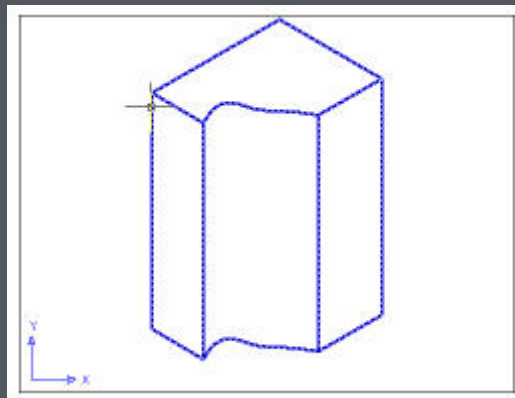


### Convert a 3D solid to a 2D drawing with a hidden view

This tip explains how to create a hidden view, but you can create a wireframe as well. It uses the SOLPROF command to create a profile. By transferring the results to another file, you get a solely 2D drawing.

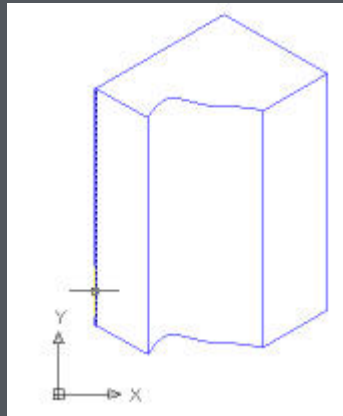
1. Create the 3D model. I worked with one object, but you can work with more than one.
2. Set up the view that you want.
3. Start the UCS command and use the New>View option to set the XY plane parallel to the view.
4. Choose a layout tab. By default, a viewport is created automatically. Otherwise, choose View>Viewports>New View (MVIEW command) and create a viewport.
5. Double-click inside the viewport to switch to model space.
6. Type solprof on the command line. At the prompt, select the 3D model and accept the defaults (Y each time) for all three prompts. You should now see a wireframe profile, as shown here in a viewport. (The profile is one object.)



7. You'll now see two new layers in the Layer Control drop-down list. One starts with PV- and could be PV-ad, PV-125, or any suffix. The other starts with PH- and has the same suffix. The PV layer contains the front parts of the profile (V stands for visible). The PH layer contains the hidden parts (H stands for hidden). Make the PV- layer the current layer.
8. Freeze all other layers. Now you see the hidden view. If you want a wireframe, don't freeze the PH- layer.
9. Press Ctrl+C and select all objects (which won't include the frozen layers) to copy the profile to the Windows Clipboard.
10. Start a new drawing.
11. Press Ctrl+V to paste in the profile and specify any point to place it. You should see the profile looking exactly the same as before. (If the angle looks wrong, reproduce the viewpoint you had in the previous drawing and set the UCS to View again.)

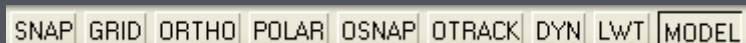
12. Start the EXPLODE command (because the profile comes in as a block) and select all objects. (Skip this step if you want to leave it as one object.)
13. The new profile may not be the same scale as the original. If not, measure any length in the original drawing.
14. Use the SCALE command and select all the objects. Then use the Reference option. At the prompt to specify the reference length, specify the beginning and end of the length you measured, that is, the same object in the new drawing.
15. At the prompt to specify the new length, enter the length that you measured to scale the model to that new length.

Here is the model in the new drawing. Each line (and spline) is a separate object.



### Bring back the command line in 2006.

The AutoCAD 2006 based products introduced a new feature called Dynamic Input. This moves your command line input to your cursor. As with most new interface changes some people like it while others do not. If you want to restore the command line to the way it functioned in previous versions of AutoCAD click the DYN button on the Status Bar to disable Dynamic Input.



### Clipping Blocks

The command XCLIP is known as "Xref clip", but many might not know that XCLIP can be used to clip block what objects are displayed. To clip a block, start the XCLIP command by entering it at the command line or selecting Xref from the Modify menu > Clip. Select the block and follow the prompts to create a new boundary that should be used to clip the block.

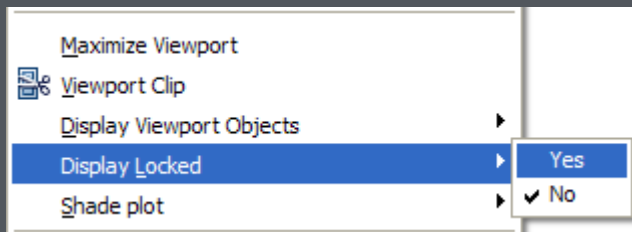
This is how the SUPERHATCH command that is part of Express Tools works. It determines how the objects in a block can be placed within a given boundary and then clips the objects that don't fit nicely in that boundary. SUPERHATCH is a great command for creating custom hatch patterns based on images, blocks, wipeout objects, and xrefs. SUPERHATCH can be found under the Express menu > Draw > Super Hatch.

### Locking the Viewport Display

After you have created a viewport in the Layout and set it to the desired plot scale from the dropdown menu of the Viewports toolbar, how can you keep from mistakenly changing the plot scale when you scroll in the viewport.

Instructions to Lock the Viewport Display

1. While in the Layout, single click on the viewport frame, then right-click and go to Display Locked, then slide over and click Yes.



2. To prove that indeed the display is locked, double-click inside the viewport to make it current.
3. You will notice that the plot scale of the viewport shown in the Viewports toolbar dropdown list is greyed out. That's your first indication that the viewport is locked.
4. Use your wheel mouse or the Pan or Zoom commands. You will notice that the entire layout may pan or zoom, but not the display of the objects as they relate to the viewport.