

Advantages of the Sliding Table Saw

RETHINKING THE TABLE SAW IN THE ONE MAN SHOP

Of all the machine tools in a woodworking shop, the table saw is the workhorse. With it, you can make virtually any straight cut. Fitted with a good dado head, the table saw is the tool of choice for cutting dados and rabbets.

I recently built a new shop and decided to upgrade my equipment, especially my table saw. After rethinking how I use my shop, it dawned on me that I wasted space because I had a number of machines that I used intermittently and when I wanted to use various machines, things were often in the way. Another factor in my decision was the fact that I have a sawmill, and the wood that I have dried, with the help of a dehumidification kiln, is now ready to use. One pressing question was, after jointing and planing the rough lumber how was I going to establish a straight edge quickly and accurately? I don't have the room nor the inclination, much less the volume, for a specialty piece of equipment like a straight-line rip saw. For the straight-line function I decided to get a bigger slider. Although sliders are usually

associated with cutting up sheet goods they also excel at straight-line ripping.

As sheet materials became more popular, particularly in production settings, manufacturers responded by creating the tilting-arbor table saw which is epitomized by the Delta uni-saw, first manufactured in 1939. Looking at the latest American saws, there has been very little change except for making the table bigger and beefing up the fence. Some of the manufacturers offer attachments but to my knowledge there is no true slider made in North America. The attachments usually allow for a 4 foot crosscut but I also needed the straight-line ripping function. In contrast, Europeans have been building sliders for decades and continue to evolve and refine the design.

Like most woodworkers, I had acquired my collection of tools, one at a time. I have a cabinet saw for general purpose work, a vertical panel saw with a skill saw for sheet goods, a big radial saw for rough crosscuts, a small sliding table saw for general work and a miter saw for crosscuts and miters. I got the small slider after getting frustrated with two versions of bolt-on attachments for my cabinet saw. I also have a pile of jigs to increase the accuracy and efficiency of the tools.

Although my old equipment was adequate there was always a question mark in regards to accuracy, especially when handling large pieces. My attitude has changed with this new saw. Although I have always enjoyed woodworking, using the Felder machines is really fun. I can truthfully say that those machines are better than my skill level. If something isn't right it is the way that I did it or set it up that is the problem. I have used or worked in shops with older cast iron industrial machines. In comparison, the European machines, and especially the accessories, are much more evolved. These tools are elegantly designed and made.

Although I occasionally make cabinets and various pieces with sheet goods the bulk of my work is made from solid stock. I'm slowly changing the ways that I think and how I visualize the process of making something. The biggest change is using the slider to make a straight edge after face jointing and planing the material on my 16" jointer-planer. The opposite edge is made using a power feeder or the slider. Wow, I can go through a pile of wood in half the time or faster. And what is even better than the speed is the quality of the product. With my old arrangement getting good results was always a struggle, especially with bigger pieces.

With my older, smaller slider I used the sliding table like a large miter gauge mainly for crosscutting. With the standard American table saw you make a cut using either the miter gauge or the rip fence to guide the work. If neither of those will do the job the usual approach is to design and make a jig such as a taper jig. A large accurate slider easily handles the ripping, crosscutting and tapering task more efficiently and with fewer set-ups. The large T-slot in the



Mark Duginske working on his FELDER KF 700.

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middle of the sliding table allows clamps to secure the work to the table or to secure a guide such as is required for cutting tapers. I'm finding that the pile of jigs I used in the past has been replaced with the slider and the crosscut stop system. The heavy duty outrigger table combined with a stop (that extends to 103") easily replaces my radial arm saw for long cross cuts and with an accuracy that a radial saw owner could only dream of. **All of my crosscuts are now dead-on no matter how long or how wide the stock is.** What a pleasure!

There are some very clever accessories that make life for the one-person shop owner easier. One accessory that I use frequently is the parallel cutting device that clamps anywhere on the edge of the sliding table. An adjustable stop can be positioned to be aligned with the crosscut stop at the opposite end of the slider so that one can easily use the slider to make cuts parallel to an edge of a board, thus providing the ripping function with the slider. **It makes ripping so easy it is almost like cheating.** It also makes breaking down sheet goods into child's play. I can also take the stop bar off and use it as an auxiliary table for sheet goods.

Accuracy is probably the biggest reason for moving up to a slider. These machines are designed for handling large pieces of stock and processing the pieces accurately and efficiently. The massive track and stop makes cutting multiple pieces, no matter how big or long, a breeze. I have multiple stops so I can process material to length with very little mental effort. The crosscut fence and stops are located at the back of the sliding table for sheet goods. **For solid stock the fence can be moved (by loosening two knobs) to the front of the table so it can be used like a giant**

miter gauge. I got the deluxe miter setup with holes that a pin drops in for locating the various miter angles. On the scale the distance between each degree is at least .420" so setting a fraction of a degree is a snap.

Combined with the greatly improved accuracy, there is an equal improvement in efficiency. In the old days, I would rough cut boards on the radial saw to get them to a manageable size for a second more accurate cut to be made on my table or miter saw. How efficient is it to keep handling material over and over? Now I handle it once and then move on. **Without exaggerating, I would say that I get twice as much work done as I used to.** First, and perhaps most important, is that it gets done right the first time. Secondly I move material much less because I'm using one machine, not five. So I'm not moving material around figuring out which machine or jig would work best for a given task. This one machine does a much better job of every task.

Another factor that helps my efficiency is a change in the mental process. Although most people think that creativity is problem solving, another perception is that it is problem finding. If you can find the problem, it is easier to create a good solution. Rather than spending mental energy (and some anxiety) on the rote processes of cutting pieces to size, I can now spend more time looking at the grain and enjoying the creative process. Remember how much energy and concentration it took when you were first learning how to drive? Now, I feel like I can relax and enjoy the wood-working ride.

Part of the creative process is anticipating the next step. When you are confident you can focus on the next step without the anxiety of the process not going smoothly.

About once a year I reread the red underlining in the terrific book *Organization For The Creative Person*. Although I seem to get a lot done, organization has always been a struggle for me. Changing to one machine rather than using five different ones is helping to keep me much more organized and thus more efficient.

Another reason for a slider is safety. Though undeniably handy, the table saw also has its dark side. It is responsible for more injuries than any other woodworking machine. Many of those injuries, particularly those caused by kickback, can be traced directly to an incorrectly adjusted saw, no guard or bad technique. The slider design changes the way the material is cut. With the standard saw the material is guided through the blade by the rip fence or the miter gauge. Often, the operator leans over the blade and gets into other awkward positions. **A large slider is a much safer piece of equipment because the wood rests on the table and the table is pushed rather than the work piece.**

This saw also has a rip fence similar to other saws. It is the typical dual-purpose fence made of aluminum extrusion with a high and low position. It can also be repositioned to function as a stop for cutting multiple pieces less than 7" long, which is the shortest distance that the crosscut stop can measure. There is an accessory that is a pointed board with magnets on the bottom so that small pieces are deflected away from the saw blade and don't touch the back of the blade. One feature that I really like is the rip fence micro-adjuster. It is very compact and moves that heavy-duty cast iron rip fence head smoothly along the large solid round rip fence bar. Another feature that is a pleasure to use is the rip fence ruler which is a

"direct read" style so you read the ruler directly off the edge of the rip fence, no matter what mode the rip fence extrusion is in. That also means that if you add a sacrificial wood fence to the high position rip fence the ruler works without any mental gymnastics. I got the 49" fence.

The guard is very simple and is attached to the high quality riving knife, which goes up and down and tilts with the blade. Because it is small and has very little upkeep it is the kind of guard that would actually stay on the saw.

After some deliberation I decided to get the scoring blade option. When I cut plywood having a really clean cut is the ounce of prevention. The adjustable scoring unit I got is a simple design that is easy to adjust. When used it requires a 10" blade and can be removed in seconds for the use of a 12" blade.

Most saws have extensions attached to the cast iron table that expand the surface area of the table. On my Felder the extensions are stamped sheet steel that bolt to the massive cast iron table. This provides an adequately large table for the table saw.

Buying machinery is always a new experience that causes change. This new equipment has been a very positive change for my one person shop. **The one thing I wish I had gotten is the remote "on" button which is located on the front of the sliding table. The only other thing that I wish I had done was to make the change sooner.**

Mark Duginske