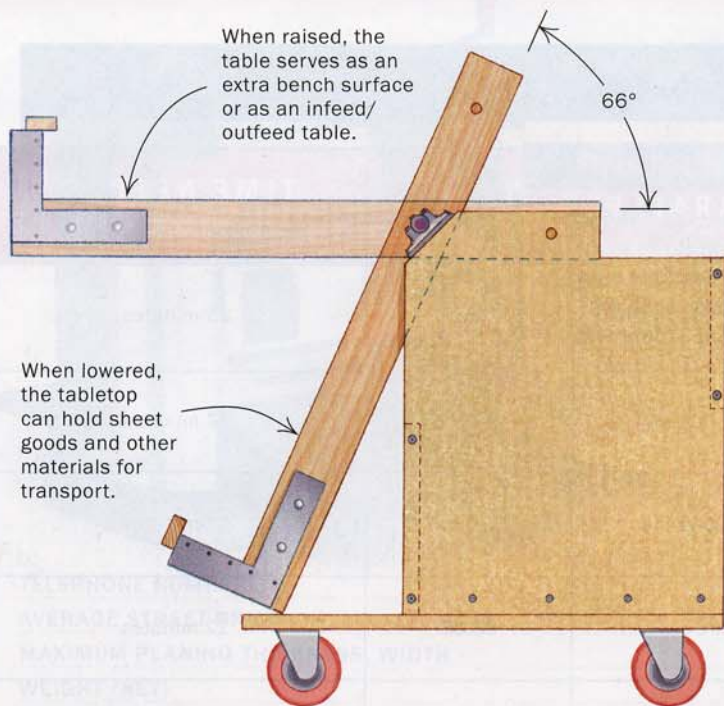


Tilt-Top Shop Cart

Move large, unwieldy stock without breaking your back

BY FRED SOTCHER



The first time I manhandled a sheet of 1-in.-thick medium-density fiberboard (MDF) onto my tablesaw, I realized that I needed something to assist with this backbreaking task. So I set out to design a materials-handling cart. But I wanted more than just a plywood mover. My wish list required this shop aid to do the following tasks:

1. Assist with feeding large boards and sheet goods onto the tablesaw
2. Transport sheet goods and other materials from my truck to the shop
3. Double as an additional bench surface when needed
4. Act as a tablesaw infeed/outfeed table
5. Store conveniently out of the way

It's safe to say that the cart I created meets all of those requirements. The tilting top

makes it easy to load and feed sheet goods onto the tablesaw. Heavy-duty casters allow me to wheel it around the shop easily. And it also works as an independent bench or as an outfeed table extension to my tablesaw.

I wanted a top that remained flat yet was light in weight, so I chose torsion-box construction. The interior is made up of 3-in.-wide pine strips stapled and glued into 5-in. squares. The box then is framed with a thicker hardwood and the two sides are covered with Masonite. Pressure laminate is applied over the Masonite on the top. Two 1/8-in. by 12-in. by 12-in. metal angles (Simpson 1212L), with one leg cut off each at 7 in., support the shelf, which is constructed of hardwood.

The base of the cart is built using 1-in.-thick MDF and connected with 1/4-20

knockdown fasteners. (You could probably get by with 3/4-in.-thick MDF.) A 3/4-in.-dia. shaft extends through the table and terminates in pillow blocks at both ends, forming the pivot point for the table. With the pivot point near the center of gravity of the sheet goods, you can pivot several hundred pounds of material with little effort. At the opposite end of the table, a 3/8-in.-dia. locking pin is used to lock the top in the horizontal position.

I made the cart the same height as my tablesaw. When I'm not using it to feed stock, it fits behind the saw, where it acts as an outfeed table extension. □

Fred Sotcher is a retired electrical engineer and an avid woodworker who lives in San Jose, California.



The L-shaped tilting top holds several sheets of plywood. A pin locks the tabletop in the horizontal position. Large locking casters can handle bumps in the concrete without stalling. Pillow blocks make for a smooth pivoting action.

Pressure laminate may be glued to the top side, if desired.

Top, 34 in. wide by 39 in. long

Hardwood lip, 1 in. thick by 2 3/4 in. wide by 34 in. long

Hole for locking pin

Torsion-box frame is made of 3/8-in.-thick by 3-in.-wide pine on 5-in. centers, stapled and glued.

Hardwood frame, 3/4 in. thick by 3 in. wide

Both sides of the torsion box are faced with 1/8-in.-thick Masonite.

MDF back, 1 in. thick by 34 1/4 in. wide by 10 in. high

Pillow blocks (two), Grainger part No. 4X725 or equivalent

Notch allows the cart to fit under the saw table.

Locking pin

Hardwood shelf, 1 in. thick by 8 in. wide by 34 in. long

L-brackets (two required), Simpson part No. 1212L, trimmed to 7 in. long on one leg

Carriage bolts, two per side, 3/8 in. by 1 1/2 in.

#8 by 1 1/4-in. screws, five per side

Steel shaft, 3/4 in. dia. by 36 in. long

VERSATILE SHOP CART

The top employs torsion-box construction. The rest of the cart is mostly made of MDF. Adjust the height of your cart so that the tilting top is flush with the top of your tablesaw.

MDF front, 1 in. thick by 34 1/4 in. wide by 13 in. high

MDF base, 1 in. thick by 32 in. deep by 36 1/4 in. wide

MDF sides, 1 in. thick by 32 in. wide by height as needed

Locking casters, 5 in. dia.