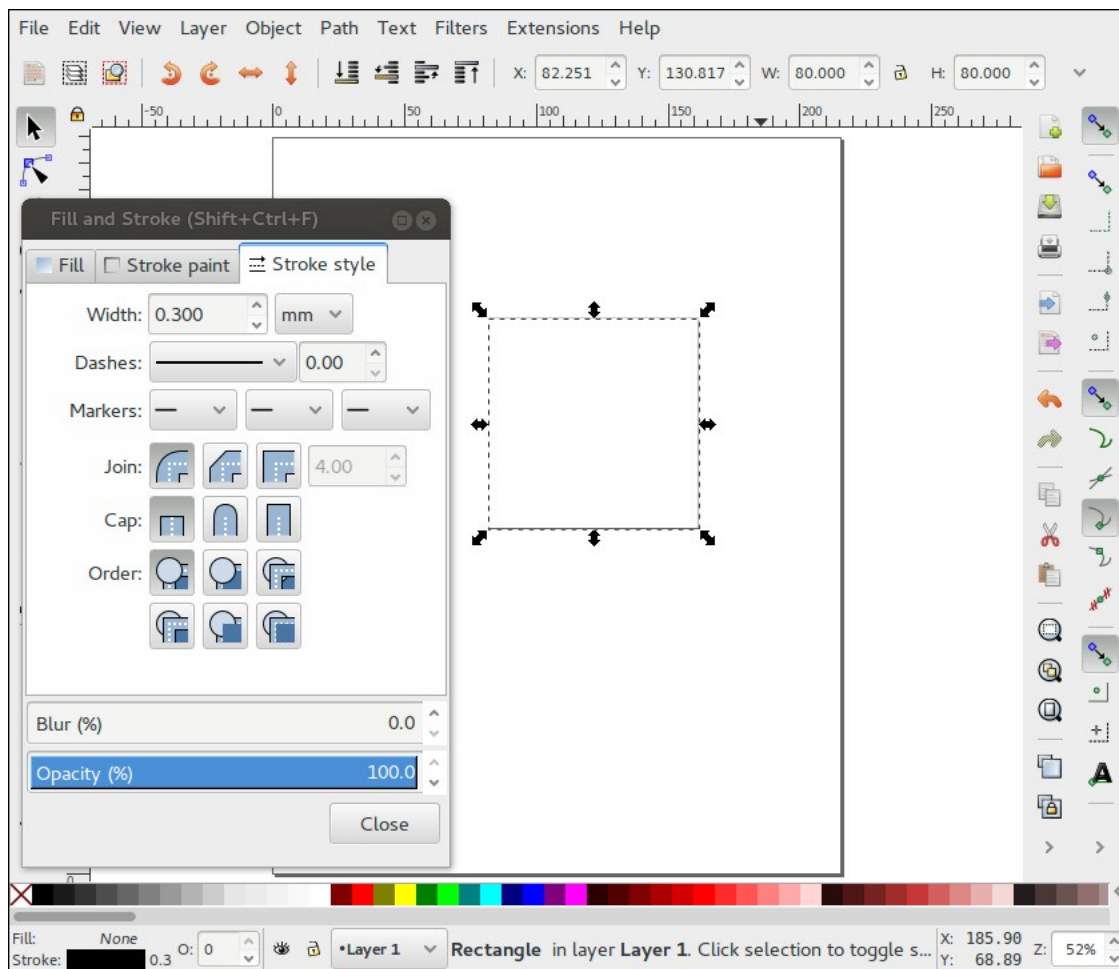


Extreme Accuracy Of Image Size In Inkscape

The problem is Inkscape shows image size (80mm in the below example) based on line width of your highlighted object or shape. As you scale the size of the object your line width increases therefore changing the overall size of the image sent to Tux plot.



If I change the size of the 80mm box you will see the stroke width change also so when Tux Plot receives your job the accuracy could be off by 1-5mm!

A couple adjustments to maximize accuracy are need for Tux Plot to be within .05mm accuracy. Tux Plot depends on a .3mm stroke width for best results.

Step One

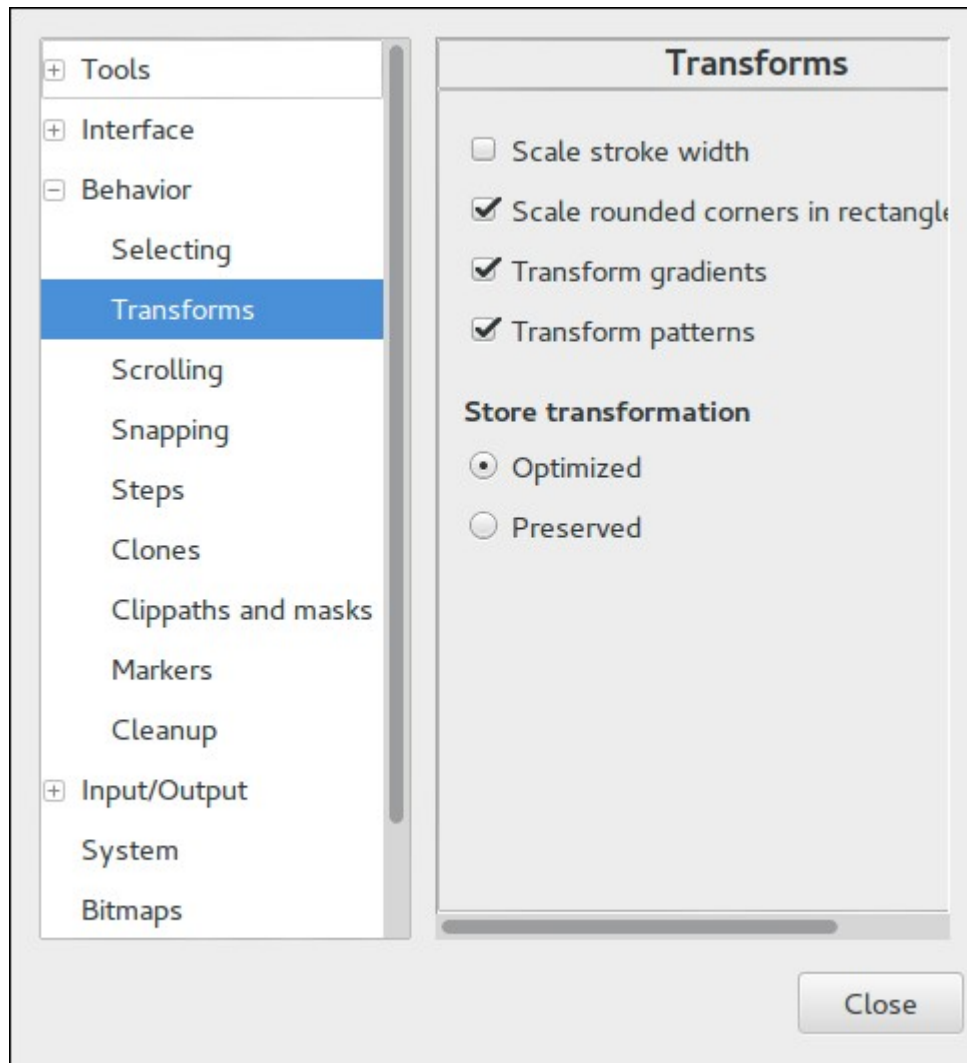
Use .3mm for stroke width as shown above for best results

Step Two

Make sure “Scale Stroke Width” is unchecked as shown below in Inkscape preferences .

Edit>Preferences>Behaviour>Transformations

Now stroke/outline will remain constant width regardless of your image size.



Of course these adjustments are only needed if doing jobs that require this kind of accuracy like pcb milling or precise media cutting like wood inlay or multi layer vinyl cutting or most importantly “Print and Cut” jobs.

50mm Test Box

I draw a box in Inkscape 50mmx50mm and set the stroke width to .3mm

Save-As to hot-folder and Tux Plot auto opens with job loaded

Job image size is shown in Tux Plot with the tool tip pop-up as shown below along with other job info

The screenshot displays the Tux Plot software interface. At the top, a menu bar includes 'File', 'Panel View', 'Tools', 'External Apps', 'Gcode Specific Tools', and 'Help'. The left sidebar contains icons for 'Save Job', 'Recall Job', 'Profile', 'H', 'ADD OUTLINE', 'DEVICE TABLE', 'MEDIA BOX', and 'Color Off'. The main plot area shows a white square representing the 50mmx50mm test box. A tooltip pop-up over the box displays the following information: '50mm-box.svg (Values Rounded To .1mm)', 'Image Size X1.96(50.0mm) Y1.96(50.0mm)', 'Media Size X8.5(215.91mm) Y11.0(279.42mm)', and 'Resolution: 40 Units/mm (Default Resolution)'. The bottom control panel features a 'SEND' button, a table of speed settings, and various control buttons like 'JOG', 'Tux Plot', 'KEYBOARD', and 'PLOT!'. The table below shows the speed settings for different passes.

XY Speed	Z Speed	Cut Depth	Slice	Pass
15.0	22	70.00	2.00	
3.0	22	70.00	2.00	
4.0	22	70.00	2.00	
3.0	22	70.00	2.00	
15.0	22	70.00	2.00	
15.0	22	70.00	2.00	
15.0	22	70.00	2.00	

Tux Plot job information pop-up shows 50.0mmx50.0mm so your cut is absolutely accurate!