

## Q & A CNC Router

**Q:)** What is the largest piece I can have milled out?

**A:)** The largest piece you can have milled is 2000 cubic inches. Note that this is the size of the blank material before it is machined, **not** the size of the finished model. Measure the blank by multiplying the width x the breadth x the height. Ex: a 12" x 12" x 2" foam blank equals 288 cubic inches.

**Q:)** What is the longest and widest run I can make on the CNC table?

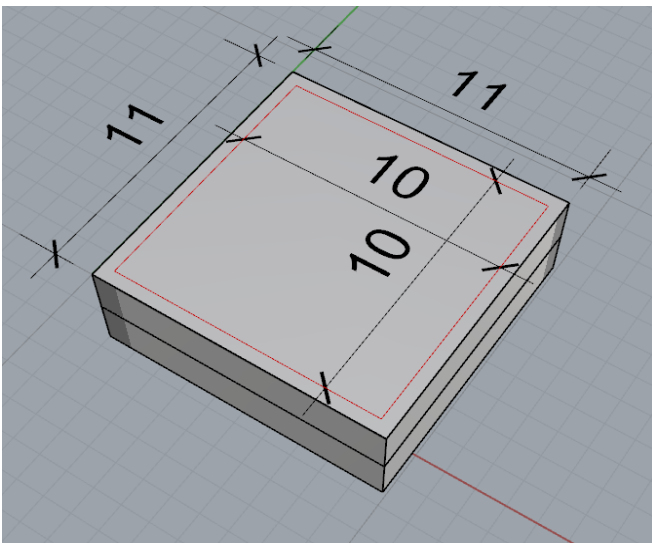
**A:)** The working area of the CNC table is 26 ½" x 24". Remember you cannot exceed the 2000 cubic inch limit.

**Q:)** What is the maximum depth I can have routed?

**A:)** Typical models have a maximum relief of 2 ½". Under special circumstances we can cut as much as 4 ½" with a loss of detail and resolution. The operator will make the final determination of what can and cannot be machined.

**Q:)** Can I laminate material to increase the size of my blank?

**A:)** Yes, however, **oversize** the pieces being joined, so the staff can square the material to the appropriate finish size. (see **figure 1**). Lamination for the CNC is limited to face joining. **No** edge joining. Also, you must use a urethane glue to adhere the foam together. **Please** ask the staff to aid you in laminating your material together.



**Figure 1:** The finished size for this model is 10" x 10" but the material is cut to 11" x 11" and then laminated together. After being clamped-up and glued up overnight, the blank can then be cut down to 10" x 10".

**Q:)** Can we cut plywood on the CNC?

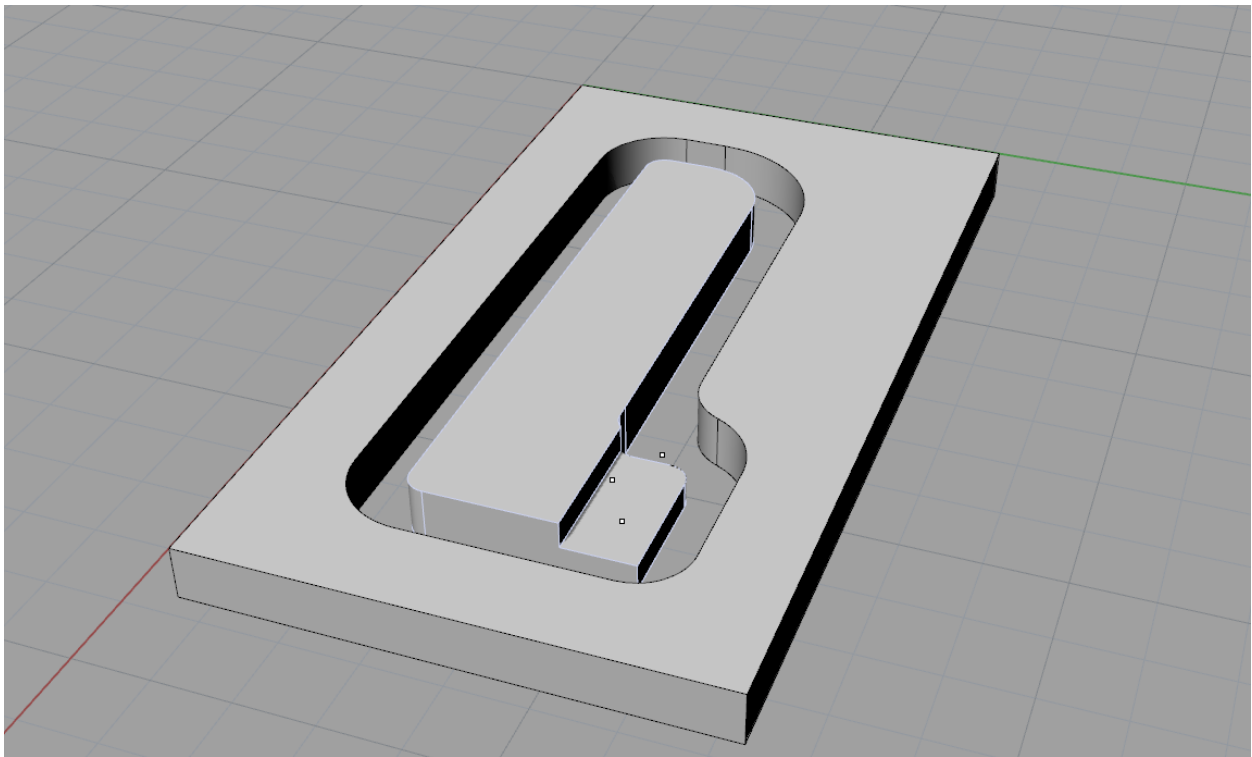
**A:)** Yes and you can also cut solid wood and HDPE (**NO MDF!**).

**Q:)** Can I cut 3 dimensional tops into the wood or HDPE?

**A:)** No, we are only allowing “edge cutting” pocket passes, contour passes and drilling.

**Q:)** What is edge cutting?

**A:)** Edge cutting is following the exterior contour of an object. We can also rout out dados, laps and rabbets into your material, as shown below:

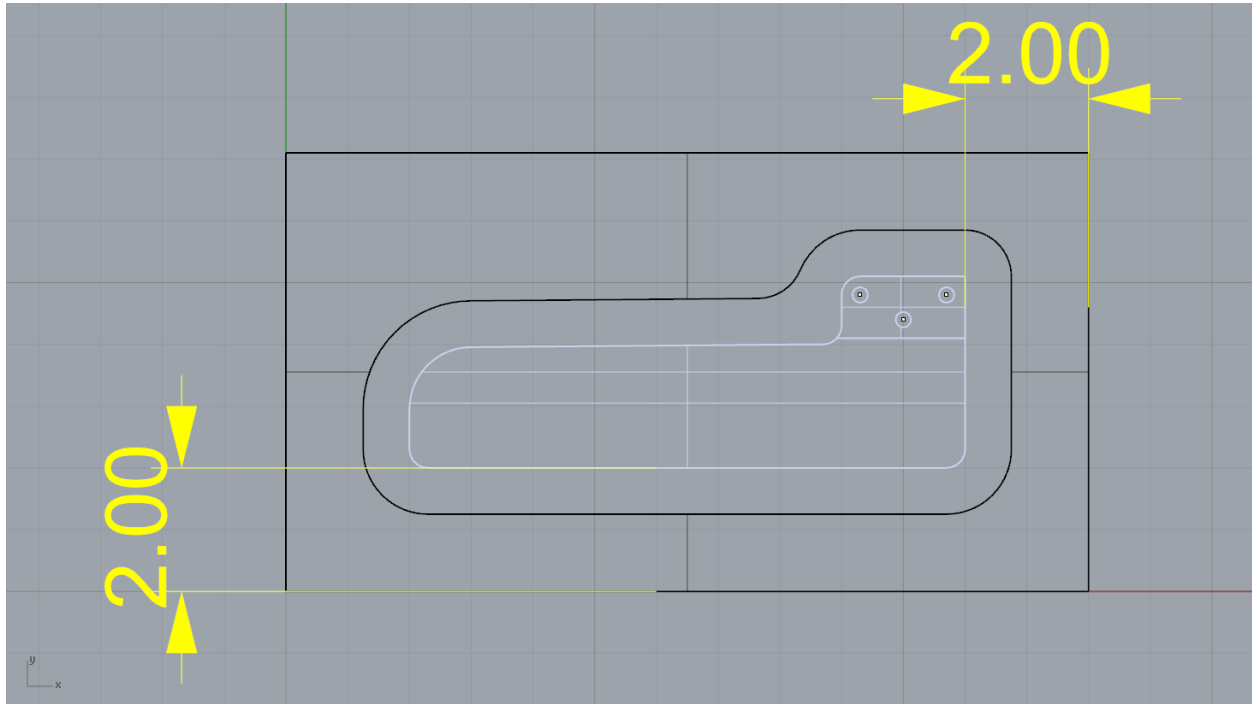


**Q:)** But what is the largest blank I can work with that will fit on the CNC table?

**A:)** The CNC working envelope is 26 ½” x 24” but you need a 2” border on all four sides for clamping purposes. So, the biggest cutting area would be 22 ½” x 20.”

**Q:)** How thick of a piece can I cut?

**A:)** The thickest dimension we will cut is ¾” and the thinnest is ½”.



**Q:)** Do I have to have a three dimensional drawing for this type of cutting?

**A:)** Yes and no, please see the staff to aid you in setting up more complicated files.

**As always come by and see the staff early and often with additional questions.**