

# ASK SMITTY

No woodworker (except *SMITTY*, of course) has ALL the answers. From time-to-time, everyone hits a snag, trying to figure out some sort of in-shop problem.

Don't worry. *SMITTY* can help. Just use the special e-mail link directly below to send your questions to *SMITTY*. He'll do his best to get back to you soon, with the answers to those questions.

**Here are the questions...and *SMITTY*'s answers for this issue...**

## ***Temporary finish for cake stand***

From Paul Paine (Waltham, MA)

*I am completing a cake stand for my daughter's wedding. (Like an old coat stand with a column of 2x2 red oak with 8 "arms" each supporting a platform for a cake.) I'd like to give it a light coat of "something" that would not hide the grain yet would give it some uniformity of finish. I'd rather not coat it with a poly or a shellac because my daughter intends to use it as a plant stand later on and we want to be able to finish it to match the decor of her house later on. I was thinking of something like a Tung Oil. What do you think?*

Two choices:

The best choice would be a light coat of clear shellac. Why? Because once you're done with the cake stand, you can remove the shellac easily with denatured alcohol....which will dissolve it instantly. If you need to get into the wood grain, use a toothbrush with the alcohol. Then, you can refinish as you desire.

The other choice would be Natural Watco Danish Oil. Then, later, you should be able to go over it with one of the Watco Danish Oils that also contains a stain, such as oak, cherry, etc.

## **Figuring out material needs**

From Derek Hunter (e-mail question — city/state unknown)

*Since I don't build a lot of projects, I have a problem figuring out the most economical way to buy the materials for my projects. Some plans include a cutting diagram to help with those decisions, but others don't. Is there some sort of "formula" for figuring this out ?*

No, there's no formula. If there's not a cutting diagram, here's an idea:

1. Buy some graph paper with 1/4" squares.
- 2: Go to your hardware store, home center or lumber yard and find out what sizes of wood are available in your market area (for example, 8" wide oak may be available in 6-foot lengths and 10" wide oak may not be available at all).

3: Draw the board sizes that ARE available in your town onto the 1/4" square graph paper. For example, if 8" x 6-foot boards are available, assume that each 1/4" square equals 2" and draw a board on your graph paper that's 36 squares by 4 squares.

4: Finally, draw as many pieces as you can onto this 36 square by 4 square area to see what you can get out of each board.

5: Repeat the process until you have drawn all of your project pieces onto graph paper drawings of as many boards as you may need to contain all the pieces you'll need to make your projects.

6: Remember that you'll have an average 1/8" saw kerf every place you make a cut, so don't forget to deduct this saw kerf from your board length everywhere you make a cut.

### **Woodworking fire hazard**

From Chris Van (e-mail question — city/state unknown)

*I purchased a Mark V several months ago, and have been doing some light projects. I have my Mark V set up in my garage and have the dust vacuum hooked to it. A gas powered hot water heater sits in the corner of my garage. One of my friends was at the house and said that he heard it was dangerous to do woodworking in a garage because the dust is highly combustible. Can you provide me with some guidance here. I don't have anywhere else to place my Shopsmith, but I don't want to cause a potential fire hazard to my home either.*

It is highly unlikely that you will have a problem. My shop is in a basement, sharing an area that contains a gas-fired furnace and water heater and I haven't had any problems in nearly 30 years.

This can, however, become a problem if:

- 1): You're creating so much dust that breathing is difficult
- 2): You're creating so much dust that you can't see from one end of your shop to the other
- 3): You fail to use dust collection under the two conditions above
- 4): Your shop is nearly air-tight and you don't provide adequate ventilation

On the other hand, I understand what your friend is saying. If you would feel safer, you could:

- 1): Wall-in your water heater...but...you should check local building and fire codes prior to doing so to be sure you are compliant
- 2): Exchange your gas-fired water heater for an electric one.

### **Drilling evenly-spaced holes for shelf pins**

From Enrico Caruso (e-mail question — city/state unknown)

*Please advise on the most practical solution for drilling evenly spaced shelf pin holes (1/4" or 5mm) for cabinet shelves. I see several jigs available from 3rd party vendors, but I'm sure there is a Shopsmith solution that may include an inexpensive homebuilt jig to manage this task. Thank you for your advice.*

Do you have a copy of Shopsmith's textbook, "Power Tool Woodworking for Everyone" (1989 edition)? If so, see pages 95 & 96 for such a home-built jig and instructions for using it. If you have an earlier edition of this book (yellow cover)...see page 109.

If you have a model 510 or model 520 MARK V, you can attach this jig to the top of your rip fence using one of our Sliding T-Nuts (Part # 555916 in on-line catalog).

### **Removing glue from Sanding Discs**

From Bob Cuthill (e-mail question — city/state unknown)

*What product do you use to remove old glue from a 12" Disc Sander before putting-on the Velcro Conversion Disc?*

The best plan is to put the Disc in the oven on 200 to 250-degrees for about a half an hour. Be sure to put some foil under it to catch any dripping glue. After a half hour, take it out of the oven, remove the sandpaper and use a disposable rag to remove any remaining residue. Once it's completely cooled, any remaining residue can be removed (**OUTDOORS**) with lacquer thinner or acetone.

### **Setting adjustable "wobble-style" Dado Blades accurately**

From "Dusty Don" (e-mail question — city/state unknown)

*I have a Magna Dado Item 505514 The graduations for width settings are indicated by alphabet (i.e. abcdef——). How does this relate to width of cut in inches? I have no instructions.*

After giving your question some thought...and figuring out that this is obviously an adjustable, "wobble-style" dado set (even though the part number is not recognizable)...I offer you the following answer.

It really makes little difference what the letters relate to...except to get you "close" to the right setting. That's because I have NEVER seen or worked with an adjustable dado set in which the markings for the width settings were accurate. At best, these settings can get you "close"...but never (in my experience) "dead-on".

Therefore, I would make some trial cuts at the various letter settings, making note which letter gets you close to what width. From that point on, if you want your project components to fit together accurately, you're probably ALWAYS going to have to make a series of trial cuts to arrive at your exact settings. Wish I had a better answer for you.

## **Removing stain from commercially-made furniture**

From Krysta Lownsberry (e-mail question — city/state unknown)

*Greetings! I am trying to remove the last of stain from a set of end tables I am refinishing. The tables are Ethan Allen and only 10 years old. I am having a real bugger of a time getting all the stain out of the grain. I have removed a layer of thick varnish from the top of the tables and a thin layer of stain and a what I think is a polyurethane topcoat from the rest of the pieces.*

*Most of what I removed was ultimately from sanding. I used a stripper which took off the polyurethane and the varnish but not the stain. I had to sand that. It is made of pine and the color is the typical Ethan Allen color- DARK. I even tried doing a test spot on one of the legs of a two part wood bleach to get the final stain out of the grain but it only seemed to lighten the already sanded and stripped wood. It left the remaining stain. The biggest problem areas are on the doweled curved legs.... UGH!!!! HELP!*

If Ethan Allen used a penetrating oil stain on this project (which they probably did)...and if the wood bleach didn't work...you're probably out of luck. On a soft wood such as pine, a penetrating stain can conceivably go 1/4" or deeper into the wood. As a result, getting it out will be close to impossible. You could try taking it to a local "tank stripper", who will dip it into a tank of heated chemicals. However, be aware that such dipping can destroy joinery, so you're better off disassembling the table and taking only the parts you can't strip yourself. Wish I had a better answer for you.

## **Slot vs. Hollow Chisel Mortising**

From Bruce Chalmers (e-mail question — city/state unknown)

*Slot mortising versus hollow chisel—which do you recommend? I'm making Morris chairs out of white oak with my Model 510 MARK V and there seems to be quite a bit of controversy as to which is the best. So, I thought I'd ask the expert—what speed does the hollow chisel system require (speed reducer needed)?*

The answer depends on what size your finished mortises are to be. If they're small (1/4" to 3/8"), the hollow chisel set-up is probably the best because of the difficulty in squaring the ends of the mortise (made by a router) on such narrow slots. The best MARK V speed is "G" or "H".

If they're 1/2" or wider, router slot-mortising is OK, too....since the mortise slot is wide enough to accommodate your wood chisel for squaring-up the ends of your cuts.

With hollow chisel work, it is extremely important that your mortising chisel and bit are as sharp as you can get them. Be sure to provide support under the worktable (telescoping extension table leg or 2" x 4"), as you'll have to exert a LOT of pressure to mortise white oak.