ALLEN DATAGRAPH

Technical Support Bulletin: Plotting Drawings Larger Than Windows Maximum Page Size

Last Update November 15, 2004

Abstract: A tutorial using various cad systems to cut a drawing larger than the maximum paper size allowed by Windows. (PowerCad, CorelDraw, Adobe Illustrator, AutoCad 2002)

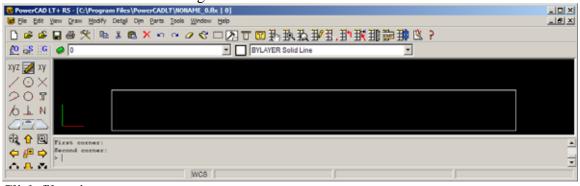
The object of this tutorial is to cut with the Allen Datagraph Cutter an object 200,20 inches (508,50.8 cm). This is larger than the largest size that is supported by the windows operating system, which is 129 inches (327cm).

PowerCAD LT+ R5

First draw an rectangular object in PowerCad that is the size we want to produce. (200,20 inches)

Start a new drawing. File New

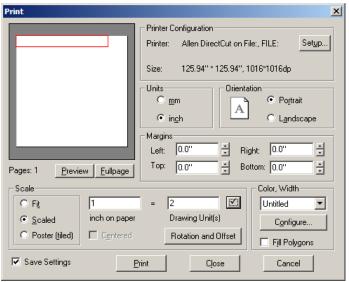
Click on rectangle tool,
Enter 0,0 for first corner
Enter 200,20 for second corner
Zoom out to see whole drawing



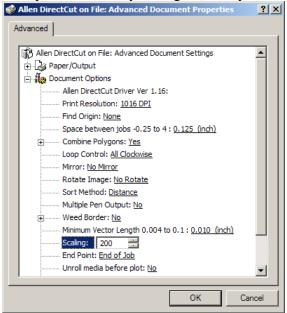
Click file print

Select window and draw a rectangle around 200,20 inch object

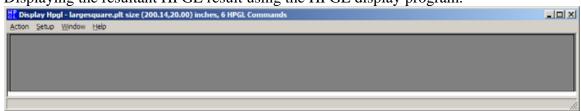
Set scaling 1-2 (1 inch on paper, 2 inch on drawing or 0.5 scale) on power cad print menu. Pressing on the check mark button will redisplay the preview showing that it will fit in the 129x129 select paper size.



In the Direct Cut Properties page set scaling to 200 %. This allows sending the object at ½ scale to the printer driver. The driver will then expand the size of the created HPGL file by a factor of 2 yielding a (200 by 20 inch) final result.



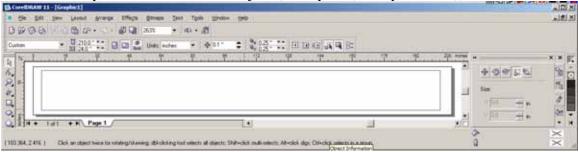
This scales the size of the drawing by ½ so the drawing can be sent to the printer driver. We then scale the drawing back up by a factor of 2 to obtain the original size. Displaying the resultant HPGL result using the HPGL display program.



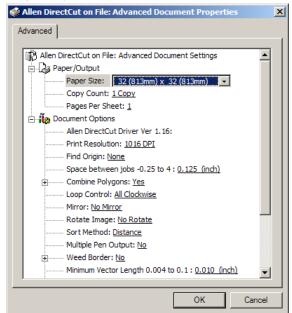
The size of the resultant rectangle is shown at the top of the window as (200.14,20.00). The axes are expanded slightly so that the edges can be seen. That is why the size is slightly larger than the plotted object.

Corel Draw

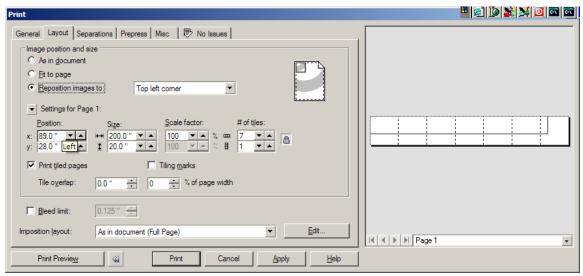
With Corel Draw you do not have to scale the drawing since Corel Draw supports tiling. Create an area for your page size that is greater than the image you want to draw. I selected 210 by 24. I then drew the object (200 by 20 (508 by 50.8 cm)).



File Print



Select paper size of 32 x 32. Corel Draw is limited to a 32-inch page size at 1016 DPI.



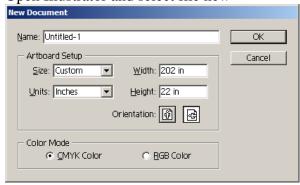
Select print tiled pages. Preview shows 7 tiles. Corel Draw will send each tile to the driver separately. The driver will then reassemble the tiled pages before sending the file to the cutter.

The resultant HPGL file is the same as shown by Display HPGL program.

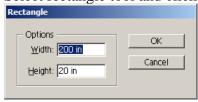


Adobe Illustrator

Open Illustrator and select file new

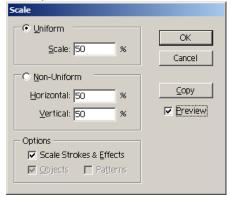


Create an image full scale and then save the drawing. Select rectangle tool and click near origin of plot window



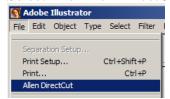
Enter size of desired rectangle

Position the rectangle in the illustrator artboard. Now save the file. Select all the objects with (Ctrl-A or Select -> Select All). Click on Object -> Transform -> Scale

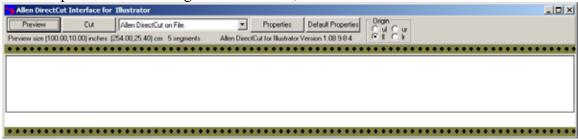


Select 50% scaling and click on OK.

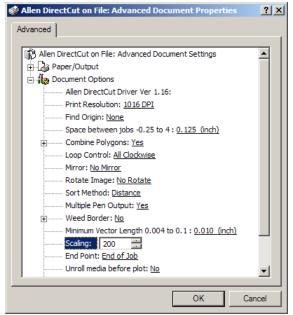
Select File Allen DirectCut



Click on preview shows image size of 101.01,



Set scaling in properties to 200%



Click on cut.

The resultant file is 200.13 by 20 inches.



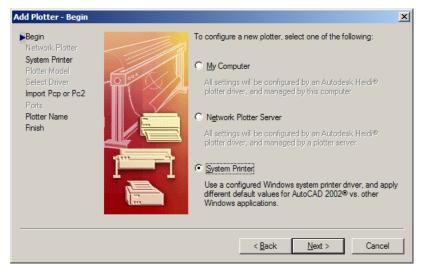
You can now discard the ½ size scaled drawing in illustrator.

AutoCad 2002

First setup a printer that has 2x scale factor as a printer property.



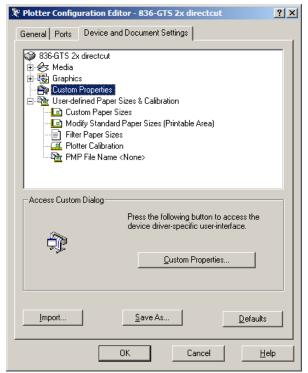
Double click on Add-A-Plotter Wizard



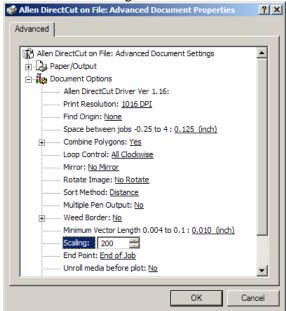
Select system printer



Select your direct cut driver
Click next on import pcp/pc2 file
Enter cutter name 836-GTS 2x directcut and click next
Click on Edit Plotter Configuration
Select Custom Properties and click on Custom Properties



Select 200% scaling

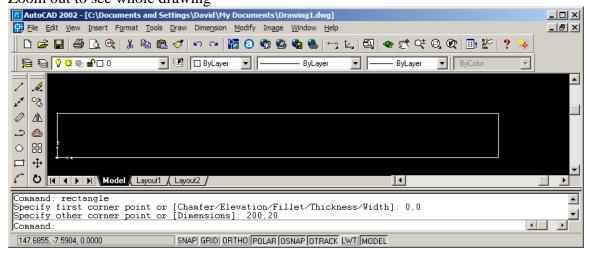


Click on OK, OK, Finish Click on Finish

Now, draw an object in our cad program that is the size we want to produce (200, 20 or (508, 50.8 cm)).

Start a new drawing. File New

Click on rectangle tool, Enter 0,0 for first corner Enter 200,20 for second corner Zoom out to see whole drawing



Click File Plot

Select new printer in name box (836-GTS 2x directcut).

Click on plot settings

Click on window < button and draw rectangle around 100x10 rectangle

Change Plot Scale = 1:2 in drop down box

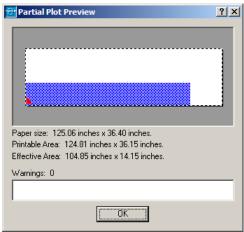
Uncheck Plot with plot styles

Uncheck Plot object line weights

Select Landscape for drawing orientation



Click on partial preview shows that image will fit into paper size of 129x36.4



Click on OK sends hpgl to cutter. If you plot to file the plot file will appear in the same directory as the input file. If you have not opened or saved the file it will be in the C:\Program Files\Autocad 2002 directory.

