \$349 available mail order.

The **Makita 3901** takes third place and Top Value honors in this test, thanks largely to some thoughtful features built into this tool. First are the large tension levers and knobs on the fence. These are handy when making frequent setup changes. Also, the two-piece fence on the Makita uses a rack-and-pinion height adjustment, which holds the fence parallel to the blade and makes fine-tuning the fence a snap \$170 available widely.

Although the **DeWalt DW 682** didn't win one of the top three spots, we still consider it an excellent tool. The one-piece fence of this tool is well marked with graduations of 1/16" on height scale and 1° increments on the angle scale. Adjusting the height of the fence is accurate and quick thanks to the rack-and-pinion mechanism. \$165 available widely.

The **Craftsman Professional** is essentially a clone of the DeWalt with a few key differences, related mostly to ergonomics and comfort. It has a knob rather than a handle, making it more difficult to operate. \$165 available widely.

The **Freud JS102** is a solidly-built, affordable plate joiner that performs well once you get used to a few of its idiosyncrasies. Despite finishing last, we do have a few positive things to say about the Ryobi JM81. Priced at under \$100, this would be a good tool for a budget-conscious, occasional user. *Edited by Barry Humphus from Workbench Magazine.*

Time to Renew

It's that time of year, yes it's time to pay your dues to the LCWWC and continue to receive this newsletter and go to meetings. Send your \$20 dues to Dick Hopes, 1139 Green Road, Lake Charles, LA 70611.