## Some Thoughts About Tools

So some of you builders will have your own way to do things but I'd like to share you mine. I'm using regular tools you can buy at the box stores. Nothing special. They arent cheap ones you can buy but quality ones. By trade I am a renovation contractor. I'm always looking for better quality cuts in materials. I've come up with a few ideas that might help you out. I love working with wood and like having quality tools as we all do. I've tried the cheaper tools over the years thinking they will do but they're not worth spending your money on if you want to have good cuts and no breakdowns. You'll be glad you spent the extra money when you start cutting. The tools I'm going to tell you about are the table saw and the scroll saw. These are two tools you'll use lots in your build. Along with others that you have. I have a couple ideas on other tools I'll pass on also. I live in Canada so some of these brands may not be available to you depending on where you live.

Now safety is always a concern and shouldn't be taken lightly. Power tools can cause serious injuries if not used properly. Use manufacturers recommended safety concerns. This includes safety glasses (we only get one set of eyes). Watch your fingers. We have 10 and don't want to chew one up. Loose clothing is not good around power tools. On the table saw when getting close to the blade use a scrap push block as you feed material into the blade. These blades will cause serious injury if fingers get hit by the blade. Cut slowly when you feed the material into the blade. Good lighting is also necessary. Don't work or cut while guessing where cut is. Most quality saws have a sawdust exit that you can hook your shop vac up to. What this does is create a suction on the blade area pulling all sawdust away from your cut rather then it flying all over the place making it hard to see whats going on. Plus it's easier to clean up afterwards.

## Remember safety first.

## **Table and Scroll Saws**

Lets look at the table saw. You can spend \$100 or less (cheap brand) DON'T. You wont like the result. Usually cheap plastic with incorrect angles and weak sloppy guides. Something will break before you get to far. Made more for the Joe home owner who uses it a few times to make a playhouse or something.

\$400 plus (give or take). Much better quality. Has good warranty. Won't break. Quieter. Usually has extra goodies included. Gives good straight accurate cuts over and over.

\$6-700 plus ( can go into high thousands) Not needed for the work you'll be doing. These expensive ones are more for the full time cabinet maker who's running it day after day all day. Designed and built for that. Plus they have the large adapter add on tables so they can flip large sheets around. We don't need to worry about that.

One thing you need to know when looking at a purchase of any tool is quality of product. Not price. Yes price will come into it but look at quality first. Grab them, twist things around, feel for any slop in guides, sliders. Move the blade up and down. Does it feel solid, no slop. Hold the blade while trying to turn the knob that raises and lowers blade. Feel for zero slop. Does the blade have any movement side to side. Cheap ones will have a little slop. Not good. All motors now are direct drive, no belt. Check amperage on motor. Higher the better. Won't lug down when you get into heavy hard materials.

Here's mine shown below. I think I paid around \$650 a few years ago. Bosch makes excellent tools. I've tried others and settled on these. For my work I have hammer drills, regular drills, chop saws, table saws. All Bosch. There are Dewalt tools. I don't like them. I do have they're drill/impact barttery drills.

Like those. Definitely try out the tool. Usually most stores have a return policy. The better tools have no problem with the returns. The tool company wants you to try it. So put it through it's paces. If it doesn't live up to what your after. Take it back. Try another brand. Now I know I said look at quality first, not price. Now when it comes to price you have to be comfortable with what your spending but believe me when you spend that good hard earned dollar on a quality tool you'll thank yourself later when using it. I've bought a lot of tools over the years and quality if worth the few extra hundred dollars. Watch for sales also. Spring is good time for tool hunting because retailers are after the summer family's wanting to do some home projects. So back to my ideas. Hope they help some of you.

Here's my 10in. table saw. Really nice saw. Accuarte and quiet. Some brands you need ear muffs. Very noisy. That's why you should try them out. Problem with this saw for us is making those fine cuts on materials.





I've got it set for 1/8 cut but look at the gaps still around blade. Piece your cutting will jump and chatter while trying to cut them plus the 1/8 cut piece will get sucked down by the blade near the fence. What if you wanted 1/8 X 1/8. Can't be done this way. Very difficult. But I have a solution which works.



Use a piece of scrap MDF (compressed sawdust and who knows what). Plywood would work also but youl"II need the good one side. You want a smooth surface to slide material on ½ in or ¾ will be fine. Doesn't have to be very big. As long as you cover front to back on the saw. Turn on the saw, run the MDF or ply in until it covers the saw table. Stop. Turn saw off. Now you can put a couple clamps on it on opposite edge but I never have. The piece won't move unless you bump it. You'll see now you only have the blade showing through the MDF. So no big gap for your nice material to get pulled down into. This is a 80 tooth blade I have in the saw. Get one that has narrow kerf. Makes fine smooth cuts. Don't cheap out on your blade. This ones \$120. Well worth it for smooth cuts.

With this setup you can cut all day making strips which will be clean and accuate.

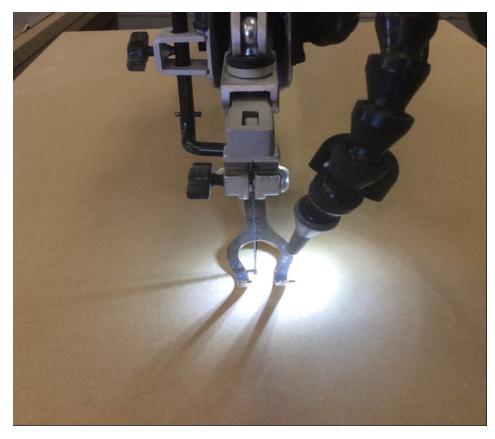


Basically same idea on the scroll saw. Mine is a \$450 one. Well worth the money. Quick change blades, 18in depth , adjustable speed, work light, very quiet. But the MDF or ply you'll add will do the same things as the table saw with a few differences.

The scroll saw as many others have an insert around the blade that has openings that allow removal of the blade. Some inserts are removable which then gains access to get at the lock screws for the blade on the bottom. Now when you slide in the MDF or ply cut into it as if your cutting it in half. Have the MDF longer then the table and probably the width of the table. Let the piece butt up against the back arm of the scroll saw. Stop. Now mine has never moved while cutting unless you happen to bump it. Use at least a 1/2in MDF or ply. What this does is act as a guide for the blade keeping it straight. Cut your material slowly. Good blades are also a necessity. The blades last longer using the ply. Without it when your cutting and get too carried away you'll snap the odd blade. Using this method I've been able to cut 1/16 in off material because the blade is held solid by the ply.

Here's how it looks





Here's another couple tools you'll more than likely have



## Drill press and a Disc/Belt sander.

Mine is a 8" disc and 4" X 36" belt. Have assortment of belts and discs. Again around \$450. Well worth the money. For our work a 120 grit belt is about as course as you should go. If your doing a lot of balsa sanding a finer grit as in 220 works better. Removes less material as you make passes. Removes material good but not too much to be uncontrollable. Works very nice on outside curves or flats. The 8in disc on the side is a peel and stick pad. Need a new one, just peel the old one off and stick on a new one. As in the table saw and scroll saw go slowly on feeding material. Watch your lines as you approach them.

The drill press has a sanding drum on it. I use it for the inside curves. You can use a dremel tool but this has better control on depth as well as you can feel the curve in the material as you sand.

Hope these ideas help you guys out on your projects. I like to scratch build my own. That is cutting out my own parts. Seems more rewarding then buying the full kit, then glueing things together. Takes longer but fun and rewarding.

David Nimigon <u>dnimigon@xplornet.com</u> Alberta Canada

A few hours work on the table. A bit of work getting to this stage but fun and rewarding. More to do !!!!

