

# HART™



Rolling Workbench with Charging Station  
by @southernyankeediy

## PROJECT PLAN

**Finished Dimensions:** Varies based on Desired Size


**Skill Level:** Beginner


# Materials

Item	Qty
4' x 8' x 3/4" Plywood*	2 Sheets
22" x 4" x 8' Board*	1
2 3/4" Screws	
1 3/4" Brad Nails	
Caster Wheels	4

\* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

\*\* Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

 Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper. Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

 A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

# Tools Used



Miter Saw

and



Circular Saw



Drill/Driver



Tape Measure




Hole Saw & Arbor



Level

Also Needed:  
Brad Nailer

 **Battery Tip:** A 4.0 Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

# Lumber Cut List

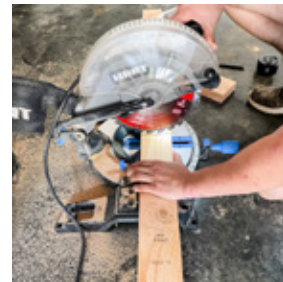
Board*	Description	Cut to	Qty
2 x 4 x 8	Base Long sides	8'	4
2 x 4 x 8	Base Short sides + Middle support	32"	6
2 x 4 x 8	Legs	33"	4
4 x 8 x 3/4"	Plywood top/shelf	38 3/4" x 8	2

\* Board dimensions are "nominal." Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

## Assembly Instructions

### Step 1

Cut out all material using the Lumber & Sheet Cut Layout Guide.



### Step 2

Next, we will build 2 rectangles out of the 2x4s. Lay out two long sides (2x4x8) and two short sides (32" pieces).



### Step 3

Assemble the rectangle using wood glue and 2 3/4" exterior screws with the drill. Be sure to square and level the boards before attaching.



## Step 4

Next add the third 32" piece to the middle of the rectangle, attaching it from the outside with screws.



## Step 5

Once both bases are built, you should have something that looks like this:



## Step 6

Attaching the legs is the final step to building the base portion. Flip one base over on top of 2x4 spacer pieces. This will keep the bottom shelf from sitting directly on the floor once it's assembled.





## Step 7

Once the spacers are under the base, insert the 2x4x33" leg pieces into all four corners. Be sure to clamp and level them so they are straight.



## Step 8

Once the legs are level, attach them with wood screws from the inside. This is how the bottom base should look once all 4 legs are attached:



## Step 9

Now, flip the entire unit over on top of the other base you built, and attach the legs the same way. This one will sit flush on the ground because it's going to be the top of the workbench.



## Step 10

After the legs are attached to both bases, it's time to install the caster wheels. To do this we used different drill bits to step up to a 5/16" hole. (Install yours according to manufacturer's instructions.)



---

## Step 11

Once the holes were large enough, we installed our wheels.



---

## Step 12

Finally, it's time to flip a table! Make sure your table is level and not wobbly. If it's uneven, start by checking that the casters are all screwed in the same amount.



## Step 13

Now we will move onto cutting the plywood for the bottom shelf and top piece. We trimmed ours down to a width of  $38 \frac{3}{4}$ " so that we could have a little overhang off the front for clamping, but left the length alone.



---

## Step 14

The bottom shelf will need cutouts on all 4 sides so that it can fit with the legs. We cut the plywood using the Hart circular saw because it's easiest to maneuver and still very accurate!



---

## Step 15

Place the bottom shelf on the base before installing the top. Secure both pieces using a brad nailer and  $1 \frac{2}{3}$ " nails.



## Step 16

Drum roll please... easiest workbench ever! This build literally took us 2 hours and only 1 Hart battery to complete!

But that's not all folks!



---

## Step 17

For this simple battery charging station we are simply going to use the scraps we had leftover from the plywood shelves!

Cut the plywood into 5 pieces:

- (2) Side Pieces- 9x9"
- (1) Back Piece- 9x10  $\frac{3}{4}$ "
- (2) Bottom Piece & Shelf Piece- 9x9  $\frac{1}{4}$ "



---

## Step 18

Next, attach the back piece to the two side pieces using wood glue and brad nails.





## Step 19

Next, attach the 3 pieces to the bottom of the charging station.



---

## Step 20

Your charging station should now look like this:



---

## Step 21

Finally, add the separating shelf to the station. We used 2x4 scrap pieces to set the distance from the bottom.



## Step 22

After the charging station was assembled, we decided where we wanted the cord hole to be drilled. The brand of chargers you use will determine the hole saw size you need.



## Step 23

Then we simply attached our battery chargers to the back wall using sticky Velcro strips!

