

Folding Outfeed Table for BT3000

Designed by Jim Frye

When I first purchased a table saw, the first thing I knew I'd need was an outfeed table for it. The BT3000 didn't have one and anything I'd seen on the after market was intended for a cabinet saw. I'd seen shop built outfeed tables in several of the wood working magazines and decided to make my own. I found a discarded file cabinet top from a Steelcase unit that was 18" by 30" by 1 3/16" thick. It was made of MDF and covered in off white laminate. It wasn't exactly the right size, but the price was right. This became the basis for this outfeed table. I next determined that the Sliding Miter Table (SMT) on the BT3K needed at least 5 1/2" of clearance at the back for the clamp levers. This pushed the outfeed table top back and help make up for the rather narrow 18" width. The drawback to this design is that it adds 9" to the depth of the saw when folded. Due to the MDF, it is also rather heavy and required some ballast in the front, lower part of the stand to offset it's weight.

After considerable thought about how to mount the table on the saw, I finally rejected the idea of hanging it from the underside of the rear rail and designed a mount that is bolted to the saw stand. At the time, I theorized that this would relieve undo strain on the rail and make moving the rail less cumbersome. Later, I came to realize that if I had made the outfeed table mount moveable, I could use it as an infeed table for the accessory table on the saw. This limitation will be corrected when I enclose the saw stand and the outfeed table mount will also become moveable. Another design consideration for this project was that the outfeed table had to fold. My shop is so small, the saw has to be moved and stored out of the way for assembly and finishing work. I designed a folding leg that will not let the table top twist and is also adjustable for irregularities in the floor of my shop. The supports under the table top are inset a couple of inches to provide room for clamps if they were ever needed for some reason.

The entire structure is made from 3/4" plywood, glued and screwed together, with the exception of the "U" shaped leg. It is cut from a 2x4 and the joints are doweled bridal (open mortise and tenon) joints. The glued assembly was then jig sawed to shape and the lower leg hole was bored. The slot in the bottom of the "U" shaped leg was cut with a jig saw and the clamping knob/bolt was fabricated. The clamping bolt threads into a T-nut in the back of the leg. The pivot points for the table are 1/2" diameter hardwood dowels with rubber crutch tips on each end to secure them in place. The lower leg of the table is a broom handle with a crutch tip on the end to prevent the leg from sliding on the smooth concrete floor. The mount for the outfeed table is bolted to the top horizontal frame member of the saw stand with two full length pieces of 3/4" plywood behind to strengthen the frame. These backing boards are also bolted at the corners of the stand for added strength. There are magnetic door catches positioned so that the leg assembly is secured to the underside of the table and the table is secured to the mount when folded. This keeps the outfeed table from flopping around while the saw is being moved.

This table required an additional change in that when the table was folded down, there was not enough room to connect the shop vac hose to the dust collection port. I made an swiveling elbow from a 2" pvc elbow and a piece of 2" pvc pipe. The table assembly folds so close to the saw that a standard pvc elbow was too long. To shorten the elbow, I cut 1" out of the middle at a 45 degree angle. I then glued the two parts back together with pvc cement. After that cured, I wrapped the joint with three layers of pvc electrical tape and brushed liberal amounts of pvc cement over the tape. This created an extra strong joint. I made a jig to mount a piece of 2" pvc pipe in my drill press and used a rasp and sand paper to reduce the outside diameter of part of it to fit inside the saw's dust collection pipe. When this wears and the elbow no longer fits snugly, I wipe on a coat of pvc cement and let it dry. This adds some thickness and corrects the problem. The outer end of the pvc elbow is too large for a regular shop vac hose, so I glued a couple of short pieces of pvc pipe inside to pinch the vac fitting for a tight fit. This elbow can be positioned to allow the user to connect the shop vac hose at the best angle for the particular table position.

I was at a wood working show shortly after I built this table and got into a discussion with a Ryobi representative about the saw and what I was doing with it. He told me they were planning to come out with a folding outfeed table in a few months from then.





