

Spindle Sanders

The best tool for sanding curved work

BY WILLIAM PECK



Oscillating spindle sanders are a go-to tool for sanding the edges of curved furniture parts while keeping them square to the surface. They're also helpful when cleaning up templates for pattern-routing. The oscillating action of the spindle and sanding drum mounted to it removes stock quickly and efficiently, because it uses most of the sandpaper sleeve. Some models even offer a tilting table if you want the edge

at a consistent angle. As with other woodworking machines, there are both floor models and benchtop models. The most economical option for a home shop is a benchtop unit, so I looked at what's available to see which ones stand out.

Big table is better

The table on an oscillating spindle sander, usually cast metal, supports the work. To get consistent results, the table must be flat and perpendicular

to the spindle. A bigger table is better because there's more area to help support your work whether working front to back or side to side. When considering size, it's important to also think about spindle placement because the more table there is in front of the spindle, the more room there is to work.

Some tables tilt so that you can sand at an angle along a curve. The tables on the Delta 31-483, General International, and Jet sanders tilt around the

spindle, where the Ridgid tilts on the portion of the table in front of the spindle.

Dust is the enemy

These units can produce a lot of fine dust, a nuisance and a health hazard if not handled properly, so dust collection is a prime concern. When hooked up to a Bosch VAC090A vacuum, most of the units I tested collected 90% of the dust or more.

Dust collection was poor on the Delta 31-483, the General

Features that matter

TABLE SIZE



Small tables can be problematic. With a small table, there is very little real estate in front of the spindle where the action happens. Large workpieces are difficult to handle.



Support where you need it. A larger table can handle stock of any size and makes it easier to sand wide or long boards.

THROAT INSERTS



Poorly sized inserts leave a gap. The inserts on most of the tested models were out of level with the tabletop, on average by 0.013 in. This gap can cause the workpiece to dip, throwing it out of square and binding as it hits the plate.



Close up the gap. The Wood River and Ridgid were the only models with throat inserts adjustable via set screws. A flush insert offers solid registration along the entire top and allows smooth passes for better results.



Tool free is hassle free. The Power-tec, Craftsman, and Ridgid models have thumbscrews for quick and easy drum changes. The thumbscrew applies pressure to tighten the sanding sleeve.

SPINDLE CHANGES



Tools in tight places. The Delta 31-483, General International, and Jet sanders have separate spindles for each diameter that thread directly into the motor. This design is strong and works well, but to change them you must reach under the table and use two wrenches.

Testing the sanders



Sanding squarely. To check that each sander removes material consistently from top to bottom, Peck marked a board's edge and made one pass. Peck then used a square to check down the length of the board.



Dust pickup. Most models captured more than 90% of the dust, leaving barely a sign of dust on the table (top). A few sanders, though, didn't fare so well in the dust test, collecting less than 50% of it (bottom). See chart on p. 70 for specific results.

Oscillating spindle sanders



CRAFTSMAN
25100



DELTA
SA350K



DELTA
31-483



RIDGID
EB 44242

AUTHOR'S
BEST OVERALL
CHOICE

AUTHOR'S
BEST VALUE
CHOICE

WINNER AND STILL CHAMPION

An earlier Ridgid model won Best Overall the last time we reviewed oscillating spindle sanders. This time was no different. The EB 44242 is the most versatile of the bunch, with a big table and great dust collection.



Two tools in one. The Ridgid's belt-sander attachment stores behind the unit, and attaches as easily as a standard spindle.



Last shop sander you'll need. With the belt sander, the Ridgid lets you accurately sand both curved and flat surfaces.

MODEL	STREET PRICE	TABLE SIZE	MOTOR RATING	SPINDLE/ DRUM SIZES	SPINDLE STROKE	OSCILLATIONS PER MIN.
Craftsman 25100	\$300	18 in. dia.	2.6 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in., and 3 in.	1 in.	30
Delta SA350K	\$310	18 in. dia.	3.5 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in., and 3 in.	7/8 in.	60
Delta 31-483	\$430	14 3/4 in. by 14 3/4 in., tilting	7.5 amps	1/4 in., 1/2 in., 5/8 in., 1 1/2 in., and 2 in.	15/16 in.	29
General Intl. 15-220M1	\$490	14 3/4 in. by 14 3/4 in., tilting	7.5 amps	1/4 in., 1/2 in., 5/8 in., 1 1/2 in., and 2 in.	15/16 in.	29
Grizzly G0739	\$130	11 1/2 in. by 15 in.	3.5 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in., and 3 in.	5/8 in.	60
Jet JBOS-5	\$490	14 3/4 in. by 14 3/4 in., tilting	7.5 amps	1/4 in., 1/2 in., 5/8 in., 1 1/2 in., and 2 in.	15/16 in.	29
Powertec OS-1000	\$190	18 in. dia.	2.6 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in., and 3 in.	1 in.	30
Ridgid EB 44242	\$200	14 in. by 19 in., tilting	5 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., and 2 in.	3/4 in.	60
Shop Fox W1831	\$180	11 1/2 in. by 15 in.	3.5 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in., and 3 in.	5/8 in.	58
Triton TSPS450	\$170	11 1/2 in. by 15 in.	3.5 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in., and 3 in.	5/8 in.	58
Wood River 157889	\$170	11 1/2 in. by 15 in.	3.5 amps	1/2 in., 3/4 in., 1 in., 1 1/2 in., 2 in., and 3 in.	5/8 in.	58

AUTHOR'S
BEST OVERALL
CHOICE

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BEST VALUE
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**GENERAL INTERNATIONAL
15-220M1**



**GRIZZLY
G0739**



**JET
JBOS-5**

DUST COLLECTION	COMMENTS
Excellent	Motor stalled under heavy load. Includes onboard storage for drums with sleeves, inserts, and tools.
Excellent	Only table supplied with flush throat inserts. Includes onboard storage for drums with sleeves, inserts, and tools.
Poor	Metal case and throat inserts. No 3-in. spindle. Includes 4-in. dust collection adapter, which didn't improve performance during testing, onboard storage for spindles with sleeves, inserts. No tool storage.
Poor	Metal case and throat inserts. No 3-in. spindle. Includes 4-in. dust collection adapter, which didn't improve performance during testing, onboard storage for spindles with sleeves, inserts. No tool storage.
Very good	The noisiest machine, tested at 94 db. Includes onboard storage for drums with sleeves, inserts, and tools. Workspace in front of drum is limited to 4 in. wide by 9 in. long.
Poor	Metal case construction and throat inserts. Includes a 1/4-in. spindle but no 3 in., and onboard storage for spindles with sleeves, inserts. No tool storage.
Excellent	Motor stalled under heavy load. Includes onboard storage for drums with sleeves, inserts, and tools.
Good	Includes a 4-in. by 24-in. oscillating belt sander, adjustable throat for flush-mounted inserts, and onboard storage for drums with sleeves, inserts, and tools.
Very good	Includes onboard storage for drums with sleeves, inserts, and tools. Workspace in front of spindle is limited to 4 in. wide by 9 in. long.
Very good	Includes onboard storage for drums with sleeves, inserts, and tools. Workspace in front of spindle is limited to 4 in. wide by 9 in. long.
Very good	Adjustable throat for flush-mounted inserts. Table machining was rougher than similar units. Includes storage for drums with sleeves, inserts, and tools. Workspace in front of spindle limited to 4 in. wide by 9 in. long.



**POWERTEC
OS-1000**



**SHOP FOX
W1831**



**TRITON
TSPS450**



**WOOD RIVER
157889**

International, and the Jet, because the space below the table is wide open. This provides access when attaching the spindles using two wrenches, but significantly reduces the airflow. As a result, less than 50% of the dust was captured.

Easy spindle changes are a plus

What's great about these sanders is that you can change out the drum sizes to sand different-size curves. There are two ways to make this change. Most of these sanders have a single, permanently mounted spindle shaft that holds different-size sanding drums. The drums slip over the shaft and a nut and washer on top are tightened to compress the drum so that it holds the sanding sleeve tightly. Other units, such as the Delta 31-483, General International, and Jet sanders, use different size spindle shafts for each drum size—a less convenient system (see photos on p. 69).

Because of the various size spindle attachments, inserts, and tools required to replace the drum or spindle, it's helpful if the machine has onboard tool storage. Convenient storage options help avoid cluttering your bench or drawers with loose attachments, or worse, losing them altogether.

The choice is easy

Overall, it's hard not to like the versatility of the Ridgid unit. It has the largest table and the spindle is mounted toward the rear, providing an unbelievable amount of usable space. Its dust collection worked well and it had storage for all the drums, inserts, and tools. The real icing on the cake is that after all that, you also get an oscillating belt sander, which stores neatly in the Ridgid's sturdy plastic housing. Because of all this, I give the Ridgid the Best Overall and Best Value awards. □

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