

AcornPipe uses layout files to define the general appearance of the drawing. The layout is normally selected during setup of a new job. If you try to draw in a job for which no layout has been selected, you will be prompted to select one. The layouts can be found under Data/Layouts. In most cases, the Data folder will be directly under the AcornClients folder. It is also possible for a client to have its own Data folder.

One example of a layout file is 11x17-Inspect-3 Col.ASL. This is a good all-purpose layout designed for fabrication drawings with three columns of NDE data. When you select a layout, the layout file is copied to the current job, to the installation folder or fabrication folder as appropriate. During copying, the layout file is split into five parts as follows:

Template.asl

Border.plt

BorderP2.plt

Price1.plt

Price2.plt

Template.asl is a copy of the first part of the layout file. It lists the values of variables that influence the layout of the drawing and it determines some of the choices that are available when setting up a spec. So for example, the maximum number of lines in the bill of materials or in the list of welds is contained in Template.asl.

Each of the four remaining files contains a combination of lines and text that do not change from one drawing to the next. Border.plt is used during normal drawing and Price1.plt is used when you switch to pricing view.

The bill of materials and/or the weld list can overflow on to a second page, where they can occupy multiple columns. Drawn items, details, images, notes, and draw-your-own details appear only on page 1. Page 2 uses the files BorderP2.plt and Price2.plt.

The coordinate system starts from the origin at the lower left. Lines and text are defined using a small subset of HPGL/2 commands that includes the following:

- SL: character slant – in this case, the slant is zero
- DI; text direction – in this case, it defaults to text from left to right
- SI.5,.5; set the character size to .5 wide by .5 tall
- PA; plot absolute (as opposed to plot relative)

PD4210,40; pen down – draw a line to 4210,40

PU100,475; pen up – move to 100,475 without drawing

LBPROJECT* label - print the word PROJECT. Note the label text is terminated by the non-printable ASCII character 3, represented here by *. A simple way to enter this character in NotePad is to copy it from an existing label command. (It won't look like a star.)

While the coordinates were originally intended to represent 0.1 mm per unit, the exact dimensions represented by the coordinates vary depending on the layout chosen and the paper size. It is quite common to use a layout designed for 11x17 inch paper to print on legal size, for example. But if taken to extremes, this can lead to text that is too small to read. The SI command units were originally in cm.

You could create your own layout from scratch but in practice few users do this. Most users adopt one of the existing layouts and insert their own title block.

Tips in case you decide to modify a layout

Modifying Template.asl is a good way to gain experience as to the effect of changing the layout, as your changes will be overwritten if you reselect the layout. If you want the changes to be permanent, a better approach is as follows:

1. Make a copy of the original layout, under a new name.
2. Make the desired changes to the new layout.
3. Reselect the layout to view the effects of the changes.

If you modify a layout, be sure to test its operation in pricing view and using drawings whose bill of materials and/or weld list extend on to a second page.