

The SAND-FLEE® Tabletop Sander

The SAND-FLEE measures two foot by three foot and has a built-in dust port.

Putting This New Machine Through Its Paces



The inside of the SAND-FLEE.

Editor's Note: I met Bob Raffo, the designer of the SAND-FLEE, at the Midwest Scrollers Picnic in 2003.

His sanding unit created a buzz at the show as folks tried out this new machine that makes the tedious job of sanding a bit more manageable. While it looked good on display and when Bob demonstrated its use, I wanted to have a hands-on review completed to make sure it was going to deliver on its promise. Frequent Scroll Saw Workshop contributor Joannie West was my choice for putting the SAND-FLEE through its paces.

—Cathy Hart

As a teacher of scroll sawing for the past ten years or so, I have often seen exquisite sawing technique cut on rough and under-finished wood. I am greatly pleased to announce an awesome tool that addresses the problem of poorly prepared wood. Now available is a wonderful, easy-to-use tabletop horizontal surface drum-sander designed by and available through Bob Raffo, Sr. of RJR Studios, LLC (Beth Raffo, CEO) and, in the United Kingdom, the Wood Worker's Work Shop.

The SAND-FLEE

The SAND-FLEE gets the job done in an incredibly efficient manner, even on the most delicate of designs. There are many out there who just don't have that optimal workshop with unlimited space and overall dust control. You folks will be glad to know that the SAND-FLEE

contains 85% of the dust, even without a vacuum hooked up to the dust port. It also runs quietly with little vibration and takes up only 2' by 3' of space.

But the real star of the unit is the sanding drum. Measuring a whopping 18" long, this feature has advantages no other machine provides. An obvious benefit is that it can accommodate large pieces of wood. What really makes this tool unique, however, is that more than one grit of sandpaper can be rolled onto the drum for a succession of sanding jobs. In just a few, easy motions, a board can be taken from rough and pitted to a satiny smooth sheen.

SAND-FLEE FAST FACTS

- Top, 24" x 24" Stainless Steel, 1/8" thick
- Base frame, 21" x 17 1/2"
- Dust port, 2 1/2"
- Adjustable Lifter Plate, 21" long
- Motor Base, 11" x 9"
- Motor, 1/2 hp Baldor, 1725 rpm, shaft diameter 1/2" on a 48 frame
- Suggested Retail Price: \$350 without motor, \$450 with motor, plus freight

What's Inside the Box

As my husband will affirm, I am decidedly mechanically disinclined! While I love tools, I have little patience or skill for fixing, adjusting or assembling anything with a motor and more than two sets of bolts. I was determined, however, to take on the challenge and put together the SAND-FLEE unaided. The SAND-FLEE arrived in a number of packages and assembly seemed a daunting task. Fortunately, the hardware packages were well marked and the instructions were easily decipherable. I assembled the machine in a short amount of time with minimal assistance.

Once assembled, the SAND-FLEE did require me to fine tune the tabletop relative to the drum. I didn't tighten all bolts to a final position until I achieved the correct table height across the entire length of the drum. Fine-tuning required loosening and retightening several of the bolts until every joint was perfectly square. Also, the drum needed to be seated directly in the center of the slot.



The table must be raised to eliminate the gap shown. The table is adjusted correctly in relation to the drum when NO gap exists between the wood and the table.

It's essential to have the proper lifter plate height relative to the drum surface. To check the height,

TOP 5 REASONS YOU'LL LOVE THE SAND-FLEE

- 1) Multiple Grits Fit on One Drum
- 2) Quick Change Hook and Loop Sandpaper Rolls
- 3) 85% Effective Dust Control
- 4) Maximum Control to Sand Delicate Fretwork
- 5) Quiet Operation

load the drum with 220-grit sandpaper and adjust the lifter plate until the sandpaper is just touching the wood. Test the height by placing a 1"-board on its edge and moving it the length of the drum. There should be NO rocking at any point along the drum's length. The SAND-FLEE works best when just the grit of the paper does the sanding.

One of the SAND-FLEE's greatest features is the ease in which the sandpaper attaches to the drum. The sandpaper used on the SAND-FLEE comes in rolls. The special 3" x 25" rolls cost about \$30 and are available in these grits: 60, 80, 100, 120, 150, 180, 220, 320 and 420. The back of the sandpaper has fine loops, which cling tightly to the hooks on the drum, similar to Velcro. This means that you can change grits in less than three minutes!

SPECIAL SOURCES

The SAND-FLEE

RJR Studios
81 Tindall Rd.
Robbinsville, NJ 08691
609-448-2414 FAX 609-443-1915
rjrstudios@optonline.net

In the United Kingdom
Wood Worker's Work Shop,
011 44 118 972 2266
FAX 011 44 118 972 1012
www.woodworkersworkshop.co.uk
sales@woodworkersworkshop.co.uk

In order for the sandpaper strips to wrap around the drum, the ends are angled. This angle must be cut precisely to wrap exactly from end to end. The instructions I received with the machine included a diagram but it was a bit awkward to use. I made a template from wood using the paper pattern included. I then taped the template to the inside of the table for quick use. The instructions were a bit confusing on the exact length to cut the strips for installing two or more grits on the drum at a time. Bob has assured me that the new instructions provide greater clarification. I had some trouble with the narrow points of the paper coming loose. Be sure the ends are pressed down securely and avoid pushing the wood directly into the very ends.

After you've assembled the unit, the SAND-FLEE needs to be mounted to a base 33" x 24" x 1/2" and will sit on a table or workbench. The unit sits 6" above the mounting surface. Take that into consideration when you're selecting the SAND-FLEE's new home. You don't want to have it so high that your arms are in an awkward position to use it. Some additional do's and don't follow which will help lessen the learning curve for you so you can enjoy the full benefits of this unique sanding unit.

Final Thoughts

Any time I discover a means to increase the quality of my projects, I am eager to try it out and the SAND-FLEE certainly fits the bill. I can take a length of wood from rough to finishing quality in just a few minutes. The SAND-FLEE gives such control that I can sand even a fretwork project AFTER it has been cut! This allows me to sand away any dried glue left behind when joining and to remove any nicks or dings that occurred during cutting and drilling.

Maintenance can be an issue with any machine. Not so with the SAND-

FLEE. According to Bob Raffo, the SAND-FLEE has bearings that are self-lubricating so all you need to do is periodically clean the dust from around the outside.

The virtual maintenance-free feature of the SAND-FLEE is yet another reason I like this tool. If you're looking for a way to make sanding a little easier and more efficient, while creating less workshop dust than with conventional sanders, try the SAND-FLEE.

Do's and Don'ts

DO Apply even pressure the entire length of the board.

Anticipate the range of motion required to push the wood over the entire length of the drum, and position your arms and body accordingly.

DON'T Apply too much pressure.

Hold down the wood just hard enough to push it over the drum with two hands while maintaining control.

DO Anticipate making multiple passes for the sandpaper to do its job. Sanding requires patience!

DON'T Stop the flow mid-stroke.

A hesitation in flow will create a slight depression.

DO Turn the board end-to-end on each pass. This will help even out any pressure inconsistencies.

DON'T Move the board over the drum too fast. 15-20 seconds a foot is about the right speed. Keep in mind that the density of the wood will affect optimal rate of speed.

Using the SAND-FLEE Safely

The SAND-FLEE runs deceptively smooth and quiet but that doesn't mean it doesn't have its dangers. The drum is rotating at 1725 revolutions per minute. Don't even think of wearing loose sleeves or jewelry when using this tool. If anything catches on the drum, your fingers and hands will be drawn between the drum and slot, resulting in serious injury. Be sure your hair is tied back and that you are wearing safety glasses at all times.

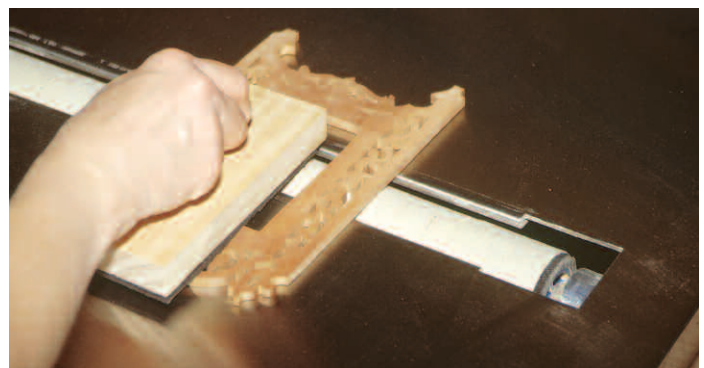
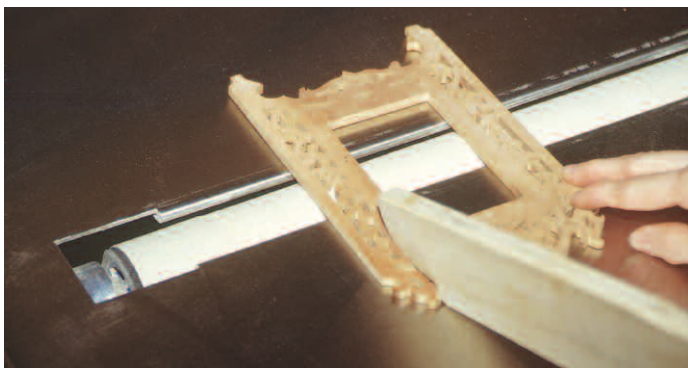
Be aware of the drum's direction of rotation. It will be turning TOWARD you. This means that at times the corner of the wood can "catch" on the drum and jerk it away from you. If it does, don't try to fight against it! Just let it go. More damage to the project and more potential injury to yourself will occur if you have a vise-like grip on the wood and overreact to the catch.

The SAND-FLEE's tabletop is large and heavy-duty. This is wonderful for getting a great sanding job but can be a nuisance if not a danger when lifting the lid when loading sandpaper or making height adjustments. The version I tested lacked a safety latch to prevent the top from independently closing. When raised, the tabletop set at a 90-degree angle, making it

vulnerable to falling. Bob told me that all units manufactured after May 2004 will have the safety latch installed on it. For those purchased before May, Bob says a safety latch kit is available at no charge, though the customer will need to pay the cost shipping. Contact RJR Studios for the kit.

Knowing something about the wood you are sanding is important. Many woodworkers, like myself, can be scavengers; we pick up attractive pieces of wood wherever we find them. While this is a great way to obtain unique pieces of wood, you must be aware of the harmful effects from the dusts and oils of certain species. Refer to *Scroll Saw Workshop* Fall 2002 (Issue #8) for a chart of wood toxicity.

You may be reluctant to use your bare hands to guide the wood over the drum, especially when first getting used to the machine. There are push sticks and blocks available from your local hardware store that grip the wood and guide it over the drum. It is easy and inexpensive to make your own. Complete instructions and patterns are available as free downloads on our website, www.scrollsawer.com or send a self-addressed stamped envelope to Push Stick Patterns, c/o *Scroll Saw Workshop*, 1970 Broad St., East Petersburg, PA 17520.



Using a push stick or a push block keeps fingers well away from the drum.