

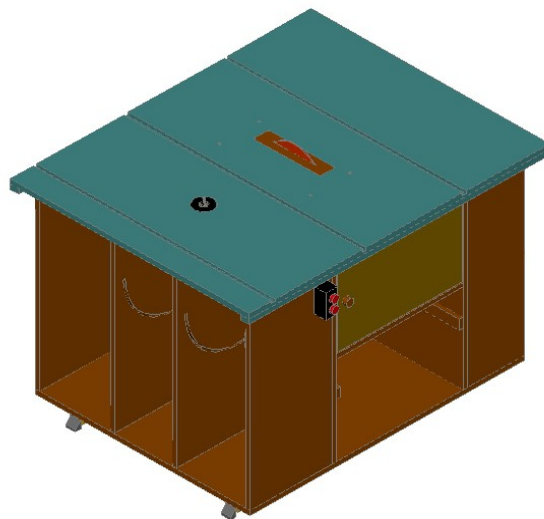
Saw-Router table plans.

-Take the time to understand the plans, and how it works the machine. These plans are for my original Saw-Router table, for routers with 43mm clamp collar and Makita 5903R Circular Saw, for other tools, you must be make changes surely.

-Plans are in metric units, you can generate plans in imperial units simply by changing the units to "imperial" in SketchUp under "window-model info", but the units will not work out to even numbers like they do in metric.

Safety note:

- Never cut metals, cement or masonry.
- Make sure power switches are in “OFF” position before plugging tool in.
- Check tools from damage.
- Disconnect tool from power source before servicing, adjusting or changing set-ups or blades, bsaw, router bit and other accessories.
- Use proper feed direction.
- Do not force tool or workpiece. Operate tool at intended speed and feed rate for better and safer operation.
- A potential danger with mounting the router inside this machine is that the router's switch may bump against the template or the template holder and be turned on unexpectedly.
- A further safety improvement is to use a router with a slow start. Such a router starts off very slowly, thus giving time to get one's hands out of the way before injury occurs if it should start unexpectedly.
- Be careful with the horizontal router, hands and clothes, use clamps or adapt templates to your works.



Description and assembly:

-The machine is manufactured with a plywood sheet made of birch(hard plywood) and ocume(hsoft plywood). Birch for the parts which need to have resistance and ocume for the rest, making the total weight lighter. The cover is made of birch plywood with melamine on both faces, although another similar material may be used. It has grooves which act as cutting guides and these have an aluminium U profile in order to improve sliding. The bodywork is made of ocume plywood screwed together and with dowels. I have not used tail in case I have to dismantle or rectify it one day. For the joins of the bodywork I have used 4x50 screws. The bodywork is strengthened with tow strips of hard wood, where I have screwed in adjustable legs. I have applied two coats of lacquer in order to protect it and so that it will last for more years, everything depends on the material which is used. As regards vacuuming, a bag vacuum cleaner with a 100mm tube is ideal, at the entrance to the machine this would fork into two 50mm tubes, one going directly to the outlet of the circular and the other to the hollow of the machine.

As can be seen in the first video, the cover which also acts as a table is made of 20 mm birch plywood with melamine for both faces. I found this in a carpenter's shop, but I don't remember what they said it had been used for, however, when I saw it, I bought it at once as these are difficult to find for small scale production purposes. Normal, varnished birch would serve perfectly, and this was my first idea. It is screwed underneath and has recesses for a saw and a milling machine, some by the upper face in order to be facilitate changing the disks and cutters easily, others by the lower face in order to adjust the saw to the table and achieve a deeper cut. It has other recesses in the upper part in order to insert the aluminium profile which will act as a guide. I machined all these recesses with a milling machine and guides, this part is very important in order to achieve cuts in set square, all the templates for this milling must be placed straight and squared. My profile measures 15mm wide by 10mm deep, but other measurements can be used, however, with a maximum of 10mm in depth in order not to weaken the table too much. The profile must enter exactly but with no need to force it to enter.

The support for the horizontal milling machine is made from birch plywood and must be hard and stable. The part in contact with the milling machine measures 20mm, the rest measures 12mm. Cut properly straight and squared all the parts so that the milling machine also works in set square. It is

meant for milling machines with a 43mm clamp collar, so, make this hole very precise. If you cut too excess, the milling machine will remain loose with the logical hazards! Use metric 8 screws with self-screwing ramps.

The vertical support for the milling machine is made of birch, again with a 43mm clamp collar. The tightening handles are made of birch plywood and I used metric 8 with their corresponding self-screwing ramps. Check the length of the milling machine in case the structure is too short and you have to lengthen it a little. The hinges enable you to gyrate the milling machine and take more advantage of it so as to make mouldings or cuts. Use glue and long screws in order to provide resistance to the support.

I have developed the function to make joints in boxes or drawers more easily and comfortably. Make an MDF template with 10 mm outlets and inlets. I have made these on my home CNC milling machine, but if you do not have one, the best thing to do is to order these templates from someone who does. It is very important that these are perfect so that the system will function correctly. In order to reset the work, as can be seen in the video, you must place the two pieces one in each frame, with one beginning at an inlet and the other at an outlet with the same measurements as the gaps of each recess.

- For the body joints I used screw 4x50.
- Strengthens cabinet with two strips of hardwood, where you can screw your adjustable leg.
- The curved or special operations can do so by printing the full-scale plan and sticking paper over the board as a cutting guide with jig or router.
- Place shelves as you like, as needed.
- The Universal 43mm neck should be very fair, make sure the router is secure, or vibration can loosen.
- The top hits are very comfortable to change saw and router bit.
- I painted the body, to protect.
- Connect a vacuum to avoid dust.
- Do not forget to install an electrical box with emergency button to spare possible shocks ...

